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How Commercial Solar Panel Depreciation Works

Sara Wolf

SOLAR FINANCING | 3 MIN READ

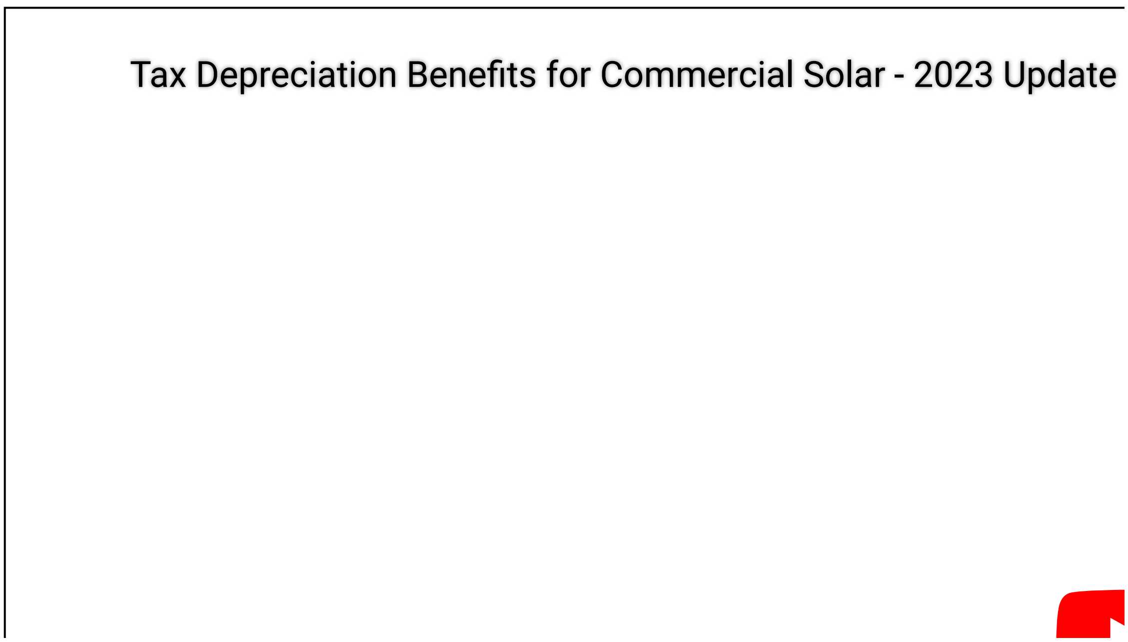
Depreciation on solar panels is one of the easiest ways businesses and farms looking to go solar can keep installation costs down, ROIs high, and paybacks short.

Put simply, depreciation is a decline in an asset's value over time. Your business can use this to recover costs from purchases as the equipment's value degrades throughout its lifetime.

There are a few different ways to expense depreciation, but we're going to focus on depreciating your solar system using the Modified Accelerated Cost Recovery System, or MACRS depreciation, with all the benefits accelerated to year one.

At Paradise Energy, we are expert solar installation professionals, not accountants. **We give the most accurate outlook we can based on the financial information provided to us by our customers, but before making any decisions on how to expense depreciation, we recommend checking with your accountant first.**

A word to homeowners looking to go solar: depreciation is not generally allowed on residences unless it is considered a business expense.



Accelerated Depreciation for Commercial Solar Installations

The Schedule

Whether it's three, five, seven, or ten years, your investment's recovery period depends on the type of investment you make. Solar systems fall under the five-year schedule.

Is Depreciation Calculated Before or After the 30% Solar Tax Credit?

Because everything has a wonderful way of being simple and easy, the answer to this question is going to be either before or after, right? Not so much. The IRS reduces the basis for depreciation by one-half of the tax credit amount allowed. So if the tax credit is 30%, then the depreciable basis would be 85% of the total cost (100% - [30% X .5]). For example, if your solar system costs $100,000, you would be able to depreciate $85,000.

Note: For property acquired after September 27, 2017, and before January 1, 2023, the law allowed taxpayers to take a deduction amounting to 100%. That dropped to 80% in 2023 and will continue to step down by 20% each year until it reaches 0% in 2027.

Does the Production Tax Credit Impact Your Depreciable Basis?

The Production Tax Credit (PTC) is an alternative to using the 30% Solar Investment Tax Credit (ITC). It pays a set amount per kWh over a ten-year span. Typically this makes the most sense for utility-scale systems.

Unlike the ITC, claiming the Production Tax Credit does not reduce your depreciable basis.

