

Connecticut

Solar Policy Survey

October 2016



The NESEMC Solar Policy Survey compiles information on state-level policies that significantly influence the solar energy market. The survey was produced with the help of the Pace Energy and Climate Center’s team of student researchers. The vast majority of the information contained within this document has been obtained from [the Database of State Incentives for Renewables & Efficiency](#) (DSIRE) with additional information and research obtained from various sources.

Note: These factsheets are updated periodically to reflect policy changes within each state. If you notice a mistake or out of date information, please contact Nick Martin at nmartin@nesemc.com.

SOLAR MARKET POLICIES

This document surveys the following solar market relevant policies.

POLICY	DESCRIPTION
RENEWABLE ENERGY GOALS	Does the state have enforceable and/or non-mandatory renewable energy goals? Do these goals include a specific solar PV carve out?
SOLAR TARIFFS AND RATES	How are solar PV customers impacted by utility tariffs and rates? Does the state offer net metering and/or value of solar tariffs? Do utilities impose high fixed charges or specific charges on solar customers?
VIRTUAL NET METERING	Can solar PV customers offset electricity purchases on multiple meters?
COMMUNITY AND SHARED SOLAR	Can multiple customers offset their electricity purchases from a single PV system?
GREEN FINANCING	Does the state support renewable energy financing through institutions like green banks or property assessed clean energy (PACE) financing?
PERMITTING	Has the state streamlined the solar PV permitting process?
LICENSING	What type of licensing is required to install solar PV systems? Are specialized solar PV or renewable energy licenses available?
SOLAR RIGHTS AND ACCESS	Does the state protect customers’ ability to install solar PV systems and access sunlight?
OTHER FINANCIAL INCENTIVES	Does the state offer financial incentives including grants, loans, tax credits, and/or tax exemptions?

RENEWABLE ENERGY GOALS

Goals and Mandates:

Connecticut state law creates a renewable portfolio standard (RPS) requiring 27% of retail electricity sales to be supplied by renewable sources by 2020.¹

20% of the 2020 RPS mandate must be fulfilled by Class I resources, which include solar PV. 3% must be fulfilled by either Class I (includes solar PV) or Class II (excludes solar PV) resources. The remaining 4% of the mandate must be fulfilled by Class III resources, which do not include solar PV.

The increasing yearly requirements of the RPS will be primarily fulfilled by additional Class I renewables.

Solar Carve Out:

Connecticut has a solar carve out in its RPS requirements. Signed into law in July 2015, Public Act No. 15-194 directs the CT Green Bank to offer Class I RECs to residential solar PV installations. The CT Green Bank will offer these incentives until the earlier of December 31, 2022 or 300MW of residential solar PV installation is achieved. These Renewable Energy Credit (RECs) are referred to as Solar Home Renewable Energy Credits (SHRECs).

SOLAR TARIFFS AND RATES

NET METERING

Connecticut state law mandates net metering for solar PV customers.²

Maximum System Capacity:

Net metered systems may be up to 2MW per facility.

Aggregate Capacity Limit:

There is not a specified aggregate (e.g. state-wide or utility-wide) capacity limit on net metered facilities.

Applicable Entities:

Investor owned utilities (representing approximately 96% of the state's customers) are required to offer net metering.

Excess Generation:

Excess generation is carried over as a kWh credit for one year. If not used, the credits are reimbursed to the customer at the avoided cost of wholesale power at the end of the year (March 31).

Renewable Energy Certificate (REC) Ownership:

The customer retains ownership of any RECs generated by a net metered facility.

¹ [Conn. Gen. Stat. § 16-245a](#)

² [Conn. Gen. Stat. § 16-243h](#)

VALUE OF SOLAR

Connecticut's utilities do not offer any value of solar tariffs. The Acadia Center has analyzed the value of solar in Connecticut for several types of solar PV systems installed near Hartford, CT. The [study](#) found solar PV energy values between 20.4 to 26.0 cents per kWh to the grid.

VIRTUAL NET METERING

Connecticut state law allows virtual net metering for specific customer classes and for specific uses.³

Maximum System Capacity:

Virtually net metered systems may be up to 3MW per facility.

Aggregate Capacity Limit:

There is not a specified aggregate (e.g. state-wide or utility-wide) capacity limit on virtually net metered facilities.

Compensation Rules:

Generation in excess of the host customer's consumption is credited to beneficial accounts at the full generation service component and at the following declining percentages for the transmission and distribution service component:

- First year of commercial operation: 80% of transmission and distribution charges
- Second year of commercial operation: 60% of transmission and distribution charges
- Third year of commercial operation and after: 40% of transmission and distribution charges.

Any excess credits after one year are credited to the host customer at the retail generation rate and the declining percentage of transmission and distribution charges.

Limitations:

The host customer must be either a state, municipal, or agricultural customer. The benefiting accounts must be of either the same customer class as the host or a critical facility connected to a microgrid.

State/municipal customers can host up to 5 additional accounts of the same customer class and 5 additional accounts that are critical facilities connected to a microgrid.

Agricultural customers can host up to 10 beneficial accounts as long as those accounts either use electricity for agricultural purposes, or are critical facilities connected to a microgrid.

The host customer may aggregate all the meters owned by that customer host.

³ [Conn. Gen. Stat. § 16-244u](#)

COMMUNITY AND SHARED SOLAR

Connecticut does not have a wide-ranging shared solar program, but recently passed legislation has established a shared clean energy facility pilot program.⁴ Project proposals will be submitted to and selected by the CT Department of Energy and Environmental Protection (DEEP).

