

I think that Mass Save should create a rebate program for solar hot water systems. There is a great need, and solar hot water is well worth the investment.

As Massachusetts seeks to dramatically reduce our carbon footprint, solar hot water is in a great position to help by filling a key niche in reducing the emissions related to domestic water heating. With respect to these carbon emissions, solar hot water excels well beyond any other existing alternatives. For example, it produces 3 - 4 times more energy per square foot than solar electric. Also, since it only uses a small pump to collect energy, it has a co-efficiency of performance (COP) of 20, which is many times better than heat pump hot water heaters powered by the grid. Furthermore, solar hot water has a 40 plus year proven track record, so we know the benefits will last for decades to come.

Solar hot water can create huge economic savings for Massachusetts rate payers as well. Of course there are dollars saved by not burning fuels. Depending on the type of fuel being offset, a household of 4 could save up to \$1200 annually. Furthermore, solar hot water can help reduce upgrade costs to the grid. In our collective effort to stop burning fossil fuels, Massachusetts is pushing to electrify all loads. Undoubtedly, our grid is facing major upgrade costs to handle the additional loads. The wonderful thing about solar hot water is that, similar to insulation, it reduces the energy needed in the first place, so there will be less stress on the grid and lower upgrade costs. Another way to look at it: solar hot water, with its large storage tank, is the solar that comes with an "off-grid" battery.

As a renter in Newton, I have already taken advantage of the options that are available to reduce my housing emissions. Our electricity use is powered by community solar, and I do an additional REC offset of New England Wind credits. Our heating is fuel oil, but we have worked with our supplier to run B50 in our heating system to reduce emissions as much as possible. Natural gas provides cooking and hot water use, and the hot water is by far the biggest use of NGas. If incentives were in place, I could work with my landlord to install a solar hot-water system to offset these costs, and the emissions from NGas. I was successful in working with him to insulate the two units in my house entirely due to the state incentives for blown-in cellulose.

Unfortunately, current incentives like the Massachusetts CEC rebate are either expiring or dwindling, leaving the solar hot water industry in a precarious state at best. We ask that Mass Save step up and (Mass) Save the day!

These systems are often reasonably low cost and have a quick payback period, however the barriers to entry are still high, and a small rebate might just be enough to boost installs that provide many times the economic and climate benefit. Please keep solar hot water in mind when looking at new credit options!

Thank you,

John Pelletier