



June 15, 2015

**E2 Testimony with regard to**

- **S1770 & H2852: An Act relative to net metering, community shared solar, and energy storage**
- **H2911: An Act Relative to Net metering**

**Dear Chairmen Downing, Golden and Members of the Committee:**

I am writing on behalf of Environmental Entrepreneurs (E2) ([www.e2.org](http://www.e2.org)) in support of S1770, H2852, and H2911.

We believe it is imperative for the state to act to immediately raise the net metering cap while simultaneously laying the framework for a broad new policy to encourage the growth of solar in the longer term. Surely we can move forward on long-range policy, while still maintaining the growth and economic benefits of the current net metering policy. We strongly support the *Next Generation Solar Policy Framework for Massachusetts* put forth by Acadia Center,<sup>1</sup> which provides the elements of a policy solution.

**About E2**

E2 represents a national community of nearly 900 prominent business leaders -- 100 of them in Massachusetts -- who believe in protecting the environment while building economic prosperity. As a group of entrepreneurs, investors and professionals who collectively manage over \$120 billion of venture capital and private equity, we have started well over 1700 businesses, which in turn have created over 500,000 jobs.

**We urge you to adopt policies that:**

- 1. Immediately suspend or raise the net metering cap**  
-- *Every day the cap is in place our state loses jobs and investment opportunities*
- 2. Create a stable and predictable financial climate for investors and developers**  
-- *Uncertainty drives investors to states that have stable long-term policy*
- 3. Fairly and fully value both the benefits and costs of solar energy**  
-- *Studies consistently show that the value of solar far exceeds its costs*
- 4. Maintain and enhance Massachusetts' clean energy leadership**  
-- *MA was ranked as the #2 state in clean tech right behind CA -- but that position is eroding*
- 5. Ensure that all citizens have energy choice and access to the benefits of solar energy without unduly burdening low income residents**  
-- *Support community solar to enable all citizens to enjoy the benefits of solar energy*

<sup>1</sup> <http://acadiacenter.org/wp-content/uploads/2015/06/Next-Generation-Solar-Policy-Framework-for-MA-June-5-2.pdf>

Here we explore each of these issues.

### **1. Immediately suspend the net metering cap**

As business leaders and investors, we urge you to take immediate steps to suspend the net metering cap and avoid irreparable damage to the state's extremely successful solar energy program. At the same time we recognize the need to revamp the entire solar program in light of the many changes in the solar industry since the original legislation was passed in 2008. Surely these two things can and should be done in parallel so that we do not endanger a thriving industry that is creating jobs, attracting investment, saving ratepayer's money, and helping the state to meet its legally mandated GHG emission targets.

According to the Solar Task Force Report<sup>2</sup>, states that do not offer net metering have had highly limited solar market development compared to Massachusetts. The notion that we can somehow continue to be a leader in clean energy and meet our solar and GHG emission targets with a start-stop policy on solar energy is simply wrong. Every day that passes with half the state unable to move forward on solar projects is a day that we lose jobs, investment and our standing as a cleantech leader. This is already happening, as many of you heard at the June 2<sup>nd</sup> Solar Hearing.

### **2. Create a stable and predictable financial climate for investors and developers**

Even more than the actual benefits of a policy, the attributes that investors and entrepreneurs value most in government policy are stability and predictability. Both net metering and the SREC programs have been well-managed, consistent policies that investors could count on.

To abruptly cut off net metering in half of the state and think that this will not affect overall investment in our solar program is naive. Clean energy investors have many other places to place their money, such as California which has a broad suite of clean energy policies to encourage solar investment, including a recently passed a bill requiring 50% renewable energy by 2030.

The federal investment tax credit (ITC) program will expire at the end of 2016. The startup time for solar projects is on the order of 9-12 months. Investors are making decisions right now about where to expend their funds to get the best returns before that incentive expires. We are leaving this money on the table as developers pull money out of stalled projects in Massachusetts and send it to states such as California, Nevada, Arizona and New Mexico with more predictable policies and financial returns. Every day that passes with an artificial barrier to solar development is a day that investors look elsewhere for their next investment.

### **3. Fairly and fully value both the benefits and costs of solar energy**

In order to spend our taxpayer's money prudently and efficiently, it is a truism that the state must consider both cost and benefits. It is disingenuous at best for the Baker Administration to cite solar policy costs without acknowledging that the benefits far outweighed the costs. According to

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<sup>2</sup> Massachusetts Net Metering and Solar Task Force Final Report to the Legislature, April 30, 2015, <http://www.mass.gov/eea/docs/doer/renewables/final-net-metering-and-solar-task-force-report.pdf>



the Solar Task Force Report<sup>3</sup>, under all the scenarios they considered, “the benefits of the solar program exceed the costs by more than 2 to 1.” If our government only considered the cost of policies, we would have no public universities, no transit system, no state healthcare system, to name just a few of the investments we make because their benefits far outweigh their costs.