Enrollment / Program Size Limits:

The pilot program is capped at 6MW statewide with 2MW in United Illuminating's service area and 4MW in Eversource's service area.

There is no limit on the number of subscribers, but each pilot project must have at least two subscribers. The minimum size for a project is 100kW.

Compensation Rules:

CT DEEP will establish a billing credit for subscribers, but the legislation does not stipulate the value of this credit.

Other Limitations:

Shared solar is currently only a pilot project in Connecticut. CT DEEP has been directed to recommend whether a permanent program should be established in the state within two years.

GREEN FINANCING

Green Bank:

Connecticut has established the [Connecticut Green Bank](#) (formerly Clean Energy Finance and Investment Authority). The bank is a quasi-independent corporation. It compiles its funding from both private and public sources, including proceeds from the Regional Greenhouse Gas Initiative (RGGI), commercial electric bills, federal funds and grants, and private capital.

From the Connecticut Green Bank's website:

The Connecticut Green Bank's mission is to:

- Support the Governor's and Legislature's energy strategy to achieve cleaner, cheaper and more reliable sources of energy while creating jobs and supporting local economic development.

The Connecticut Green Bank's vision is to:

- Lead the green bank movement by accelerating private investment in clean energy deployment for Connecticut to achieve economic prosperity, create jobs, promote energy security and address climate change.

PACE Financing:

Authorized by state law, the Connecticut Green Bank oversees a [Commercial PACE \(C-PACE\) program](#). For a

⁴ [Conn. Public Act No. 15-113](#)

building owner to take advantage of the program, the municipality must join the C-PACE program through an approving resolution.

Other Green Financing:

[Low-Interest Loans for Customer-Side Distributed Resources](#) – This loan program offers a long-term financing option at a fixed interest rate.

[Smart E-Loans](#) – Energize CT offers this loan program with long-term, low-interest financing to CT residences for a variety of solar technologies.

[Energy Conservation Loan](#) – The Connecticut Housing Investment Fund (CHIF) offers this ten-year loan to owners of one- to four-family homes that are installing solar.

[CT Solar Lease](#) – Supported by the Connecticut Clean Energy Fund, CT Solar Lease allows homeowners to lease PV and solar thermal systems.

PERMITTING

Standardization:

Connecticut does not have a statewide standard application or fee for obtaining necessary permits for solar PV projects.

Connecticut state law requires municipalities to incorporate residential solar PV systems into their building permit application process. Beyond incorporation, the law also requires the municipality to inform the applicant whether the system is approved or disapproved within 30 days.⁵

Connecticut state law allows municipalities to exempt Class I renewable projects (including solar PV) from paying building permit fees.⁶

Guidance:

Energize Connecticut issued a [report](#) in May 2014 that contains guidance for municipalities for developing their solar permitting processes.

LICENSING

In Connecticut, solar installers must be a licensed electrician in order to connect a solar installation to any existing panel, junction box, wiring or circuit(s).

The state does offer two different types of [special solar PV licenses](#), but ultimately a licensed electrician is required for each installation. The two licenses—PV-1 Limited Solar Electric Contractor and PV-2 Limited Solar Electric Journeyman—allow holders to perform work limited to solar electric systems except for connecting to any existing panel, junction box, wiring, or circuit(s).

⁵ [PA 15-194—HB 6838](#)

⁶ [PA 15-194—HB 6838](#)

Tied to Incentives:

In order to participate in incentive programs such as the [CT Solar Lease Program](#), the Connecticut Green Bank requires [approved eligible PV contractors](#) to have at least one employee hold [NABCEP](#) certification.

Reciprocity:

Connecticut does not offer reciprocity with other states for electrician or solar licensing.

SOLAR RIGHTS AND ACCESS

Solar Rights:

Connecticut does not have any state laws or regulations that specifically address solar rights.

Solar Access:

Connecticut does not have any state laws or regulations that specifically address solar access.

OTHER FINANCIAL INCENTIVES

Grants/Rebates:

[Residential Solar Investment Program](#) – In March 2012, the CT Green Bank unveiled its solar photovoltaic residential investment program with the ultimate goal to support 30 megawatts of residential solar photovoltaics (PV). HB 6838 enacted on June 2015 expanded the program to support up to 300 MW of new solar PV by 2022. Solar customers can receive up to \$0.540/watt for systems <10kW and \$.40/watt for systems <20kw.

Tax Incentives:

[Property Tax Exemption for Renewable Energy Systems](#) – Property tax exemption for solar systems that serve farms, single-family homes or multi-family dwellings limited to four units.

[Local Option: Property Tax Exemption for Renewable Energy Systems](#) – Connecticut municipalities are authorized to exempt solar thermal or geothermal renewable energy resources from property taxes.

[Sales and Use Tax Exemption for Solar and Geothermal Systems](#) – A sales and use tax exemption for solar energy equipment.

About NESEMC



The **Northeast Solar Energy Market Coalition** brings together solar energy business associations and other stakeholders in the Northeast United States to harmonize regional solar energy policy and advance the solar energy market. We are funded by the U.S. Department of Energy SunShot Initiative as a cooperative agreement through 2017.

Our vision is a thriving, efficient regional market for solar photovoltaic energy generation in the Northeast.

We will realize our vision by encouraging and engaging regional solar businesses in advancing market policy to lower costs and increase solar market opportunity. We will educate stakeholders and policy makers throughout the region directly, and by empowering our member organizations with robust analysis and timely information.

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