

To: ma-eeac@mass.gov (Massachusetts Energy Efficiency Advisory Council)
Re: Public Comments for the 2022-2024 Three Year Plan

We would like to request that Mass Save create a rebate program for solar hot water systems. There is a great need, and solar hot water is well worth the investment. Also it does not require rare earth metals to the extent that solar electric does, so avoids some of the worst abuses that rare metal mining does to children and the earth. We are proud to own a solar hot water system our new home and want to see it easier for more people to do the same.

As our state of 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. 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.

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!

Thank you for your consideration,
Bill Taylor