Depreciation of Solar Energy Property in MACRS

Businesses rely on policy certainty to make long-term investment decisions. SEIA supports smart tax policy that drives continued innovation in the solar industry. Depreciation is one aspect of the tax code that facilitates greater investment in renewable energy and ultimately lower costs for consumers.

Quick Facts

- The Modified Accelerated Cost Recovery System (MACRS), established in 1986, is a method of depreciation in which a business' investments in certain tangible property are recovered, for tax purposes, over a specified time period through annual deductions.
- Qualifying solar energy equipment is eligible for a cost recovery period of five years.
- The market certainty provided by MACRS has been found to be a significant driver of private investment for the solar industry and other energy industries.

The U.S. tax code allows for a tax deduction for the recovery of the cost of tangible property over the useful life of the property. The Modified Accelerated Cost Recovery System (MACRS) is the current depreciation method for most property. The market certainty provided by MACRS allows businesses in a variety of economic sectors to continue making long-term investments and has been found to be a significant driver of private investment for the solar industry and other energy industries.

MACRS as a Method of Depreciation

The Modified Accelerated Cost Recovery System (MACRS), established in 1986, is a method of depreciation in which a business' investments in certain tangible property are recovered, for tax purposes, over a specified time period through annual deductions. MACRS is the method of depreciation used for most property, though assets vary by class, which determines the depreciable life, or cost recovery period, of the property. Class depreciation timeframes vary between three and 50 years, depending on the certain type of property. Some examples of classes include television and radio broadcasting equipment, which qualify for a cost recovery period of five years and office furniture and equipment, which qualify for a cost recovery period of seven years.

Qualifying solar energy equipment is eligible for a cost recovery period of five years. For equipment on which an Investment Tax Credit (ITC) or a 1603 Treasury Program grant is claimed, the owner must reduce the project's depreciable 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.

Various other renewable energy technologies also qualify for a five-year cost recovery period, including wind energy property, geothermal, fuel cells, and combined heat and power technology. Certain biomass property is eligible for a seven-year cost recovery under MACRS. Other energy technologies qualify for accelerated depreciation, including a 15-year recovery period for nuclear power plants and a seven-year recovery period for natural gas gathering lines.

Accelerated Depreciation Encourages Private Sector Investment

MACRS depreciation is an important tool for businesses to recover certain capital costs over the property's lifetime. Allowing businesses to deduct the depreciable basis over five years reduces tax liability and accelerates the rate of return on a solar investment. This has been a significant driver for the solar industry and other energy industries.

Accelerated depreciation, along with other successful energy tax incentives such as the Investment Tax Credit (ITC), has helped fuel unprecedented growth in annual solar installations.

Bonus Depreciation

In response to the economic downturn of 2008, Congress took action to further incentivize capital investment by accelerating the depreciation schedule economy-wide. The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 allowed companies to claim a 100% depreciation bonus on qualifying capital equipment purchased and placed in service by December 31, 2011. Congress included an extension of 50% bonus depreciation in early 2013 in the so-called "fiscal cliff" deal, which was scheduled to expire at the end of 2013. Under 50% bonus depreciation, in the first year of service, companies could elect to depreciate 50% of the basis while the remaining 50% is depreciated under the normal MACRS recovery period. At the end of 2014, Congress passed a retroactive extension of 50% depreciation such that companies that placed qualifying equipment in service through December 31, 2014 were eligible for 50% bonus depreciation. In December 2015, Congress passed the Protecting Americans from Tax Hikes Act of 2015, which included a 5-year extension of bonus depreciation, including a phase-out that is structured as follows: 2015-2017: 50% bonus depreciation; 2018: 40%; 2019: 30%, 2020 and beyond: 0%.