

# Massachusetts

## 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 If you notice a mistake or out of date information, please contact Nick Martin at [nmartin@nesemc.com](mailto:nmartin@nesemc.com).

### SOLAR MARKET POLICIES

This document surveys the following solar market relevant policies.

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

## RENEWABLE ENERGY GOALS

### Goals and Mandates:

Massachusetts state law creates a renewable portfolio standard (RPS) requiring 22.1% of retail electricity sales to be supplied by renewable sources by 2020 with 1% increases each subsequent year.<sup>1</sup>

15% of the 2020 RPS mandate must be fulfilled by Class I renewables, which include solar PV. The remaining 7.1% of the mandate must be fulfilled by Class II resources, which include existing renewables and waste energy. The increasing yearly requirements of the RPS is primarily fulfilled by increases in Class I renewables.

### Solar Carve Out:

Massachusetts has a solar-specific renewable energy goal. Class I resources for the RPS must include at least 1600MW of solar PV by 2020.<sup>2</sup> Qualifying solar facilities must be 6MW or less and must have become operational after December 31, 2012.

## SOLAR TARIFFS AND RATES

### NET METERING

Massachusetts state law mandates net metering for solar PV customers.<sup>3</sup>

### Maximum System Capacity:

Net metered facilities may be up to 2MW per facility. For municipal or government facilities, net metered systems may be up to 10MW.

### Aggregate Capacity Limit:

Aggregate net metered facility capacity is limited to 7% of the utility's peak load for private entities and 8% of utility's peak load for municipalities and government entities. Systems 10kW and under on a single-phase circuit and systems 25 kW and under on a three-phase circuit are exempt from the private aggregate capacity limit.

### Applicable Entities:

Investor owned utilities must offer net metering. Municipal utilities may offer net metering voluntarily.

### Excess Generation:

Most net metered solar PV systems receive close to the retail rate for net excess generation (includes default service, distribution, transmission, and transition charges). Net metered facilities greater than 2MW or neighborhood net metered facilities used by customers other than government entities receive the same credit less the distribution charge.

Once 1,600 MW of aggregate solar capacity is reached in the state, net excess generation will receive “market net metering credits”. These credits will be worth slightly less than the retail rate for governmental solar facilities and

<sup>1</sup> Mass. Gen. Laws ch. 25A, § 11F

<sup>2</sup> DOER, Installed Solar Capacity in Massachusetts (2016) *available at* <http://www.mass.gov/eea/docs/doer/renewables/installed-solar.pdf>

<sup>3</sup> Mass. Gen. Laws ch. 164, § 138-140 (subsequently amended)

60% of the retail rate for all other solar facilities, except facilities exempted from the net metering aggregate capacity limit.

Credits may be carried forward to the next month indefinitely.

**Renewable Energy Certificate (REC) Ownership:**

The customer retains ownership of any RECs.

## VALUE OF SOLAR

Massachusetts' utilities do not offer any value of solar tariffs.

The Acadia Center analyzed the value of distributed generation in Massachusetts. The [study](#) found values between 22 to 28 cents/kWh to the grid, with additional societal values of 6.7 cents/kWh.

## VIRTUAL NET METERING

Massachusetts allows for virtual net metering under its existing net metering program.

**Maximum System Capacity:**

Virtually net metered systems may be up to 2MW for most facilities and up to 10MW for municipal or government facilities, which are the same limits that apply to net metered facilities.

**Aggregate Capacity Limit:**

Virtually net metered facilities are included under the net metering program's aggregate capacity limit, which is 7% of utility's peak load for private entities and 8% of utility's peak load for municipalities and government entities

**Compensation Rules:**

Beneficial accounts are credited at the host customer's fully bundled retail rate.

**Limitations:**

Host customers and beneficial accounts must reside within the same distribution company territory and ISO-NE load zone.

## COMMUNITY AND SHARED SOLAR

Massachusetts's provisions for virtual net metering allow for shared solar configurations. Massachusetts also allows for "neighborhood net metering" for Class I, II, and III facilities (including solar PV).

**Enrollment / Program Size Limits:**

Shared solar facilities are included under the state-wide net metering capacity limit of 4% of utility's peak load for private entities and 5% of utility's peak load for municipalities and government entities.

"Neighborhood net metering" facilities must be owned or serve the energy needs of a group of at least 10 residential customers in a single neighborhood and served by a single utility. Non-residential customers may also be served as long as base requirements are met.

**Compensation Rules:**

Credits for neighborhood net metering facilities do not include credit for the distribution component of the energy bill.

