Property Tax Exemptions for Solar Installations

By: Lee Hansen, Chief Legislative Analyst
August 24, 2023 | 2023-R-0214

Issue
This report describes the state’s property tax exemptions for solar installations.

Summary
Connecticut’s property tax exemption laws for solar installations vary depending on factors such as the type of installation, the date it was installed, and how the energy produced by it will be used. Anyone claiming an exemption must file a written application with their town assessor or board of assessors by November 1. Failure to do so waives the exemption for that assessment year. Once approved, the exemption does not need to be renewed unless the facility is altered in a way that requires a building permit.

Brief summaries of the relevant laws appear below.

Active Solar Energy Heating or Cooling Systems

CGS § 12-81(56). The law allows municipalities to authorize a property tax exemption for buildings equipped with an active solar energy heating or cooling system. By law, these systems are equipment that (1) provides for the collection, transfer, storage, and use of incident solar energy for water heating or space heating or cooling that would otherwise require a conventional energy resource such as petroleum products, natural gas, or electricity; (2) employs mechanical means such as fans or pumps to transfer energy; and (3) meets certain standards established in regulations by the Office of Policy and Management secretary.
If authorized by municipal ordinance, the exemption applies to: (1) systems installed since October 1, 1976; (2) the first 15 assessment years after the system’s installation; and (3) the amount by which the assessed valuation of the property equipped with the system exceeds the valuation of the property equipped with the conventional portion of the system, excluding any portion of the system related to solar energy.

Residential or Agricultural Class I Renewable Energy Sources

**CGS § 12-81(57)(A)(i).** The law exempts from the property tax certain Class I renewable energy sources (which include solar) installed to generate electricity for private residential use or on a farm. The system must (1) be installed on or after October 1, 2007; (2) have an estimated annual production that does not exceed the load (i.e., demand) for its location (when it is installed and as indicated on the exemption application); and (3) be for a single-family dwelling, a multi-family dwelling with two to four units, or a farm.

The law specifies that the exemption applies regardless of whether the facility (1) also participates in state net metering or tariff programs or (2) is owned by a third party (e.g., leased solar).

Passive or Active Solar Water or Space Heating Systems

**CGS § 12-81(57)(A)(ii).** By law, any passive or active solar water or space heating system is exempt from the property tax. The exemption applies only to the amount by which the assessed valuation of the property equipped with the system exceeds the valuation of it equipped with the system’s conventional portions.

Commercial or Industrial Class I Sources Installed 2010-2013

The law mandates a property tax exemption for certain renewable energy facilities installed in New Haven between January 1, 2010, and December 31, 2013, and gives other municipalities the option to abate the taxes on these same types of facilities. The exemption is mandatory for facilities installed on or after January 1, 2014 (see below).

**CGS § 12-81(57)(B).** The law exempts from the property tax certain Class I renewable energy sources installed to generate or displace energy for commercial or industrial purposes. The system must (1) be installed on or after January 1, 2010; (2) have a nameplate (i.e., generating) capacity that does not exceed the load for its location; and (3) be installed in a distressed municipality with a population between 125,000 and 135,000 (i.e., New Haven).

**CGS § 12-81(57)(C).** The law allows other municipalities to abate up to 100% of the property taxes for certain Class I renewable energy sources installed to generate or displace energy for
commercial or industrial purposes. The system must (1) be installed on or after January 1, 2010, and (2) have a nameplate capacity that does not exceed the load for its location. The abatement must be approved by the municipality’s legislative body, or, if the legislative body is a town meeting, its board of selectmen.

**Commercial or Industrial Class I Sources Installed After January 1, 2014**

*CGS § 12-81(57)(D)*, as amended by *PA 23-102*, § 36. Since the 2014 tax year, the law has exempted from the property tax certain Class I renewable energy sources installed to generate or displace energy. The system must (1) be installed on or after January 1, 2014; (2) be for commercial or industrial purposes; and (3) have a nameplate capacity that does not exceed the load for its location (or its aggregated load if it is used for virtual net metering).

The exemption does not cover nuclear power generating facilities, which, under *PA 23-102*, § 36, will be considered Class I renewable energy sources if they are built on or after October 1, 2023. (State law generally prohibits construction from starting on a new nuclear power facility until the Department of Energy and Environmental Protection (DEEP) commissioner finds that the federal government has identified and approved a demonstrable technology or means to dispose high level nuclear waste; however, it also allows this construction at any nuclear power generating facility currently operating in the state (*CGS § 22a-136*, as amended by *PA 23-102*, § 34.).)

**Municipal Abatement Option for Certain Class I Sources Built After January 1, 2013**

*CGS § 12-81(57)(F).* By law, the DEEP commissioner, under certain conditions, must solicit power purchase agreement proposals from Class I renewable energy sources built on or after January 1, 2013. If a proposal meets certain conditions, the commissioner can direct the electric distribution companies (i.e., Eversource and United Illuminating) to enter into a power purchase agreement for up to 20 years with the proposal’s Class I facility.

For assessment years starting on and after October 1, 2015, the law allows municipalities to abate up to 100% of the property taxes due for any tax year for any Class I renewable energy source subject to one of these power purchase agreements. The abatement (1) cannot be for longer than the power purchase agreement’s term and (2) must be approved by the municipality’s legislative body, or if the legislative body is a town meeting, by its board of selectmen.

LH:kl