

Be Prepared: The IRA Eliminates the Tech-Based ITC in Just Over a Year

Beginning in 2025, electricity-producing facilities will need to achieve zero emissions to claim the Investment Tax Credit, making the eligibility of several currently funded technologies uncertain.

by Elizabeth Waters

This article has been prepared for informational purposes only; it is not intended to provide, and should not be relied on for, tax, legal, or accounting advice. You should consult your firm's tax, legal, and accounting advisors before engaging in any transaction.

Just as project teams have started to get a handle on the huge decarbonization and resilience incentives of [the Inflation Reduction Act \(IRA\)](#), one of the law's most significant provisions for the building industry is about to radically change.

On January 1, 2025, for the first time in its almost 50 years, the Investment Tax Credit for Energy Property (ITC) will no longer apply to specific energy technologies. The Clean Electricity ITC (section 48E) will replace the current ITC (section 48), becoming "technology agnostic" and applying only to electricity-generating facilities, energy storage, and some interconnection equipment.

This shift includes a significant exception for "geothermal heat property" such as [ground-source heat pumps](#) (for which section 48 doesn't start scaling down until 2033). But projects installing other system types must begin construction before 2025 to be eligible for the credit in its current iteration. That's coming up quickly.

While we can be confident that 48E will continue covering renewable energy technologies like solar and wind, it is

unclear whether it will apply to fossil fuel-powered equipment that's currently eligible for section 48. It's also uncertain whether 48E will consider all equipment types covered by section 48 to be "electricity-generating facilities."

BuildingGreen spoke with Paul Smith, partner at law firm Bryan Cave Leighton Paisner, and his colleague Christopher Girouard, associate at the firm, about what is known—but mostly unknown—about the ITC transition.

Questionable tech covered by the ITC

[The Investment Tax Credit for Energy Property \(ITC\)](#) was first enacted as part of the Energy Tax Act of 1978, which offered businesses a 10% tax credit for energy equipment using sources other than oil or fossil gas. [According to a 2021 Congressional Research Service summary report](#), the intention behind the ITC was to encourage the commercialization of energy technologies that would reduce U.S. fossil fuel consumption and improve energy efficiency. Originally designed to expire at the end of 1982, the ITC has been phased down, extended, and then expanded numerous times in the near-half-century since, with technologies frequently added and removed from the list of qualifying energy equipment.

Its emphasis has always been on solar,



Photo: UniEnergy Technologies. License: CC BY-SA 4.0.

and at times wind, but many other technologies—some of which have questionable climate benefits—have been made eligible over the years, including:

- Gas-powered fuel cells
- Gas engines for combined heat and power (CHP) systems
- Gas turbines and microturbines
- Biogas equipment
- Electrochromic glass (dynamic glazing)

As expressed in the [2005 Energy Policy Act](#), lawmakers included fuel cells to reduce U.S. dependence on imported oil and increase energy security. And CHP systems were added a few years later to improve the efficient use of fossil fuels in electricity generation, according to the summary report.

These technologies are still covered by the ITC today—even though the White House describes the provision as “a tax credit for investment in renewable energy projects” in its [IRA guidebook](#).

Will 48E continue to cover fossil fuel-powered equipment?

With the expiration of section 48, prescriptive rules based on technology type will end.

And although it sounds like section 48E will disqualify any facility with a greenhouse gas emission rate “greater than zero,” it seems, at least for now, not to be shutting the door on those powered by fossil fuels. Emissions captured, used, or stored—in a way that meets the carbon capture and sequestration (CCS) credit section 45Q requirements—will not count toward a facility’s total emissions.

The code explains that a “qualified facility” is one that:

- Is used for the generation of electricity
- Is placed in service after December 31, 2024
- Has an anticipated greenhouse gas

The new Clean Electricity credit will primarily apply to zero-emission electricity-producing facilities. Energy storage (including standalone batteries like these) and some interconnection property are the only other equipment types explicitly eligible for the post-2024 “technology-agnostic” ITC.

emissions rate not greater than zero. Each year, the Secretary of the Treasury will publish a table with the carbon dioxide equivalent rates of different categories of facilities, thus dictating which will qualify for the credit. This table has not yet been released for 2025, nor has the agency announced which types of facilities it will determine rates for.

As such, explained Girouard, “no one can say for sure which technology will or will not apply because we don’t know how you measure greenhouse gas emission rates. But if the rule was some permissive-looking standard, I’d think that most existing technology would qualify.”

It stands to reason, though, that fossil fuel-powered equipment will have a trickier and costlier—though maybe not impossible—compliance pathway to zero emissions.

How can project teams plan for this change?

As mentioned, it’s likely a safe bet that 48E will cover wind, solar, and other truly renewable energy projects, along with battery storage. But coverage for projects using fossil fuels is less certain.

Smith commented that investors and lenders need relative certainty to finance a project. The lack of a clear definition of a “zero-emissions facility” from the administration could lead to a pause in financing for projects beginning construction soon after 2024, he considered.

As for why further guidance has yet to come out? “There were big changes implemented [in the IRA] for 2023 and 2024,” Smith explained, “and the industry is pivoting to jump onto that. A lot of focus is on the immediate horizon. Very few people are looking at 2025 and after”—despite the long design and construction timelines the building industry is notorious for.

Plus, added Girouard, “A lot of the IRA changes are not necessarily tax chang-

es, but are policy changes we’re implementing through the tax codes, so a lot of these things need to be leveraged with other agencies.”

This means that the development of guidance will take time and interagency collaboration.

Other details

Section 48’s credit structure will remain in place under section 48E. Facilities that meet the prevailing wage and apprenticeship requirements or are under one megawatt can receive a 30% credit. Those that do not meet these criteria will be eligible for 6%. On top of this, the three bonus credits, direct pay, and transferability options will stay available.

Once a facility receives the 48E credit, it must remain in use for five years and not exceed a greenhouse gas emission rate of 10 grams of CO₂e per kWh. Otherwise, the ITC is subject to “recapture”—meaning the facility owner would be liable for back taxes.

The new version of the tax credit will phase out starting at the later of two dates: either in 2032 or when U.S. greenhouse gas emissions from electricity are 25% of 2022 emissions or lower.

Published December 4, 2023