

Current Guidance for Municipal Officials on the Valuation of Solar Plants

(Excerpt from Lister Handbook)

Re: H.431 Testimony from Jill Remick, PVR

Valuation of Solar Plants

Municipal property tax is imposed on a solar plant unless one of the following applies:

The solar plant has a plant capacity less than 50 kW and is either (a) operated on a net-metered system or (b) not connected to the electric grid and only provides power on the property on which it is located; or

The municipality has voted to exempt the plant pursuant to 32 V.S.A. § 3845; or

The municipality has entered into a contract to stabilize the property's taxes pursuant to 24 V.S.A. § 2741.

All other solar plants must be valued for municipal property tax purposes. Solar plants with a plant capacity of less than 50 kW, and that do not qualify for any of the three exemptions described above, will also be valued for education property tax purposes. Vermont law requires a solar plant to be valued using the discounted cash flow method as described in 32 V.S.A. § 3481(1)(D) and designated by the Department's Division of Property Valuation and Review (PVR). Assessing officials should contact their district advisors for help with using the valuation model identified by PVR.

The appraisal value that an assessing official should use is 70% of the value calculated by the valuation model based on the expected 25-year project life.

The assessment will remain unchanged for either 25 years or the remaining life of the project, whichever comes first. For net-metered systems that are not exempt, an assessing official must reduce the plant capacity by 50 kW before calculating an appraisal value.

Valuation of Land Supporting Solar Facilities

The land supporting a solar facility is to be based on highest and best use. Although Vermont Statute provides special treatment to Solar Facilities [32 V.S.A. § 3481 \(D\)](#), there is no statutory language addressing treatment to the underlying land.

The market approach or income approach are the appropriate approaches to value.

Solar Facilities on Exempt Land

[32 V.S.A. § 8701](#) was later amended to explicitly preserve the exempt status of any underlying land. That is to say if a solar facility is constructed on exempt land the land remains exempt.

LAWS, REGULATIONS AND GUIDANCE

[32 V.S.A. § 8701 Uniform Capacity Tax](#)

[30 V.S.A. § 8002 Definitions \(Chapter 89: Renewable Energy Programs\)](#)

[32 V.S.A. § 3802 Property Tax \(Chapter 125: Property Tax Exemptions\)](#)

[32 V.S.A. § 5401\(10\)\(J\) Definitions \(Chapter 135: Education Property Tax\)](#)

[32 V.S.A. § 3481 \(D\)\(i\) Miscellaneous Provisions Pertaining to the Listing of Property for Taxation](#)
[24 V.S.A. § 2741 Municipal Corporations; Property Values Fixed by Contract](#)
[Taxation of Solar Plants](#)

Solar Plants Subject to the Uniform Capacity Tax

You are required to file [Form SCT-603, Solar Energy Capacity Tax](#) and pay the tax to the Vermont Department of Taxes if all of the following apply to you:

- you own an operating solar plant;
- the plant has a capacity of 50 kW or more; and
- the plant was in operation as of December 31.

Tax Due

The Uniform Capacity Tax is imposed at a rate of \$4.00 per kW of plant capacity. Plant capacity is the total AC nameplate capacity of all inverters used to convert the plant's output to AC power. The Department uses the rated nameplate capacity stated on the plant's Certificate of Public Good (CPG) to determine plant capacity unless the taxpayer can demonstrate that another method is more accurate. Owners—as named on the CPG—must pay the tax for the prior calendar year to the Department no later than April 15 each year.

When Multiple Facilities are Connected

A group of solar-generating facilities is considered one "plant" under Public Utility Commission (PUC) Rule 5.100. One form SCT-603, Solar Energy Capacity Tax, must be filed if a group of solargenerating facilities uses common equipment and infrastructure such as roads, control facilities, and connections to the electric grid, and the facilities are not found by the PUC to be separate plants. Calculate and pay the UCT based on the total capacity of the connected facilities.

Implications for Property Tax

Solar plants subject to the UCT are exempt from the statewide education property tax. A municipality may vote to exempt or stabilize a solar plant for municipal property tax purposes. Municipalities that impose municipal property taxes on solar plants are required to follow a property valuation methodology specified in law.

