



Federal Tax Credit for Commercial Solar Installations

Tax Credit?

A tax credit reduces the amount of income tax liability on a dollar-by-dollar basis. For example, a \$20,000 federal tax credit reduces the federal income taxes due by \$20,000.

Federal Solar Tax Credit?

The federal solar energy credit is a tax credit that can be claimed on federal income taxes for a percentage of the cost of a solar system including a solar HVAC system.

In August 2022, Congress passed a revision to the Investment Tax Credit (“ITC”), which provides a 30% tax credit for systems installed in 2022 - 2031, 26% in 2032 and 22% for systems installed in 2033. The tax credit expires starting in 2034 unless Congress renews it. It would also increase the solar credit another 10% for solar equipment built in America, another 10% for solar equipment installed in an Energy Community and would increase the tax credit another 20% for solar equipment installed in certain low-income housing applications.

There is no maximum amount that can be claimed, and the credit can be transferred from one party to another, with certain limitations.

Eligibility to claim the Federal Solar Tax Credit?

These are the current requirements:

- The solar system was installed after January 1st, 2022.
- The solar system is installed on a commercial facility.
- You own the solar system (i.e., you purchased it with cash or through financing, but you are not leasing the solar equipment).
- The solar system is new or being used for the first time. The credit can only be claimed on the “original installation” of the solar equipment.
- Not leased to a tax-exempt entity (e.g., a school), though tax exempt entities are eligible to receive the ITC themselves in the form of a direct payment.

Expenses included in determining Solar equipment “cost”!

The following expenses are included:

- Contractor labor costs for onsite preparation, assembly, or original installation, including inspection costs, and developer fees.
- Balance-of-system equipment, including wiring, inverters, and mounting equipment.
- Sales taxes on eligible expenses (many states do not impose sales tax on solar installations).
- Energy storage devices that have a capacity rating of 5 kilowatt hours or greater (even if not charged with solar).

- For projects 5 MW or less, the tax basis can include the interconnection property costs spent by the project owner to enable distribution and transmission of the electricity produced or stored by the system—this can include costs that are incurred beyond the point at which the energy property interconnects to the distribution or transmission systems.
- The cost of a roof installation is generally *not* eligible, except for incremental costs, or the amount over what you would have spent if the roof was not used for solar. These costs could include solar shingle, solar tiles, or the incremental cost of installing a reflective roof membrane that increases electricity generation.

How can tax-exempt organizations benefit?

- Organizations that don't pay federal taxes, like non-profits or local governments, can take advantage of the tax credits through either direct pay or a transfer of credit.

Electric Utility and State Government Rebates

Most solar system rebates provided by a utility or state government are considered taxable income and do not change the tax basis when calculating the ITC. For example, if the tax basis is \$1,000,000 for a PV system installed at a commercial business that commenced construction in 2024, is placed in service within four years, and the state government gives a one-time rebate of \$100,000, the ITC would be calculated as follows:

$$0.3 * \$1,000,000 = \$300,000$$

Other Incentives

Solar incentives and policies that do not reduce the tax basis—although some may be considered taxable income— include:

- Revenue from the sale of renewable energy certificates or other environmental attributes
- Payments for a state performance-based incentive
- State and local income tax credits
- State and local property tax exemptions on the equipment
- Taxable state or nonprofit grants (tax-exempt organizations wishing to take direct pay should see examples in that section of how to handle tax-exempt grants and loans)
- Loan guarantees
- Depreciation deductions

What happens to unused tax credits?

Unused tax credits related to the project may be carried back three years and forward 22 years for projects placed in service in 2024 or later (projects placed in service before 2023 can carry the tax credits back one year and forward 20 years). After 20 or 22 years, one-half of any unused credit can be deducted, with the remaining amount expiring. Tax credits carried backward or forward are not eligible for “transferability” (i.e., cannot be sold).

Tax Equity Financing

If a business does not have a large tax liability, tax equity financing may allow the business to take full advantage of federal tax benefits for a solar system. The business can partner with a tax equity investor that has a relatively large tax appetite and can make use of the tax benefits. While solar developers can now transfer tax credits, a tax equity investor may help them take advantage of accelerated depreciation. There are two commonly used models, although the specific arrangements can be quite complicated:

- Partnership Flips: The developer and investor form a partnership, and the economic returns

“flip” from the investor to the developer after the investor makes use of the tax benefits and achieves target yields.

- Sale-Leasebacks: The developer sells the solar system to a tax equity investor who leases the system back to the developer.

How does financing impact ITC calculations?

Eligible solar equipment purchased through debt financing qualifies for the ITC. However, individuals (including partnerships or limited liability companies), S corporations, and closely-held C corporations financing a solar project by borrowing on a “nonrecourse basis” face additional rules that may delay claiming of the ITC. Borrowing on a nonrecourse basis means the borrower is not personally liable to repay the loan, and the lender primarily relies on the solar project as collateral. In general, the portion of the solar project paid through nonrecourse financing is not immediately included when calculating the ITC (although several exceptions exist that are commonly satisfied); instead, in future tax years, the taxpayer can claim the ITC on the portion of the loan principal (but not the interest) as it is repaid.

The amount of ITC may be reduced by up to 15% if tax exempt bonds are used to finance a facility after August 17, 2022. The reduction is the lesser of i) 15% or ii) the fraction of the proceeds of the tax-exempt bond used to provide financing for the facility over the aggregate amount of additions to the capital account for the qualified facility.

How does a business claim the ITC?

To claim the ITC, a taxpayer must complete and attach IRS Form 3468 to their tax return. Instructions for completing the form are available at <http://www.irs.gov/pub/irs-pdf/i3468.pdf>

How to File the Federal Solar Tax Credit

Solar HVAC recommends that you or your company discuss this credit with a tax professional to determine if you are eligible for state, local, or utility incentives that could affect the overall benefit of the Solar HVAC installation.

IRS tax forms (plus their instructions) to file for the Federal solar tax credit.

- Form 3468

Also needed:

- Receipts from your **Solar HVAC** installation
- OG-100 Certification form
- Domestic Content letter from Solar HVAC