



## Growing our Solar-Powered Economy: Net metering and the urgent need to lift the caps

*Massachusetts is a national leader on solar thanks to smart, forward-thinking policies like net metering and virtual net metering.*

Net metering ensures a solar customer receives retail credit on their utility bills for the excess clean power they feed back to the grid. Virtual net metering allows those net metering credits to be shared with other customers and provides a broader range of Massachusetts energy consumers access to solar power. These two policies maximize the potential of solar to grow the Massachusetts economy by creating jobs and encouraging private sector investment in clean, local power sources. Unfortunately, net metering caps increase costs and prevent the development of a long-term, sustainable market for this renewable energy technology. In order to realize the full potential of solar in the Commonwealth, **net metering caps must be lifted.**

### **Net Metering Caps Threaten Jobs, the Solar Market, and Investment in the Energy Economy**

Solar isn't just powering our homes—it's powering the Massachusetts economy too: every dollar invested in solar creates \$1.20 in economic benefits for our state. These economic benefits, however, are at risk as long as net metering caps remain in place. The net metering cap for public projects in National Grid territory has already been hit and solar development will slow as a result. This impacts the 1,415 Massachusetts solar companies and puts a portion of our 12,000 solar jobs at risk. The net metering cap issue also increases uncertainty in the market, drives up costs, and reduces investment in the local energy economy. Waiting to address it until all the caps are hit, as has been suggested, would significantly harm the Massachusetts solar industry and could collapse the solar market.

### **Please support IMMEDIATE passage of An Act Relative to Net Metering, Community Shared Solar and Energy Storage (SD-1616 and H-2852)**

Filed by Sen. Eldridge, Rep. Calter and Rep. Mark, this bill provides one long-term framework for solar, emphasizing equity in access to clean energy, growth of the clean energy sector and strategies to address the region's energy needs. The legislation aligns net metering policy with the state's 1600 MW solar goal and exempts projects under 1 MW from the net metering cap; encourages expanded access to solar by incentivizing community shared solar projects; sets a 20% solar by 2025 target for Massachusetts; and directs the Department of Public Utilities to initiate an energy storage program.

Several bills raising or abolishing the net metering cap have also been filed. Other net metering cap legislation includes: An Act Relative to Net Metering (SD-869 and HD-2050), filed by Sen. Petrucci and Rep. Smizik, increases public net metering caps by 2% and private net metering caps by 1%; An Act Relative to Net Metering (HD-1084), filed by Rep. Garry, suspends net metering caps until December 31, 2016; and An Act Relative to Net Metering (SD-1531), filed by Sen. Pacheco, raises the public and private sector net metering caps by 3%.

## MASSACHUSETTS NET METERING POLICY<sup>1</sup> OVERVIEW

### How Net Metering Works

Net metering comes into play for customers who install an on-site clean energy system, such as solar, which is connected to the electric grid. When a customer produces more electricity than he or she consumes, the meter runs backwards as excess electricity is returned to the grid for others to use. The utility credits the customer for that electricity, generally at the same dollar per kilowatt hour (kWh) rate that the utility sold it to begin with. At the end of every month, a customer is billed for the “net” amount of electricity consumed. If solar electricity production is greater than consumption, the customer receives a credit on his or her electric bill. This credit rolls forward indefinitely, but is typically used up in the fall and winter months when less solar electricity is produced.

Net metering makes installing solar power a smart economic choice, encouraging private investment in new, local power resources. That’s good for all of us in Massachusetts, because between now and 2020, New England is expected to lose a third of its existing generating capacity. Without investment in new power sources, the region will soon face power shortages. Net metering helps bring that needed new power online in the fastest, easiest and cleanest way.

### How Virtual Net Metering Works

Net metering works well for homeowners and businesses with roofs that have good solar access. But it doesn’t work for about 80% of the state, such as renters or properties with shaded roofs. This is where virtual net metering (VNM) comes into play. VNM allows the net metering credits generated by a solar system in one location to be shared, bought, or sold to different electricity customers, either at the same location or nearby. VNM allows any solar system owner that generates net metering to share or sell credits, as long as all of solar system and the electricity customers are served by the same utility and in the same utility load zone.<sup>2</sup> VNM is valuable because it expands opportunities for solar in Massachusetts and allows the solar market to diversify and evolve as technology changes and prices continue to decline.

### How Net Metering Caps Work

Massachusetts “caps” the amount of solar that is eligible for net metering. These caps are set forth in statute and are based on each utility’s historical peak megawatt energy demand. Current net metering caps are set at 4% for “private” projects<sup>3</sup> and 5% for “public” projects of each utility’s historical peak demand. As these caps are hit, new solar projects will no longer earn retail credit for the excess power returned to the grid—instead they would be credited for any excess power at roughly a third of the retail rate, preventing many solar projects from being financially viable. Residential systems 10 kW or less and many commercial systems 25 kW or less are exempt from net metering caps but community shared solar and larger solar projects are not.

Net metering caps are hit at different rates in each utility territory because the availability of solar sites and the economics of developing solar vary across the Commonwealth. The cap is hit more quickly in National Grid’s territory, which represents 45% of total net metering capacity in Massachusetts, because it is easier and less expensive to find sites suitable for solar. This is not the case in NStar territory, where solar sites are much more expensive to acquire. And while solar sites are easy to find in WMECO territory, the utility rate structure makes the economics of many solar projects difficult.

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<sup>1</sup> As concerns the Investor Owned Utilities (IOUs): National Grid, NStar, Unitil and Western Mass Electric Company.

<sup>2</sup> Massachusetts has 3 load zones: roughly western, central and north Massachusetts (WCMA), eastern Mass and Boston area (NEMA), and southeastern Mass (SEMA).

<sup>3</sup>Public projects either benefit or are owned by a municipality or other government entity.