Many studies of the benefits of solar energy and net metering re-enforce the finding that their value far exceeds their costs. E2 supports the Acadia Center call for an immediate comprehensive “Value of Solar” or “Solar Cost/Benefit Analysis” to assess the various benefits that distributed solar PV provides to the electric grid, ratepayers and society, as well as the costs to utilities and ratepayers associated with integrating solar PV and its generation.

#### **4. Adopt policies that will maintain and enhance Massachusetts’ clean energy leadership including making progress towards the goal of 20% solar by 2025**

Since 2008 with the passage of the Green Communities Act (GCA), the Global Warming solutions Act (GWSA) and the Green Jobs Act, Massachusetts clean energy policy has been a shining example a smart environmental policy that fosters economic growth while reducing harmful greenhouse gas emissions. Clean energy is now a \$10B industry that employs about 2.5% of our state’s employees, including over 12,000 in the solar industry. Solar policy has been a success by any measure.

Massachusetts was ranked Number 2, behind California in the 2015 Cleantech Leadership Index for the 3rd year in a row.<sup>4</sup> However, this leadership is eroding as this year California also captured the #1 spot in Capital after trailing Massachusetts in the previous five years of the Index.

With over 850 MW of solar energy currently installed and over 1400 companies, Massachusetts ranks among the top in the nation in installed solar energy.<sup>5</sup> However, to maintain this leadership we need smart, consistent policies designed for a world where distributed generation, storage and a smart grid are the norm.

Based on a report by the National Renewable Energy Laboratory<sup>6</sup>, Massachusetts has the potential to produce twice as much electricity from solar power as the state consumes each year. Continued growth in solar energy in Massachusetts would bring a goal of 20 percent solar electricity within reach. Solar PV capacity in Massachusetts increased at a rate of 127 percent per year from 2010 to 2013. If solar PV installations continue to increase at just 30 percent annually between 2013 and 2025, Massachusetts would have enough solar energy to generate 20 percent of its electricity.<sup>7</sup> Smart policies that incentivize solar development while recognizing that the price of solar is dropping can make this goal achievable at reasonable cost to all ratepayers.

<sup>3</sup> Massachusetts Net Metering and Solar Task Force Final Report to the Legislature, April 30, 2015, <http://www.mass.gov/eea/docs/doer/renewables/final-net-metering-and-solar-task-force-report.pdf>

<sup>4</sup> 2015 U.S. CLEAN TECH LEADERSHIP INDEX *State & Metro / June 2015*; <http://environmentmassachusetts.org/reports/mae/star-power-growing-role-solar-energy-massachusetts>

<sup>5</sup> SEIA, <http://www.seia.org/state-solar-policy/massachusetts>

<sup>6</sup> U.S. Renewable Energy Technical Potentials: A GIS-Based Analysis; <http://www.nrel.gov/docs/fy12osti/51946.pdf>

<sup>7</sup> Environment Massachusetts, November 2014, Star Power: The growing Role of Solar in Massachusetts; <http://environmentmassachusetts.org/reports/mae/star-power-growing-role-solar-energy-massachusetts>

**5. Ensure that all citizens have energy choice and access to the benefits of solar energy without unduly burdening low-income residents.**

Not all citizens are able to install solar panels on their roof. Providing energy choice by expanding access to solar generated electricity means preserving community solar (also known as virtual net metering) -- not restricting it. Upwards of 80% of households (many of whom are low income voters) and businesses in Massachusetts cannot take advantage of solar generated electricity because they rent their property, lack adequate credit, or have a roof that is unsuitably sized or oriented or that is hindered by excessive shade from trees or other structures. Massachusetts' current virtual metering policy ensures that the benefits of solar generated electricity are available to everyone. Community solar projects facilitate the development of properties that are well suited to solar generated electricity and provide much needed energy choice to consumers.

At the same time, any new legislation should avoid minimum bills and/or flat rate charges that not only disproportionately hurt low-income households, but also discourage energy efficiency measures.

We sincerely hope you will act swiftly and decisively to implement solar policy that embodies the principles we have enumerated in this letter and the explicit policies called for in the Acadia Center "Next Generation Solar Policy Framework for Massachusetts".

Thank you for consideration of the E2 business perspective on these issues. Please contact Berl Hartman at 617 497-0393 or at [berl@berlhartman.com](mailto:berl@berlhartman.com) if you would like further discussion on these important matters.

Sincerely,

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