The Modified Accelerated Cost Recovery System (MACRS)

What is the MACRS Depreciation Benefits of Solar Panels?

MACRS depreciation is an economic tool for businesses to recover certain capital costs over the solar energy equipment's lifetime. Allowing businesses to deduct the appreciable basis over five years reduces tax liability and accelerates the rate of return on your solar investment. The value of the MACRS Depreciation benefit can be challenging to consider without the guidance of a professional accountant.

There are a number of factors that must be considered and we can't cover each of them here. Consult your CPA to make sure you can take advantage of MACRS for your solar system.

How To Use MACRS to Depreciate My Commercial Solar Investment?

Qualifying solar energy equipment is eligible for a cost recovery period of five years. For equipment on which an Investment Tax Credit (ITC) the owner must reduce the project's appreciable basis by one-half the value of the 30% ITC. This means the owner is able to deduct 85 percent of his or her tax basis.

"Depreciation" is the loss of value that occurs over time when the object purchased is used for a specific use. As a business owner, you are eligible to deduct this "loss in value" from your taxable income when used for your business. If you are running a profitable business, and you can show that the solar power you are generating is for business use (as opposed to personal use), then it may have a strong impact on reducing your bottom line.

For our calculations, we assume that our clients maintain a 30% tax rate. Your personal rate will likely vary. Understanding which portion of your solar investment is eligible for depreciation is important to know. Assume you have a solar project valued at $100,000. The taxable basis is reduced by half of the 30% Investment Tax Credit, so it is 85% of $100,000 or $85,000.

Sample of Depreciation Benefit – 5 Year MACRS Table

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Depreciation Basis	$85,000					
Depreciation %	20.00%	32.00%	19.20%	11.52%	11.52%	5.76%
Depreciation Expense	**$17,000**	**$27,200**	**$16,300**	**$9,792**	**$9,792**	**$4,896**

Bonus Depreciation on Solar Panel Projects Explained

- Before 1/1/2018 – 50% Bonus Depreciation
- During 2018 – 40% Bonus Depreciation
- During 2019 – 30% Bonus Depreciation

In the first year claiming the 50% Bonus Depreciation, you will then reduce your post-ITC basis by half – $85,000 to $42,500 – before applying the normal MACRS depreciation rate. In Year One you will gain an addition $8,500 in depreciation ($42,500 x 20% = $8,500). After year one, you will continue to apply MACRS rates to the remaining half of the basis ($42,500 x 32% =$13,600 and so on…)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Depreciation Basis	$42,500 *(basis after bonus depreciation)*					
Depreciation %	20.00%	32.00%	19.20%	11.52%	11.52%	5.76%
Depreciation Expense	$8,500	$13,600	$8,160	$4,896	$4,896	$2,448
Bonus Depreciation	$42,500					
Total Depreciation	**$51,000**	**$13,600**	**$8,160**	**$4,896**	**$4,896**	**$2,448**

Economics of MACRS Accelerated Depreciation

Please note that we have not considered the Net Present Value of these numbers and is in simple dollar format. Accelerated depreciation, along with other solar tax and cash incentives, such as the Investment Tax Credit (ITC), has helped significantly reduce the payback period of going solar.

More information: https://energy.gov/savings/modified-accelerated-cost-recovery-system-macrs

Contact us for a FREE solar survey today!
(206) 557-5215 | info@artisanelectricinc.com