

Statement in Support of Net Metering

By

A Climate to Thrive

Gary Friedmann

Chair, ACTT Energy Committee

March 7, 2021



Net metering, often called “net energy billing (NEB),” has been around in Maine since the 1980s. Net metering policies allow homeowners with solar panels to be paid for the energy they produce and send back into the grid. In Maine, this program allows homeowners to receive credit for the excess electricity they produce, which they can use to purchase power back from the grid. As of 2018, a majority of states had some form of net metering system in place, while 11 others had different compensation methods, according to a 2018 policy paper¹ out of Utah State University.

In Maine, net metering has helped spur massive investment in the state’s solar industry, levelling an unequal playing field and helping make solar and renewable energy a viable economic alternative for homeowners, cooperatives, community solar farms, and small-to-medium businesses. As a 2013 report by the Congressional Budget Office² (CBO) pointed out, “From 1916 to the 1970s, federal energy-related tax policy focused almost exclusively on increasing the production of domestic oil and natural gas; there were no tax incentives for promoting renewable energy or increasing energy efficiency.”

In the 1970s, oil supply disruptions and heightened awareness of the environmental damage of fossil fuels resulted in a slow shift toward tax incentives encouraging energy production from renewable sources. But it was a very slow shift. The CBO paper also points out that “tax preferences for fossil fuels continued to make up the bulk of all energy-related tax incentives through the mid-2000s, accounting for more than two-thirds of the total cost in most years.” After more than a century and trillions of dollars in subsidies enjoyed by the global fossil fuel industry, net metering and other incentives have helped begin to level the playing field for renewable energy.

As rooftop solar has become more affordable and accessible, an increasing number of homeowners have been able to take part in net metering. But as the number of net metering participants has grown, so, too, have the policy’s critics. In many states, including in Maine,

¹ https://www.thecgo.org/research/net-metering-in-the-states/?utm_term=net%20metering%20states&utm_campaign=NA_GG_S_CGO&utm_source=adwords&utm_medium=ppc&hsa_acc=5827172578&hsa_cam=10168821513&hsa_grp=104663615671&hsa_ad=438447328472&hsa_src=g&hsa_tgt=kwd-297879314589&hsa_kw=net%20metering%20states&hsa_mt=b&hsa_net=adwords&hsa_ver=3&gclid=CjwKCAiA65iBBhB-EiwAW253WySXj04YI8yTbnatcaSQnuC2pgdE7-NJ8WYQ5v4bwQ-eKgyv9lb_LxoC2ccQAvD_BwE#state-policies-to-compensate-rooftop-solar

² <https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/03-12-energytechnologies.pdf>

opponents have mounted significant efforts to repeal policies encouraging solar installation, suggesting that paying homeowners and small-scale solar installers for power they send back to the grid unfairly shifts costs to utilities and to ratepayers who do not participate in solar.

It's not a new argument. In 2015, the Nevada Public Utilities Commission was persuaded by the state's investor-owned utility to make sharp cuts in net-metering payments. The next year, the number of new residential solar installation permits fell 92 percent in the first quarter, and the state's three largest solar installers left the Nevada market altogether (taking hundreds of jobs with them). The public, not surprisingly, was outraged and state legislation reversed course in 2017, luring solar companies back with credits. "This bill restores the rooftop solar industry in Nevada by making sure rooftop solar owners are fairly credited for the clean energy they produce," said Republican Governor Brian Sandoval at the bill's signing.³

A wealth of research and analysis over the past decade has shown that, as the Brookings Institution noted in 2016, "Far from a net cost, net metering is in most cases a net benefit—for the utility and for non-solar ratepayers."⁴

In fact, a Maine Public Utilities Commission study done in 2015 found that solar power reduced electricity prices by avoiding the costs of building more power plants and natural gas pipelines to meet increased electricity demand. It also found that solar power provides substantial societal and economic benefits by reducing pollution, creating a more secure energy system, and stabilizing prices.⁵

More recently, a study published by Synapse Energy Economics in December 2020 found that "behind-the-meter" (BTM) solar created \$1.1 billion in energy cost savings in the six New England states from 2014-2019.⁶

"Electricity produced from BTM solar reduces the need to run other power plants, which reduces the amount of electricity that electric utilities need to buy, and that saves customers money," wrote the authors of the Synapse paper. "By avoiding the need to run the most expensive power plant, when BTM solar lowers the amount of electricity purchased, it also reduces the price that all utilities pay."

Perhaps most importantly, solar also reduces the amount of pollution generated. Using publicly-available data, Synapse analysts demonstrated that BTM solar reduced CO2 emissions by 4.6 million metric tons (equivalent to taking one million cars off of the road), contributed \$87 million in public health benefits, and provided \$515 million dollars in climate benefits across New England. It also, the authors noted, created jobs and made energy systems more reliable.

³ <https://about.bnef.com/blog/nevada-lures-tesla-back-with-credits-for-rooftop-solar-power/>

⁴ <https://www.brookings.edu/research/rooftop-solar-net-metering-is-a-net-benefit/>

⁵ <https://www.nrcm.org/wp-content/uploads/2015/03/MPUCValueofSolarReport.pdf>

⁶ https://www.synapse-energy.com/sites/default/files/Solar_Savings_in_New_England_20-082.pdf

In terms of net metering, it does seem appropriate that solar owners make some contribution to maintaining the distribution grid they use. It may also be necessary to distinguish between small, local rooftop solar and out-of-state companies building large solar arrays who seek to take advantage of Maine's net metering policies. But solar power should also be paid what it's worth, which is at peak demand times when electricity supply costs are at a premium.

When considering changes to Maine's net metering policies, regulators and lawmakers should proceed with caution. Any methodology used to assess and quantify the full range of benefits and costs of net metering must be transparent and rigorous, accounting for the significant economic, societal, and environmental benefits that result from solar proliferation incentivized by net metering, as well as the potential effects on the state's economy and jobs were it to be reversed.

A thoughtful, well-informed dialogue on net energy billing will help spur the state toward meeting its climate goals and protecting Maine's most vulnerable ratepayers while allowing utilities to meet their obligations to customers and causing them to invest in a smarter, more distributed grid. While getting net metering right for Maine may take time, one thing is clear: it IS reducing Maine's climate-altering emissions, which scientists say must happen immediately.