In addition to the UCT applied to the solar plant, the underlying land is subject to property tax as normal. The presence of a solar plant on exempt land does not alter the exempt status of the underlying parcel. When the underlying land is not exempt, it is valued based on the highest and best use. Market and income are the appropriate valuation methods.

Owners of solar plants with a plant capacity of less than 50 kW are not required to pay the UCT. Further, an owner is not required to pay education or municipal property tax on a solar plant that has a capacity less than 50 kW and is either (a) operated on a net-metered system or (b) not connected to the electric grid and only provides power on the property on which it is located.

Valuing and Taxing Enclosures and Buildings that House Batteries

Solar renewable energy plants with a capacity of 50 kW or more are subject to the Uniform Capacity Tax (UCT). A plant subject to the UCT is exempt from statewide education property tax. Those plants may nevertheless be subject to municipal property taxation and are valued using a standard property valuation methodology.

The UCT is limited to solar renewable energy plants. 32 V.S.A. § 8701. The relevant part of the definition of a “renewable energy plant” is an “independent technical facility that generates electricity from renewable energy.” 30 V.S.A. § 8002(18). Accordingly, the UCT does not apply to a facility that is not a renewable energy generating plant.

An enclosure or building housing batteries does not generate solar electricity, which means it does not qualify as a solar renewable energy plant when operating independently. For some projects, however, a battery enclosure is integrated into the renewable energy system through design and function. Integrated projects tend to fall under one Certificate of Public Good (CPG), while standalone battery facilities tend to have their own separate CPG. You can use the following link to the [Public Utility Commission’s website](#) for information relating to projects that have requested a CPG in your municipality.

The Vermont Department of Taxes recommends that assessing officials consider whether an enclosure or building housing batteries is authorized under the same CPG as an associated renewable generation plant. If the facilities share a CPG, the official should value both facilities for municipal taxation (unless the plant is locally exempted).

For the energy generating portion of the facility, the official should use the discounted cash flow methodology required by statute and published by PVR. 32 V.S.A. § 3481(1)(D). An enclosure or structure housing batteries should be valued for municipal taxes as real property. For example, if batteries are stored in a shed, the shed should be valued as a shed is usually valued. The official should not value any portion of the combined facilities for education property taxation if the solar plant’s capacity is 50 kW or more because they are exempt due to being subject to the UCT.

If a battery facility is not authorized by the same CPG as a solar renewable energy plant, the official should value it as real property for both municipal and education taxes. That is because the facility is not subject to the UCT, meaning that it is not exempt from statewide property taxation.

A municipality should [contact its district advisor](#) if it believes unique circumstances warrant a deviation from this general advice.

Legislative language (current):

[Title 32 : Taxation And Finance](#)

[Chapter 215 : Renewable Energy](#)

(Cite as: 32 V.S.A. § 8701)

§ 8701. Uniform capacity tax

(a) As used in this section, the terms "kW," "plant," "plant capacity," and "renewable energy" shall be as defined in 30 V.S.A. § 8002; provided, however, that any tax or exemption under this chapter shall only apply to the fixtures and personal property of a plant, and not to the underlying land.

(b) There is assessed on any renewable energy plant in Vermont commissioned to generate solar power an annual tax of \$4.00 per kW plant capacity. The tax shall be paid to the Department of Taxes no later than April 15 of each year and accompanied by a return with such information as the Department of Taxes may require. The Department of Taxes shall deposit the taxes collected under this section into the Education Fund. The Department of Taxes may adopt procedures and rules necessary to implement the tax in this section.

(c) A renewable energy plant that generates electricity from solar power shall be exempt from taxation under this section if it has a plant capacity less than 50kW.

(d) The existence of a renewable energy plant subject to tax under subsection (b) of this section shall not alter the exempt status of any underlying property under section 3802 or subdivision 5401(10)(F) of this title. (Added 2011, No. 127 (Adj. Sess.), § 1, eff. Jan. 1, 2013; amended 2013, No. 73, § 41, eff. June 5, 2013; 2013, No. 174 (Adj. Sess.), § 29, eff. Jan. 1, 2015.)

