



**Issue  
Brief**



# **The Role of Safe Harbor for Energy Tax Credits: Guardrails, Not Loopholes**



# Contents

Executive Summary..... 2

Introduction ..... 4

Energy Project Finance Overview ..... 4

Role of Private Actors in Ensuring Projects Move Forward ..... 5

“Safe Harbors”— Guardrails, Not Loopholes ..... 6

Beginning-of-Construction Safe Harbors ..... 6

    Five Percent Safe Harbor ..... 7

    Physical Work Test ..... 7

    Continuity Requirement ..... 8

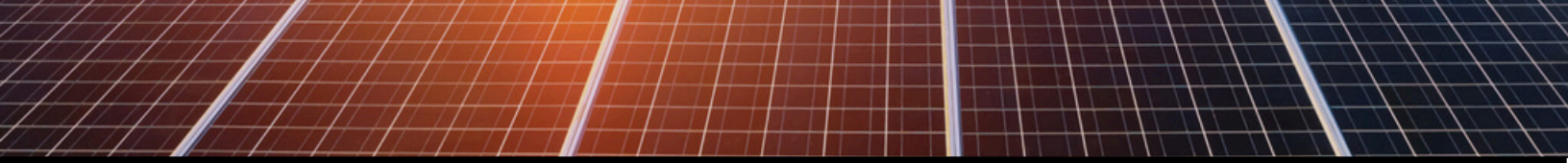
    Key Stakeholders and their Roles in Compliance ..... 8

Existing Guardrails Ensure Compliance ..... 9

    Safe Harbor Example ..... 9

Conclusion ..... 10

Appendix ..... 10



## Executive Summary

This American Council on Renewable Energy (ACORE) issue brief explains how longstanding IRS “safe harbor” provisions work in tandem with private market forces to ensure the integrity, efficiency, and effectiveness of federal energy tax credits.

As clean energy demand rises due to AI, cloud computing, and reshoring of manufacturing, private investment in energy infrastructure has become increasingly essential. Clean energy projects require significant upfront capital, often involving intricate planning and financing mechanisms. These projects are only financially viable if they become operational and generate power over time. Consequently, investors and lenders apply rigorous due diligence, including reviews of technical specifications, legal permits, environmental risk, long-term offtake contracts, and financial models before committing capital.

At the heart of energy tax credit compliance are IRS safe harbor provisions, which establish clear standards that private actors must meet to begin construction and ultimately qualify for incentives like the Investment Tax Credit (ITC) and Production Tax Credit (PTC). These include:

- **Five Percent Safe Harbor:** Projects meet this test if the taxpayer incurs at least 5% of total project costs, based on a depreciable basis, before a specified deadline. These costs must be substantiated by documentation.
- **Physical Work Test:** This standard is based on tangible construction activity, such as site preparation or manufacturing of project components under a binding contract. The focus is on substantive work of a “significant nature,” not planning or permitting.
- **Continuity Requirement:** Regardless of which test is used, taxpayers must show continuous progress toward project completion. This is typically measured by placing the facility in service within four years of beginning construction or demonstrating ongoing development through verifiable documentation.

### Conclusion: Guardrails, Not Loopholes

Far from being loopholes, these safe harbors act as guardrails—ensuring only projects with meaningful and ongoing development qualify. IRS guidance outlines strict prohibitions against misuse, including delays for market timing or inadequate documentation. Financial partners, engineers, and tax preparers serve as additional layers of verification, making fraudulent claims or premature filings highly unlikely and subject to penalty.

In conclusion, the current structure, backed by detailed IRS rules and reinforced by market oversight, ensures that only credible, advancing projects receive tax credits. Rather than relaxing oversight, these standards promote both accountability and flexibility that encourages continued private investment in America’s clean energy transition.





## Introduction

The U.S. clean energy sector is a strong contributor to advancing U.S. economic prosperity, technological leadership, and national security. The sector provides affordable, reliable, and secure domestic energy that powers businesses, homes, and essential operations, such as hospitals, emergency response, and military bases.

Despite nearly two decades of flat electricity growth, demand is forecast to rise substantially in the next five years. This is due to the rise of advanced technologies, such as artificial intelligence and cloud computing, and the need for data storage and management to support those activities. New American manufacturing operations are also helping to drive this load growth.

