

Modified Accelerated Cost-Recovery System (MACRS)

Updated August 21, 2018

Note: *The Tax Cuts and Jobs Act of 2017* increased bonus depreciation to 100% for qualified property acquired and placed in service after September 27, 2017 and before January 1, 2023.

Under the federal Modified Accelerated Cost-Recovery System (MACRS), businesses may recover investments in certain property through depreciation deductions. The MACRS establishes a set of class lives for various types of property, ranging from three to 50 years, over which the property may be depreciated. A number of renewable energy technologies are classified as five-year property (26 USC § 168(e)(3)(B)(vi)) under the MACRS, which refers to 26 USC § 48(a)(3)(A), often known as the energy investment tax credit or ITC to define eligible property. Such property currently includes*:

- a variety of solar-electric and solar-thermal technologies
- fuel cells and microturbines
- geothermal electric
- direct-use geothermal and geothermal heat pumps
- small wind (100 kW or less)
- combined heat and power (CHP)
- the provision which defines ITC technologies as eligible also adds the general term "wind" as an eligible technology, extending the five-year schedule to large wind facilities as well.

In addition, for certain other types of renewable energy property, such as biomass or marine and hydrokinetic property, the MACRS property class life is seven years. Eligible biomass property generally includes assets used in the conversion of biomass to heat or to a solid, liquid or gaseous fuel, and to equipment and structures used to receive, handle, collect and process biomass in a waterwall, combustion system, or refuse-derived fuel system to create hot water, gas, steam and electricity. Marine and hydrokinetic property includes facilities that utilize waves, tides, currents, free-flowing water, or differentials in ocean temperature to generate energy. It does not include traditional hydropower that uses dams, diversionary structures, or impoundments.

The 5-year schedule for most types of solar, geothermal, and wind property has been in place since 1986. The federal *Energy Policy Act of 2005*(EPAAct 2005) classified fuel cells, microturbines and solar hybrid lighting technologies as five-year property as well by adding them to § 48(a)(3)(A). This section was further expanded in October 2008 by the addition of geothermal heat pumps, combined heat and power, and small wind under *The Energy Improvement and Extension Act of 2008*.

Bonus Depreciation

Bonus Depreciation has been sporadically available at different levels during different years. Most recently, The Tax Cuts and Jobs Act of 2017 increased bonus depreciation to 100% for qualified property acquired and placed in service after September 27, 2017 and before January 1, 2023.

**Note that the definitions of eligible technologies included in this entry are somewhat simplified versions of those contained in tax code, which often contain additional caveats, restrictions, and modifications. Those interested in this incentive should review the relevant sections of the code in detail prior to making business decisions*

[26 USC § 48 The Tax Cuts And Jobs Act of 2017](#)