

Solar Generation Property Taxation

Personal Property definition for property tax purposes¹

All taxable personal property in North Carolina is appraised at its true value in money. The two main exceptions are inventories owned by manufacturers, retailers, wholesalers and contractors, as well as non-business personal property. These types of personal property have been exempted by statute in North Carolina. There are other exemptions for different types of personal property where the ownership and use determine the exempt status. These would have to be looked at on an individual basis.

Personal property in North Carolina is appraised each year as of January 1 at its true value in money. The personal property owner should list his or her personal property with the correct county during the regular listing period in January. Extensions for listing personal property may be granted by the County Assessor up to April 15 upon a timely request. The request for extension to list must be made before the end of the regular listing period.

The counties in North Carolina use a trending method to appraise personal property. Counties request taxpayers to list their property at original cost by year of acquisition. The counties then trend the original cost up to reach current replacement cost new and then apply a straight line depreciation schedule to reach market value. Most of the counties use trending schedules developed by the North Carolina Department of Revenue (NCDOR).

The appraised value of any personal property may be appealed to the local county board and then to the North Carolina Property Tax Commission.

From Cost Index and Depreciation Schedule (NCDOR²)

Electric Energy Generation Equipment	Page	Schedule	Life
Hydroelectric Generating Equipment	27	T	50
Natural Gas-Fired and Combined Cycle Electrical Generating <ul style="list-style-type: none"> Equipment that does not also produce steam for sale 	27	T	18
Photovoltaic Solar Electric Generating Equipment	27	T	18
Steam Powered Electric Generating Equipment <ul style="list-style-type: none"> Includes assets used in the steam power production of electricity for sale, combustion turbines operated in a combined cycle with a conventional steam unit 	27	T	28

¹ <http://www.dornnc.com/taxes/property/types.html>

² http://www.dor.state.nc.us/publications/cost_archive/15archive/2015_costindex.pdf (page 6)

Wind Power Electricity Generation Systems <ul style="list-style-type: none"> <i>Includes wind turbines, support shafts and foundations, and ancillary lines, transformers and other equipment necessary to move electricity from the wind turbines to the utility's transmission line</i> 	27	T	18
Biomass-Renewable Organic Matter Electricity Generating Equipment	27	T	18
Thermal Solar Electric Generating Equipment	27	T	18

Example:

ABC Solar, LLC, installs a solar farm at a cost of \$15 million, 20 percent of which is subject to property taxation under G.S. 105-275(45). Therefore \$3 million is subject to property tax with a depreciable life of 18 years using straight line (see above).

Annual depreciation is \$166,667 ($\$3,000,000 / 18$). Assuming the mill levy is 75 mills.

Year	Tax Value	Depreciation	Mill Levy	Prop. Tax
1	\$3,000,000	\$0	0.75	\$22,500
2	\$2,833,333	\$166,667	0.75	\$21,250
3	\$2,666,666	\$166,667	0.75	\$20,000
4	\$2,499,999	\$166,667	0.75	\$18,750
5	\$2,333,332	\$166,667	0.75	\$17,500
6	\$2,166,665	\$166,667	0.75	\$16,250
7	\$1,999,998	\$166,667	0.75	\$15,000
8	\$1,833,331	\$166,667	0.75	\$13,750
9	\$1,666,664	\$166,667	0.75	\$12,500
10	\$1,499,997	\$166,667	0.75	\$11,250
11	\$1,333,330	\$166,667	0.75	\$10,000
12	\$1,166,663	\$166,667	0.75	\$8,750
13	\$999,996	\$166,667	0.75	\$7,500
14	\$833,329	\$166,667	0.75	\$6,250
15	\$666,662	\$166,667	0.75	\$5,000
16	\$499,995	\$166,667	0.75	\$3,750
17	\$333,328	\$166,667	0.75	\$2,500
18	\$166,661	\$166,667	0.75	\$1,250
				\$213,750

This solar project, over an 18 year depreciable life, would generate, with these assumptions, ~\$214,000 in property tax revenue from ABC Solar, LLC.

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Published by the N.C. Cooperative Extension Service

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