(Cite as: 32 V.S.A. § 3481)

§ 3481. Definitions

The following definitions shall apply in this Part and chapter 101 of this title, pertaining to the listing of property for taxation:

(1)(A) "Appraisal value" shall mean, with respect to property enrolled in a use value appraisal program, the use value appraisal as defined in subdivision 3752(12) of this title, multiplied by the common level of appraisal, and with respect to all other property, except for owner-occupied housing identified in subdivision (C) of this subdivision (1), the estimated fair market value. The estimated fair market value of a property is the price that the property will bring in the market when offered for sale and purchased by another, taking into consideration all the elements of the availability of the property, its use both potential and prospective, any functional deficiencies, and all other elements such as age and condition that combine to give property a market value. Those elements shall include the effect of any State or local law or regulation affecting the use of land, including 10 V.S.A. chapter 151 or any land capability plan established in furtherance or implementation thereof, rules adopted by the State Board of Health, and any local or regional zoning ordinances or development plans. In determining estimated fair market value, the sale price of the property in question is one element to consider, but is not solely determinative.

(B) For residential rental property that is subject to a housing subsidy covenant or other legal restriction, imposed by a governmental, quasi-governmental, or public purpose entity, on rents that may be charged, fair market value shall be determined by an income approach using the following elements:

(i) market rents with utility allowance adjustments for the geographic area in which the property is located as determined by the federal office of Housing and Urban Development or in the case of properties authorized under 42 U.S.C. § 1437, 12 U.S.C. § 1701q, 42 U.S.C. § 1485, 12 U.S.C. § 1715z-1, 42 U.S.C. § 1437f, and 24 CFR Part 882 Subpart D and E, the higher of contract rents (meaning the amount of federal rental assistance plus any tenant contribution) and HUD market rents;

(ii) actual expenses incurred with respect to the property which shall be provided by the property owner in a format acceptable to the Commissioner and certified by an independent third party, such as a certified public accounting firm or public or quasi-public funding agency;

(iii) a vacancy rate that is 50 percent of the market vacancy rate as determined by the U.S. Census Bureau with local review by the Vermont housing finance agency; and

(iv) a capitalization rate that is typical for the geographic area determined and published annually prior to April 1 by the Division of Property Valuation and Review after consultation with the Vermont Housing Finance Agency.

(C) For owner-occupied housing that is subject to a housing subsidy covenant, as defined in 27 V.S.A. § 610, imposed by a governmental, quasi-governmental, or public purpose entity, that limits the price for which the property may be sold, the housing subsidy covenant shall be deemed to cause a material decrease in the value of the owner-occupied housing, and the appraisal value means not less than 60 and not more than 70 percent of what the fair market value of the property would be if it were not subject to the housing subsidy covenant. Every five years, starting in 2019, the Commissioner of Taxes, in consultation with the Vermont Housing Conservation Board, shall report to the House Committee on Ways and Means on whether the percentage of appraised value used in this subdivision should be altered and the reasons for his or her determination.

(D)(i) For real and personal property comprising a renewable energy plant generating electricity from solar power, except land and property that is exempt under subdivision 3802(17) of this title, the appraisal value shall be determined by an income capitalization or discounted cash flow approach that includes the following:

(I) an appraisal model identified and published by the Director employing appraisal industry standards and inputs;

(II) a discount rate determined and published annually by the Director;

(III) the appraisal value shall be 70 percent of the value calculated using the model published by the Director based on an expected 25-year project life and shall be set in the grand list next lodged after the plant is commissioned and each subsequent grand list for the lesser of the remaining life of the project or 25 years;

(IV) for the purposes of calculating appraisal value for net metered systems receiving a credit specified in 30 V.S.A. § 219a (h)(1)(K), the model used to calculate value will not incorporate a factor for electricity rate escalation; and

(V) for plants operating as a net-metered system as described in 30 V.S.A. § 219a with a capacity of 50 kW or greater, the plant capacity used to determine value in the model shall be reduced by 50 kW and the appraisal value shall be calculated only on additional capacity in excess of 50 kW.

(ii) The owner of a project shall respond to a request for information from the municipal assessing officials by returning the information sheet describing the project in the form specified by the Director not later than 45 days after the request for information is sent to the owner. If the owner does not provide a complete and timely response, the municipality shall determine the appraisal value using the published model and the best estimates of the inputs to the model available to the municipality at the

time, and the provisions of section 4006 of this title shall apply to the information form in the same manner as if the information form were an inventory as described in that section. Nothing in this subdivision (1)(D) shall affect the availability of the exemption set forth in the provisions of section 3845 of this title or availability of a contract under the provisions of 24 V.S.A. § 2741.

