

## To: Joint Standing Committee On Energy Utilities And Technology

## From: Susan Levene, Chapter Chair, Sierra Club Maine

## Re: Testimony In Favor Of LD 1494 An Act To Reform Maine's Renewable Portfolio Standard

Representative Berry, Senator Lawrence, and distinguished members of the Energy, Utilities and Technology Committee my name is Susan Levene. I am a resident of Phippsburg, an Electrical Engineer with degrees from MIT and Yale University and the Chair of the Maine Chapter of the Sierra Club. I am submitting testimony on behalf of Sierra Club Maine and our 18,000 members and supporters in favor of LD 1494 An Act To Reform Maine's Renewable Portfolio Standard. The Sierra Club is committed to help all states in the US to embrace a vision of healthier communities powered with 100% clean, renewable energy, and I believe that this bill is a good step in that direction.<sup>1</sup>

We encourage the use of Clean and Renewable Resources only. We prefer carbon and pollution free energy sustainably collected from renewable sources including wind, solar, tidal, and geothermal. We encourage you to incentivize these resources over hydroelectric, biomass and any solutions requiring natural gas fuel.

We also encourage you to support the Governor's bill, LD 1679, which looks beyond 2030 and calls for 100% renewable energy by 2050. You will join a growing list of states to commit to 100% Renewable Energy by 2050. The future of large scale human habitation depends on all of us reducing our carbon emissions. There is no Planet B!

Today's renewable energy technology is already working to fuel utility scale projects. Solar Energy Industries Association (SEIA) keeps track of planned and operating solar installations, reporting over 35GW of major solar projects operating with double that in the planning stages for installation.<sup>2</sup>

The Department of Energy issued a report in 2017 on our energy generation transition to Renewable Energy sources and the need to utilize energy storage solutions to meet our grid demand.<sup>3</sup> They have several demonstration projects up and running including Austin Shines with about 4.5MW of Distributed Energy Resources (DER).<sup>4</sup>

Personally, my spouse, Eric Schade (Mechanical Engineer, WPI) and I have self-installed a grid-tie 3KWH wind turbine and a grid-tie 5 KWH rooftop solar array on our property as well as a 60V Battery backup system that allows us to use the energy from our renewable systems when the grid is down. We have been able to power our home without the use of a traditional generator throughout even a week long power outage. Renewable Energy is an effective and efficient way to power our lives today.



According to the Climate Policy initiative Report published April, 2017, the idea of a not-too-distant future where our electricity is supplied almost exclusively by renewables is something we are planning for now.<sup>5</sup>

Please act now to modernize our energy grid and increase our renewable portfolio. I am sorry not to be available to present this testimony in person. I am happy to field questions and help move Maine towards being powered by 100% Clean Renewable Energy.

1. Sierra Club Ready for 100 Campaign: <u>https://www.sierraclub.org/ready-for-100/campaign</u>

2. Solar Energy Industries Association Solar Projects List : <u>https://www.seia.org/research-resources/major-solar-projects-list</u>

3. Confronting the Duck Curve: How to Address the Over-Generation of Solar Energy: <a href="https://www.energy.gov/eere/articles/confronting-duck-curve-how-address-over-generation-solar-energy">https://www.energy.gov/eere/articles/confronting-duck-curve-how-address-over-generation-solar-energy</a>

4. What is the optimal mix of solar on the grid: Operational Update of the Austin Shines Project, 1/8/2019: <u>https://www.solarpowerworldonline.com/2019/01/what-is-the-optimal-mix-of-solar-on-the-grid/</u>

5. Climate Policy Initiative Report: Flexibility: the path to low-carbon, low-cost electricity grids: <a href="https://climatepolicyinitiative.org/publication/flexibility-path-low-carbon-low-cost-electricity-grids/">https://climatepolicyinitiative.org/publication/flexibility-path-low-carbon-low-cost-electricity-grids/</a>