Federal Savings vs State Savings

The Tax Cut and Jobs Act changed how we can depreciate solar on the federal level. Prior to 2023, businesses could depreciate 100% of the cost basis in the first year. In 2023, businesses can depreciate 80% of the cost basis in year one. This will continue to decrease by 20% a year until it reaches 0% in 2027.

Businesses can still depreciate 100% of the cost basis, but the remaining 20% will follow the MACRS schedule.

An Example of How Commercial Solar Depreciation Works

Let's figure out the MACRS depreciation for a solar system that costs $300,000 before incentives. You'll be able to take advantage of the Federal Solar Incentive Tax Credit at 30%. But since we have to calculate depreciation with half of the tax credit, reducing the depreciable cost basis, we'll have to take 15% off the cost of the system to get the basis of depreciation. We can do this by multiplying the cost by 85%, which gives us $255,000.

Next, you'll need to know your federal and state tax brackets. We'll use a 24% federal tax rate and a 7% state tax for this example.

To calculate federal tax savings from depreciation, multiply the $255,000 by 24%. Because you can take advantage of 80% of this in the first year, you'll enjoy $48,960 in tax savings the year that your solar system is placed into service. The remaining $12,240 of the depreciable amount will follow the MACRS schedule.

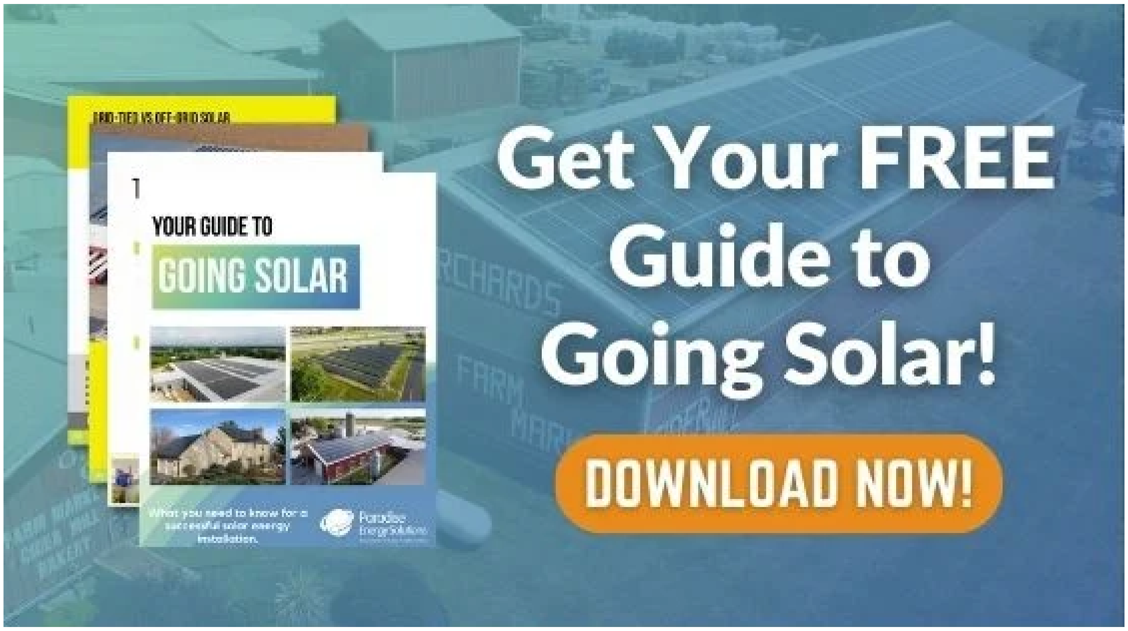
To get state savings, multiply $255,000 by your state tax rate, which in this case is 7%. You'll get $17,850 spread over the 5-year MACRS schedule.

That means the total savings from just depreciation would be $79,050. In this example, that's 26.3% of the entire solar system's cost!

Recovery Year	Federal Depreciation	State Depreciation	Total Savings
Year 1	80% Federal	20% State	$52,530
Year 2	20% of the remaining 20%	32% State	$8,160
Year 3	32% of the remaining 20%	19.2% State	$7,344
Year 4	19.2% of the remaining 20%	11.5% State	$4,402.83
Year 5	11.5% of the remaining 20%	11.5% State	$3,460.35
Year 6	11.5% of the remaining 20%	5.8% State	$2,442.90
Year 6	5.8% of the remaining 20%	0% State	$709.92

These tax savings will keep your payback period short and your ROI high. You'll be able to use these savings to reduce a loan's principal owed or reinvest in your company.

Are you ready to see how much you could save with solar? Use our Solar Savings Calculator to get instant price and savings estimate.



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