

A sneak preview of some of the ITC and PRC TTC and DER program information, we use McGuire woods on this and would always ask that a client have a good tax attorney identity based upon state, county, city and local requirements. We are also part of the DSIRE network and also ask that you visit their site as well to get as much free information that you can before hiring an attorney to look into your project.

<https://www.dsireinsight.com/>

IRA Section 48(a)(3)(A)(ix) to create an ITC for standalone energy storage technology with a minimum capacity of 5 kWh

Energy storage installations that are placed in service *after* Dec. 31, 2022, and begin construction *prior* to Jan. 1, 2025, are entitled to the existing ITC under Section 48(a). Energy storage installations that begin construction after Dec. 31, 2024, will be entitled to credits under the technology-neutral ITC under new Section 48E Any energy storage technology that qualifies under Section 48 also will qualify under Section 48E

The maximum ITC value (30% bonus credit) will last until 2033, then drop to 75% of the maximum in 2034 (22.5% bonus credit), and to 50% of the maximum in 2035 (15% bonus credit). Thereafter, the ITC will no longer be available.

The IRA removes doubt for energy storage property, as defined in Section 48(a)(6), by explicitly stating that a service contract for operation of an energy storage facility will be respected The IRA added a provision to permit project owners (other than tax-exempt entities) to make an election to transfer the ITC to an unrelated third party.

Project owners claiming the ITC when contracting with a tax-exempt offtake must understand whether the contract with the offtaker will be considered a lease or a service contract by the IRS under Section 7701(e). This determination can shift a taxpayer's depreciation to a straight line, require fair market value purchase options, and even cause an outright denial of the taxpayer's ability to claim the ITC. The IRA removes doubt for energy storage property, as defined in Section 48(a)(6)

Being able to rely on the service contract safe harbor under Section 7701(e) avoids uncertainty about claiming the ITC for contracts to provide storage services to tax-exempt and governmental entities.

Additionally, the IRA provides energy storage property an election out of the Section 50(d)(2) "public utility property" normalization method of accounting limitation for facilities with a capacity in excess of 500 kWhs.

From

<https://www.mcguirewoods.com/client-resources/alerts/2022/12/inflation-reduction-act-creates-new-tax-credit-opportunities-for-energy-storage-projects/>

The 2022 Inflation Reduction Act created unprecedented manufacturing incentives for wind, solar, batteries and critical materials produced in the U.S., but companies needed, the credits require that the maker actually sells the item in question; factories can't make things just for the purpose of claiming a tax credit. And the credits run through 2030, before tapering off to nothing by 2033.

The 45X credit scales by kilowatt-hour, so technologies that store far more kilowatt-hours than typical lithium-ion batteries stand to draw in far more money through this credit.

45X manufacturing credit.

Normally, climate hardware startups have to slog through years of selling expensive, first-of-a-kind projects until they build up enough demand to justify large-scale production, which brings down costs. The \$45 per kilowatt-hour tax credit offers an express lane to zoom ahead to more compelling price points. Or maybe it's more like a surfing instructor pushing a student's board forward so they catch a wave sooner.

<https://public-inspection.federalregister.gov/2023-27498.pdf>

What exactly is ATES?

ATES is a series of mechanical and thermal components that are designed to heat and cool as a single functioning unit. By maximizing heat recovery and thermal energy storage in every aspect of engineering design and construction, we can realize additional energy efficiencies and also secure a significant financial incentive to help fund projects that achieve the goals of clean, decarbonized energy as expressed through the IRA.

For the

IRA Section 48(a)(3)(A)(ix) to create an ITC for standalone energy storage technology with a minimum capacity of 5 kWh

Energy storage installations that are placed in service *after* Dec. 31, 2022, and begin construction *prior to* Jan. 1, 2025, are entitled to the existing ITC under Section 48(a). Energy storage installations that begin construction after Dec. 31,

2024, will be entitled to credits under the technology-neutral ITC under new Section 48E

Any energy storage technology that qualifies under Section 48 also will qualify under Section 48E

The maximum ITC value (30% bonus credit) will last until 2033, then drop to 75% of the maximum in 2034 (22.5% bonus credit), and to 50% of the maximum in 2035 (15% bonus credit)

What is the IRA?

The IRA was passed by the Biden administration to reduce inflation and promote clean energy; it is wide-ranging, spanning prescription drug price reform, enhancements to IRS operations, and changes to the tax code, some of which are related to energy projects.

The tax credit gained through the IRA can be used by the client directly or monetized using transfer provisions.

How does the IRA focus on ATES?

For us the most relevant and interesting parts of the bill are Section 48 and Section 48E. These sections address the tax credits available for owners and investors that implement specific projects under prescribed conditions and within a defined timeline. Both the Section 48 and 48E Energy Credits can be applied to energy storage projects, both traditional and ATES. The difference between Sections 48 and 48E relates to project timeline. Section 48 applies to projects that begin construction by December 31, 2024; projects that begin after that date and are placed in service after January 1, 2025, fall under Section 48E. The Tax Credit program will remain in effect until 2032 (or a later date, when the Secretary of the Treasury determines that the annual US GHG emissions from electricity generation are 75 percent lower than 2022).