This issue brief provides a brief overview of financing structures for clean energy generation projects, discusses the roles of multiple project stakeholders in ensuring integrity in the financing process, and explains how existing rules and guidance issued by the Treasury Department and Internal Revenue Service (IRS) help to ensure market discipline and efficient use of tax credits.

## Energy Project Finance Overview

Consistent with other categories of critical infrastructure, clean energy projects involve extensive planning processes with multiple stakeholders, including project sponsors, investors, debt providers, offtakers, equipment suppliers, and labor contractors (see Appendix or more detailed information on the role of each stakeholder). Project sponsors typically raise external sources of capital from multiple parties to finance the upfront costs of these projects.

Even before financing considerations, these parties must advance through numerous steps in the project development process, from initial site selection, design, and engineering, to permitting and interconnection approvals. Assuming successful navigation of these phases, which can take months to years depending on the size of the project, the parties will typically enter into multi-year contracts known as power purchase agreements (PPAs) with a utility or corporate offtaker. PPAs facilitate the purchase of energy generated by a project at a fixed rate and tend to range 10-20 years.



To meet these milestones, these energy projects require substantial private capital to be secured and deployed *before* the federal clean energy tax credits are claimed, though tax considerations factor into the overall project's financial planning.

As a result, private market actors that provide this upfront capital have a strong incentive to ensure that projects are completed on time, and that they will be performing assets that generate electricity – if they do not, then the long-term agreed upon returns from the project will not materialize.

## Role of Private Actors in Ensuring Projects Move Forward

Given the multi-year, capital-intensive nature of energy projects, project sponsors and other parties must carefully consider project economics, risk allocation, and potential financial structures before moving forward.

As part of this planning and project development process, financing parties conduct substantial technical, tax, and commercial diligence. In addition, these parties often require the project developer to enter into a long-term offtake agreement with a creditworthy counterparty to lock in the sale of electricity generated by a project, full warranty coverage, confirmation from third-party engineers as to the ability to operate the project over a long period of time, review of the environmental risks, and assurance as to full permitting authorizations and land use rights.

After the extensive analysis to quantify a project's long-term financial viability is performed, banks and other lenders offer debt, such as bridge loans, to cover a portion of a project's capital costs, while various investors may provide equity capital in exchange for partial ownership.

Labor and equipment contracts, particularly engineering, procurement, and construction (EPC) contracts, are often secured early in the financing process as a prerequisite for lenders, creating visibility into a project's scope, cost, timeline, and operational soundness.



## **“Safe Harbors”— Guardrails, Not Loopholes**

Generally, a federal tax credit is a dollar-for-dollar reduction in the amount of tax owed by a taxpayer. It is different from a deduction in that it is applied after a taxpayer's income is calculated. Credits are provided under federal tax law for engaging in private sector economic activities for which the government has warranted a reduction in tax liabilities, such as energy generation.

To ensure taxpayers understand the types of activities and investments that qualify for credits, the IRS issues rules and guidance that taxpayers must follow to validly claim such incentives. These guardrails, frequently referred to as “safe harbors,” are a longstanding concept in U.S. tax law and provide clarity and reduce the risk of litigation. They also play a vital role when extraordinary circumstances occur that lie outside of a taxpayer's control, such as sudden downturns in financial markets, or in areas that deal with highly complex facts and circumstances, such as real estate accounting and tax partnerships.

Failure to comply with IRS rules and guidance can result in audits, disqualification of credits, and other enforcement activities. For this reason, financing parties are keen to ensure strict compliance with such rules and act as gatekeepers – essentially performing an audit function given the heavy economic and reputational implications of maintaining good standing with IRS standards and procedures.

While federal tax credits such as the Investment Tax Credit (ITC) or Production Tax Credit (PTC), as well as other tax policies such as depreciation, are factored into the financials of an energy project, many of the essential procedural steps in project finance occur before credits can be formally applied or monetized.

Several particularly important provisions related to safe harbors, and the role of private sector actors in ensuring that they are followed, are outlined below.

## **Beginning-of-Construction Safe Harbors**

The safe harbor concept has been used for decades in areas such as depreciation, tax credits across multiple sectors, and other policies, designed to provide clarity with compliance and reduce the risk of litigation.



