



MEMORANDUM

To: Town Councilors
From: Kimberly Darling, Energy & Sustainability Coordinator
Date: February 3, 2016
Re: Resolution Supporting a Market Based Approach to Expanding Opportunities for Municipal, Small Business, and Large Scale Solar Projects in Maine

As summarized below, and as noted in the resolution, this Council action would express the Town's support for proposed regulatory reforms that should greatly expand opportunities in Maine's solar market; specifically medium and larger-scale solar markets. The current State regulation allows only nine meters to be offset by a solar array and restricts a single system size to 660 kW. This creates artificial hurdles to developing solar arrays that maximize the potential return on investment.

The resolution supports a revision to the distributed generation regulations to allow municipalities to maximize the options for developing solar arrays. The impact could approach up to \$30-40 million per year in additional revenue to Maine's towns and cities. In addition to these potential financial benefits, the Maine Public Utilities Commission released the "Value of Solar Study" which explains the substantial net benefit of distributed solar energy and how it coincides with peak summer power demand. This study also recognizes the potential for reduced transmission distances and the reduced need for new generation and transmission facilities. Finally, and no less important, the study identifies the environmental benefits associated with a change in policy.

In 2007, Falmouth signed the Mayor's Climate Agreement, which holds the Town accountable to meet an annual emission reduction goal of 2%. Since that time, total municipal and school emissions have decreased by roughly 16%. In 2007, Falmouth's electricity load was 4,817,953 kWh, equaling 1,098.62 metric tons of emission equivalence. In 2014, the municipality's electricity load was 4,425,520 kWh, equaling 913.78 metric tons of emission equivalence.

TRC, the engineering firm who conducted the geotechnical and preliminary electrical analysis for the capped landfill on Woods Rd, has determined the site is suitable for a system size of 1,159 kW, providing as much as 1,522,000 kWh of power production in the

first year. A system size of 660 kW (the current maximum allowed under net metering) will provide as much as 1,125,000 kWh of power production, however the cap on nine meters will mean that the Town could only build a system that is just over 200kW. Not only will there be economic advantages of offsetting the municipality's energy costs, there are tremendous environmental benefits associated with moving this project forward as well.

Recognizing both the potential to develop more solar in Maine and the need to revise regulations to recognize new markets for solar, the Legislature directed the Public Utilities Commission to convene a stakeholders process to explore new approaches for solar energy. Solar developers, utilities, conservation organizations, and municipalities participated in seven meetings through the fall and early winter of 2015-2016. There were three municipalities at the table, including Falmouth, South Portland and Rockland. The three communities expressed the need to remove current artificial limits and presented data showing opportunities for solar PV on landfills and other brownfield sites. They also demonstrated the importance of moving beyond the State's current limited net energy billing system to a more sustainable and more broadly beneficial solar energy policy.

The Office of the Public Advocate, who led the Stakeholders meetings, is working to draft legislation. The Energy, Utilities and Technology Committee will be holding public hearings this month. If adopted, all three municipalities would advocate for meaningful reforms in State regulations governing solar at the legislature and the Public Utilities Commissions. If these changes are made, as much as 250 MW of solar could be developed in Maine between now and 2021.