There are multiple tax credit rates depending on various criteria of how the project is implemented. The base credit is 6 percent. A significant increase to a 30 percent tax credit can be realized by achieving one of the following:

- **have capacity of less than one megawatt,**
- **begin construction before January 29, 2023, or**
- **satisfy both the prevailing wage requirements [Section 48(a)(10)] and the apprenticeship requirements [Sections 48(a)(11)]**

There are also 10% bonus credits, including the domestic content bonus credit and a rate increase for energy communities.

What does this tax credit mean for our clients?

With the Section 48 and 48E tax credits, electrification and decarbonization energy projects are within technical and financial reach for buildings, campuses,

and communities! Designs and strategies to maximize its benefits can be implemented with a multitude of technologies and systems, including:

- tempered water distribution
- thermal energy generation
- air-source heat pumps
- geothermal and
- many other traditional technologies

The value of the credit can be used directly by some entities or monetized through a transfer of the credit to another buyer. Ecosystem has experience in developing and executing this mechanism.

What kinds of projects will benefit from the tax credit?

- A multifamily building in NYC implements an ATES project to renew aging and inefficient infrastructure while also complying with Local Law 97, a city law that mandates a series of escalating fines on carbon emissions.
- A large college campus builds an ATES to exchange and to store energy between their facilities using electrified (and non-electrified) sources of energy
- A commercial office building uses heat pumps to heat and cool simultaneously, while storing and exchanging energy between floors

From <<https://ecosystem-energy.com/active-thermal-energy-storage/>>

Buy American Act standards.

The act provides a separate (potentially additional) 10% increase in the credit for an applicable facility located in an “energy community,” which includes a designated brownfield site, an area surrounding a coal mine closed after 1999 or coal-fired electric plant retired after 2009, or a designated tract with significant tax revenues or employment related to the extraction, processing, transport, or storage of coal, oil, or natural gas and with an unemployment rate at or exceeding the national average.

Finally, the act provides a separate (potentially additional) 10% and possible 20% credit increase for certain smaller renewable energy facilities, including those coupled with energy storage equipment, located in identified low-income communities or projects based on Treasury allocations of “environmental justice capacity limitation” with respect to the facility. Thus, there is (at least in theory)

the possibility for a project that meets all of the adder criteria to receive ITCs in the amount of 70% of eligible project costs.

Production Tax Credit

Dovetailing with the onshoring and energy security policy objectives reflected in the “domestic content” adder described above, the act refreshes a preexisting ITC and enacts a new production tax credit (PTC) for manufacturing facilities located in the United States producing a wide array of green technology industry equipment, including energy storage equipment.

Moreover, the products produced by these manufacturing facilities may still be eligible for further tax credits on the deployment side as described above.

Monetization and Potential Impact and Opportunities

The act provides for refundable green technology industry tax credits, including for the energy storage facility ITC and the energy storage equipment manufacturing facility ITC and PTC. However, aside from limited exceptions, including for the green technology equipment (including energy storage) manufacturing facility PTC, only tax-exempt and US federal, state, local, or tribal governmental entities (including Alaska Native Corporations); the Tennessee Valley Authority; and corporations operating on a cooperative basis engaged in furnishing electricity to persons in rural areas are eligible for the refundable credit.

The act also allows for the novel ability of taxable entity project owners (generally, those not eligible to claim refundable credits) to sell all or a portion of their tax credits with respect to a particular year for cash. The initial buyer of a credit may not resell the credit.

These provisions have the potential to revolutionize the way green technology industry project financing is structured and expand the investor base for green technology industry facilities, including for energy storage.

Sale of Tax Credits

In particular, the ability to directly sell tax credits has the potential to fundamentally alter the market for green technology industry financing, which, with respect to renewable energy, has prior to the act consisted of tax-driven structures (partnership flips, sale-leasebacks, and inverted leases) to monetize tax credits given sponsors’ (i.e., developers’) frequent inability to effectively use the tax credits themselves.

As an example, under the common partnership flip structure, a “tax equity” investor must generally be a true project development joint venture “partner” (among other common law–based requirements) to effectively be compensated for capital investment with a disproportionate share of project tax credits (and depreciation). The tax credit sale provisions of the act allow investors to discard this paradigm and enjoy the type of no-risk, “pure play” tax credit purchase commercial arrangement they have long desired, although at the expense of not being able to receive the benefits of depreciation (which may not be sold along with the credits).

Although initial market indications are that there is still a desire for traditional tax equity financing transactions in which investors are beneficial equity owners of

the underlying facility (and receive associated return from the operations of the facility and from disproportionate allocations of both tax credits and depreciation from the facility), the new ability to sell tax credits has the potential to expand the market of investors and for the monetization of the credits. For one, the ability to sell tax credits may have appeal, and expand financing opportunities, for smaller-scale developers and projects for which the significantly increased complexity and cost of implementing a traditional tax equity investment structure is less economically viable.

We also expect that the ability to sell tax credits will be critical for the development and financing of emerging and rapidly developing technologies, such as energy storage, and eligible manufacturing where tax equity investments have not to this point been deployed due to the perceived economic or legal risk associated with owning an equity ownership interest in the applicable facility (as compared to simply purchasing the tax credits)

From

<https://www.morganlewis.com/pubs/2023/03/new-tax-credits-and-monetization-opportunities-for-energy-storage-have-the-chance-to-revolutionize-the-industry>