Longstanding safe harbor requirements have governed the process for U.S. companies to begin construction on energy projects of all kinds, providing important legal and financial certainty regarding the eligibility of such projects for the federal energy tax incentives.

IRS guidance released since 2013 (for example, IRS Notices 2013-29 and 2028-59) outline the current methods available to taxpayers for the purposes of establishing that construction of energy property has begun to claim federal tax credits.

1. The “Five Percent Safe Harbor,” and;
2. The “Physical Work Test.”

Taxpayers may select one of the two tests, but both are subject to a “continuity requirement.”

### Five Percent Safe Harbor

Under this test, construction of energy property will be considered as having begun if a taxpayer pays or incurs five percent or more of the total cost of the energy property. All costs properly included in the<sup>1</sup> depreciable basis of the facility are considered to determine whether the threshold has been met. The Five Percent Safe Harbor incorporates the tax accounting rules under Internal Revenue Code Section 461, which generally specify that costs are paid or incurred when property is delivered to the taxpayer, with a special exception if the taxpayer can reasonably expect solicited services or property to be provided within three and a half months after the date of payment.

### Physical Work Test

Under this test, construction of energy property will also be considered as having begun if the taxpayer commences “physical work of a significant nature.” This test is focused on the nature of the work performed, not the amount or the cost. Physical work includes both on-site and off-site work performed either by the taxpayer or by another party under a binding written contract entered into prior to the manufacture, construction, or construction of the energy property. The binding nature of such written contracts further ensures no abuse and good faith development to meet this test.

Physical work of a significant nature does not include preliminary activities—such as obtaining permits, securing financing, or completing environmental studies—even if the cost of those preliminary activities is properly included in the depreciable basis of the facility. This means that in order for a taxpayer to appropriately claim any federal tax credits, demonstrable work must have commenced on the project.

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<sup>1</sup> Within the meaning of Treas. Reg. § 1.461-1(a)(1).



## Continuity Requirement

Under both the Five Percent Safe Harbor and Physical Work Test, taxpayers must demonstrate either continuous construction or continuous efforts (“Continuity Requirement”), regardless of which method was chosen to establish the beginning of construction.

Whether a taxpayer meets the Continuity Requirement under either test is determined by “the relevant facts and circumstances” or whether a project has been placed in service within four years. As part of this prong, a “Continuity Safe Harbor” generally provides that the Continuity Requirement is satisfied if taxpayers place their project in service by the end of the fourth calendar year following the year in which the Five Percent Safe Harbor or Physical Work Test was satisfied.

In other words, not only does a project need to demonstrate that substantial capital and/or physical work meeting the above tests has commenced, progress must be sustained to remain eligible for claiming federal tax credits. Taxpayers and developers are incentivized to complete construction in a timely manner for practical purposes and to meet this requirement, which financing parties and tax return preparers will diligence and validate, respectively.

## Key Stakeholders and their Roles in Compliance

For each of these steps, project stakeholders play important roles in ensuring compliance. In general, the primary responsible party is the taxpayer (e.g., project developer), as well as equipment suppliers and EPC contractors, who are responsible for appropriately tracking and documenting progress on the project (i.e., supply chain analysis, documentation of delivery, payments, etc.).

Financing parties and other stakeholders, such as tax return preparers, then provide another layer of diligence on the various project milestones and progress, and also provide validation of compliance.





## Existing Guardrails Ensure Compliance

IRS safe harbors exist to protect U.S. companies building or financing energy projects from the financial consequences of events outside their control. The existing rules already include a series of prohibitions that further help to ensure clarity and compliance.

For example, under existing rules, taxpayers cannot leverage safe harbors when they:

- Wait for more optimal financial or market conditions
- Cannot secure long-term investors or financing
- Fail to apply for necessary permits on time
- Experience delays due to internal resourcing issues or inaction
- Observe unexpected increases in equipment or labor costs
- Undertake only “preliminary” work
- Make purchases or orders under non-binding contracts
- Provide vague claims of effort rather than objective proof of meeting criteria
- Attempt to toggle between safe harbor methods and “reset the clock”

These rules are well established in U.S. tax law and well understood by the power industry. Moreover, financing parties and tax return preparers perform additional audit functions to pre-validate compliance in keeping with current IRS rules and procedures.