**Other Limitations:**

Participants must be located within same utility territory and ISO-NE zone.

## GREEN FINANCING

**Green Bank:**

Massachusetts does not currently have an operational green bank or similar institution/program that uses public funds to leverage private investment in solar PV.

**PACE Financing:**

Authorized by state law, local governments may establish a PACE financing program.<sup>4</sup> However, there has been little to no adoption of PACE financing at the local level within the state.<sup>5</sup>

**Other Green Financing:**

[Massachusetts Solar Loan Program](#) – Administered by the Massachusetts Department of Energy Resources and Massachusetts Clean Energy Center, the Mass Solar Loan Program offers low interest loans to solar system owners.

## PERMITTING

**Standardization:**

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

**Guidance:**

Navigant Consulting, on behalf of the Massachusetts Department of Energy Resources, developed a [report](#) on recommended model permitting processes and structural review guidance for rooftop solar PV.

## LICENSING

Massachusetts does not offer solar PV specific licenses for installers. All or most aspects of a PV installation must be done by a state licensed electrician.

A building permit may be required to install solar PV. An individual must hold a Construction Supervisors License or a Home Improvement License to obtain a building permit.

**Tied to Incentives:**

Incentives are not tied to licensure or certification.

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<sup>4</sup> Mass. Gen. Laws ch. 44, § 53E 3-4

<sup>5</sup> See <http://pacenation.us/pace-programs/>

**Reciprocity:**

Massachusetts reciprocates with ME, NH, OR, VT and WA for journeyman and master electrician licenses.<sup>6</sup>

## SOLAR RIGHTS AND ACCESS

**Solar Rights:**

State law prohibits provisions in ownership or real property instruments (i.e. deeds, wills, conditions, etc.) that restrict installation or use of solar devices.<sup>7</sup>

State law prohibits local governments from enacting laws that prohibit or unreasonably regulate solar energy systems.<sup>8</sup>

**Solar Access:**

State law allows for solar access permits—special permits that protect direct access to sunlight for solar energy systems.<sup>9</sup>

State law authorizes zoning rules that prohibit unreasonable infringements on solar access.<sup>10</sup>

State law requires zoning ordinances to regulate planting and trimming of vegetation on public property to protect solar access for public and private solar energy systems.<sup>11</sup>

## OTHER FINANCIAL INCENTIVES

**Grants and Rebates:**

[Chicopee Electric Light Residential Solar Rebate Program](#) - Chicopee Electric Light offers rebates of \$2.50 per watt to residential customers who install solar photovoltaic systems on their homes.

[Marblehead Municipal Light Department Solar Rebate Program](#) – Marblehead Municipal Light Department offers eligible customers a rebate for solar PV installations.

Concord Municipal Light Plant Solar Photovoltaic Rebate Program - Concord Municipal Light Plant offers rebates to customers for solar PV installation.

[Leading By Example Solar PV Canopy Grant Program](#) - Massachusetts offers a state grant program for solar photovoltaic canopies installed at state facilities, including executive agencies, state institutions of higher education, and other quasi-public state entities.

[The Commonwealth Solar II Rebate Program](#) - The organization currently has an annual budget of \$4 million (\$1 million for each quarter) to invest in corporate, residential, and non-profit photovoltaic systems. Source: <http://www.cleanenergyauthority.com/solar-rebates-and-incentives/massachusetts/>

<sup>6</sup> [National Electrical Contractors Association](#)

<sup>7</sup> Mass. Gen. Laws ch. 184, § 23C

<sup>8</sup> Mass. Gen. Laws ch. 41, § 81Q

<sup>9</sup> Mass. Gen. Laws ch. 40A, § 9B

<sup>10</sup> Mass. Gen. Laws ch. 40A, § 9B

<sup>11</sup> Mass. Gen. Laws ch. 40A, § 9B

**Tax Incentives:**

Excise Tax Deduction for Solar or Wind Power Systems – For state excise tax purposes, Massachusetts businesses may deduct expenditures from the installation.

Residential Renewable Energy Income Tax Credit – Individuals can utilize a 15% credit (up to \$1,000) against the state income tax for solar expenditures.

Renewable Energy Property Tax Exemption – Solar-energy systems are exempt from local property taxes for a period of 20 years.

Renewable Energy Equipment Sales Tax Exemption – Equipment directly relating to any solar system is exempt of Massachusetts State tax.

## 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.

Visit us at [NESEMC.com](http://NESEMC.com)

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