(2) "Listed value" shall be an amount equal to 100 percent of the appraisal value. The ratio shall be the same for both real and personal property. (Amended 1959, No. 175, eff. Jan. 1, 1960; 1965, No. 126, § 1, eff. Jan. 1, 1967; 1973, No. 85, § 11, eff. July 1, 1973; 1977, No. 105, § 6; 1995, No. 178 (Adj. Sess.), § 285; 1997, No. 60, § 64, eff. June 26, 1997; 2005, No. 38, § 1; 2005, No. 75, § 6; 2007, No. 81, § 10; 2013, No. 174 (Adj. Sess.), §§ 27, 54, eff. Jan. 1, 2015; 2017, No. 154 (Adj. Sess.), § 10, eff. May 21, 2018.)

(Cite as: 24 V.S.A. § 2741)

§ 2741. Municipal corporations; property values fixed by contract

(a) A municipal corporation, as hereinafter provided, may enter into a contract with owners, lessees, bailees, or operators of agricultural, forestland, open space land, industrial or commercial real and personal property, and alternate-energy generating plants for the purpose of:

- (1) fixing and maintaining the valuation of such property in the grand list;
- (2) fixing and maintaining the rate or rates of tax applicable to such property;
- (3) fixing the amount in money which shall be paid as an annual tax upon such property; or
- (4) fixing the tax applicable to such property at a percentage of the annual tax.

(b) A municipal corporation, by vote of a majority of those present and voting at an annual or special meeting warned for that purpose for a contract relating to agricultural or forest property, open space land, or to alternate-energy generating plants, or by a vote of two-thirds of those present and voting at annual or special meeting warned for that purpose for a contract relating to commercial or industrial property, may either:

- (1) provide general authority to its legislative branch to enter into such contracts as application is made; or
- (2) provide limited authority to its legislative branch to negotiate contracts, which shall be effective upon ratification by a majority of those present and voting at an annual or special meeting warned for that purpose.

(c) Any contract entered into pursuant to this section:

- (1) shall not be for a period in excess of ten years except for a contract to stabilize taxes for an alternate-energy generating plant, in which case the term shall not exceed the term of any license, permit, or other approval required to operate such a plant;
- (2) shall be filed with the clerk of the municipal corporation and shall be available for public inspection;
- (3) may be with existing or new owners, lessees, bailees, or operators of such property, or with persons who intend to become owners, lessees, bailees, or operators of such property; and

(4) may be applicable to existing agricultural or forest property or open space land; renovations of or additions to existing agricultural, commercial, or industrial property, or open space land; or to new agricultural, forest, commercial, or industrial property, or open space land.

(d) For purposes of this section:

(1) "Renewable energy source" means any inexhaustible, continuous, or readily replaceable supply of energy, including solar, wind, hydroelectric, and geothermal. "Renewable energy source" does not mean any biomass, fossil, or mineral supply of energy, including wood, organic waste, oil, coal, or uranium.

(2) "Alternate-energy generating plant" means real and personal property that is built at an existing or new site after July 1, 1980, including any equipment, structure, or facility, used for or directly related to the generation or production of electricity from renewable energy sources with a nameplate capacity of not more than 25 million watts.

(3) "Farmland" means real estate, exclusive of any housesite, which is actively and exclusively devoted to farming and is operated or leased as a farm enterprise by the owner.

(4) "Forestland" means any land, exclusive of any housesite, which is under active forest management for the purpose of growing and harvesting repeated forest crops.

(5) "Housesite" means the two acres of land surrounding any house, mobile home, or dwelling.

(6) "Open space land" means any land, exclusive of any housesite, that does not fall under the definition of "farmland" and "forestland," is not used for commercial or industrial purposes, and does not have structures thereon. (Amended 1961, No. 16; 1967, No. 359 (Adj. Sess.), eff. March 26, 1968; 1969, No. 16, § 6, eff. March 11, 1969; 1973, No. 183 (Adj. Sess.), § 1, eff. March 30, 1974; 1977, No. 105, § 26; 1979, No. 170 (Adj. Sess.), § 1; 1993, No. 104, §§ 1-4, eff. June 21, 1993.)