### Safe Harbor Example

Notice 2013-29 and subsequent IRS notices provide illustrations of existing safe harbor rules, including the example below. Similar concepts apply to solar, wind, hydrogen, carbon capture, and other technologies eligible for the ITC and PTC.

A taxpayer incurs \$25,000 in costs in 2013 in constructing an open-loop biomass facility, anticipating that the total cost of the facility, including one boiler and one turbine generator, will be \$500,000. The boiler and turbine generator are functionally interdependent. Thereafter, the taxpayer makes continuous efforts to advance towards completion of the facility. At the time the taxpayer places the facility in service, its actual total cost amounts to \$600,000. Because the boiler and turbine generator are a single facility that is not a single project comprised of multiple facilities (as described in section 4.04(2)), the taxpayer will not satisfy the Safe Harbor. However, if construction of the facility began (within the meaning of section 4.01) before January 1, 2014, the taxpayer may be able to claim the PTC or the ITC with respect to the entire facility.



## Conclusion

Existing IRS safe harbors are designed to honor good-faith, diligent investments in domestic energy projects while allowing for foreseeable risks during development and construction. Under the current rules, taxpayers must document their actions in comprehensive detail and absorb responsibility for the penalties of noncompliance.

Energy projects seeking to claim federal tax credits are subject to substantial private market oversight and discipline under IRS rules and guidance that have been in place for more than a decade. The interests of private sector project stakeholders ensure compliance with the law and effective completion of projects.

## Appendix

The below provides an overview of the roles of key project stakeholders:

- **Project Sponsors:** The project sponsor oversees the development, construction, and operation of a clean energy project. Project sponsors typically act as a partial owner of a special purpose project company set up to own and operate the project and contribute and raise capital to fund equipment purchases and the project's construction. Project sponsors analyze and mitigate potential risks, ensuring their projects adhere to planned timelines, budgets, and quality standards. Furthermore, they play a central role in coordinating activities among various stakeholders to ensure the construction and operation of the project.
- **Financing Parties:** Clean energy projects are typically financed through cash equity, tax equity, and debt financing. Tax equity investors provide funding to take advantage of the tax benefits and receive cash flows from the project, partnering with the project sponsor to become a partial owner of the project company. The project sponsor can also raise additional cash equity from other institutional investors. Debt financing involves loans raised by the project sponsor during the development period, construction period, and/or after the project is placed in service.
- **Offtakers:** Clean energy projects often rely on offtakers to enter into multi-year contracts, known as power purchase agreements (PPAs), to purchase the electricity and renewable energy certificates (RECs) produced by the project, often at a fixed price.



- **Offtakers (cont.):** PPAs provide a steady revenue stream for the project and make it more attractive to investors and lenders. Projects do not typically receive financing until a PPA with a creditworthy offtaker is signed. PPA tenors typically range between 10-20 years. Offtakers include electric utilities who may procure clean energy to comply with state clean energy standards and meet load requirements, and with the growth in standalone storage, meet adequacy requirements and other ancillary services. In addition, corporations enter into clean energy PPAs to hedge their power costs.
- **Engineering, Procurement, and Construction (EPC) Contractors:** EPC contractors are responsible for the engineering design of the project, managing the procurement of all necessary materials and equipment, and overseeing the construction work. Their expertise ensures that the clean energy facility is built to the required specifications, adheres to safety and quality standards, and is completed within the set timeframe and budget.
- **Equipment Suppliers:** Equipment suppliers manufacture and deliver the components and systems needed for the project. They also assist project developers in selecting the appropriate technology and equipment for the project's needs. The equipment supplier helps to manage technology risk, with their ability to provide reliable and proven equipment directly impacting the project's risk profile, financeability, and overall success.
- **Operations and Maintenance (O&M) Contractors:** Once the project is operational, O&M contractors handle the day-to-day operations, carrying out regular maintenance, and repairs as needed, to ensure the facility operates at optimal performance. They contribute to the overall reliability and efficiency of the clean energy project, ensuring that it continues to produce energy effectively over its operational life.



Figure 1: Typical Project Finance Structure

