

Maine Conservation Voters

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Testimony in opposition to LD1207, An Act to Require the Department of Environmental Protection to

Monitor Air and Water Temperatures Around Commercial Solar Energy Developments

March 31, 2025

Senator Tepler, Representative Doudera and distinguished member of the Joint Standing Committee on Environment and Natural Resources, my name is Cathy Breen. I am the Director of Government Affairs at Maine Conservation Voters (MCV), a statewide non-profit organization with 13,000 members and supporters that is building a just, thriving future for all by acting on the climate crisis, protecting the environment, and safeguarding our democracy. I'm speaking in opposition to LD1207, An Act to Require the Department of Environmental Protection to Monitor Air and Water Temperatures Around Commercial Solar Energy Developments.

Of the numerous bills we've seen this session that take aim at renewable energy infrastructure, this is one of the most confounding to me. LD1207 proposes that the Maine Department of Environmental Protection (DEP) establish a program to monitor the temperature of the air and water around solar developments occupying 3 or more acres. In order to justify this significant outlay of the DEP's limited resources, the proponents must have a concern that the temperatures of air and water around solar arrays indicate something important. But there is no scientific evidence of this or scientific theory that applies to this concern. The laws of thermodynamics¹ apply to solar panels and solar energy just as they do everywhere: energy can change forms, but it cannot be created or destroyed. In other words, solar panels don't create extra energy, but rather, they convert sunlight already hitting Earth into electricity, and some energy is lost as heat. That sunlight would have hit the ground regardless and either warmed it or been reflected. The total energy budget of Earth isn't increased by solar panels. The same amount of solar radiation is being redistributed, not added. They shift how energy is used, not how much energy Earth receives.

https://ocw.mit.edu/courses/res-8-010-introduction-to-statistical-physics-summer-2018/mitres_8_010su18 _lec4.pdf

In contrast to solar panels, energy that derives from fossil fuels creates greenhouse gases as a byproduct.² And these gases trap heat in the earth's atmosphere, causing temperatures to rise across the planet. It is these temperatures that are warming the Gulf of Maine.³ It is these temperatures that are contributing to sea level rise in Maine.⁴ It is these temperatures that are shortening Maine's winters and causing an economic ripple effect.⁵ In an attempt to address and reverse these significant temperature trends, in 2019, Maine established the Maine Climate Council and the Scientific and Technical Subcommittee, comprised of researchers and scientists from the University of Maine, the Schoodic Institute, the Island Institute, the United States Geological Survey, the Maine Geological Survey, the University of New Hampshire, Bigelow Labs, The Gulf of Maine Research Institute, the United States Forest Service, Colby College, Bowdoin College, and several agencies of state government. In *Maine Won't Wait 2.0*, the Climate Council explicitly calls for increased deployment of clean energy, like solar, with a goal of achieving 100% by 2040.⁶ These are the efforts and the temperatures that require our attention and resources.

I encourage the committee to focus on science and the good work of so many scientists right here in Maine. And I encourage you to vote Ought Not to Pass on LD1207. Thank you for your consideration.

https://www.pressherald.com/2024/03/31/warm-temps-little-snow-data-shows-climate-change-is-transforming-maine-winters/

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https://www.eesi.org/papers/view/fact-sheet-climate-environmental-and-health-impacts-of-fossil-fuels-202

³ https://gmri.org/stories/warming-23/

⁴ https://www.gmri.org/stories/gulf-maine-explained-sea-level-rise/

⁶ https://www.maine.gov/climateplan/