Natural Resources Council of Maine

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Testimony in Support of LD 1868, An Act to Advance a Clean Energy Economy by Updating Renewable and Clean Resource Procurement Laws

To the Committee on Energy, Utilities and Technology
by Jack Shapiro, Climate and Clean Energy Program Director
May 6, 2025

Senator Lawrence, Representative Sachs, members of the Energy, Utilities and Technology Committee, my name is Jack Shapiro, and I am the Climate and Clean Energy Director at the Natural Resources Council of Maine (NRCM). NRCM is a nonpartisan membership organization that has been working for more than 65 years to protect, restore, and conserve Maine's environment, now and for future generations. On behalf of our nearly 20,000 members and supporters, NRCM testifies in support of the sponsor's amendment to LD 1868, *An Act to Advance a Clean Energy Economy by Updating Renewable and Clean Resource Procurement Laws*.

Overview

Maine is fortunate to have strong plans for addressing climate change, and for Maine's energy future. The backbone strategy embedded in these plans is to move from fossil fuels for heating, transportation, and power generation – with the associated pollution and price volatility they impose on Maine families and businesses – to reliable clean energy technologies including heat pumps, electric vehicles, and renewable energy technologies like solar and wind. Establishing a standard for Maine to reach 100% clean electricity by 2040 as called for in LD 1868 will power Maine forward, stabilizing energy costs, creating new jobs, and reducing fossil fuel dependence by investing in homegrown clean energy.

This testimony will outline three primary reasons why Maine should adopt LD 1868, then will touch on some of the specific policy choices in the bill.

LD 1868 is essential for addressing the threat of climate change

Climate change is already having significant impacts in Maine. Last winter's storms caused $90 million in damage to public infrastructure alone, with the damage to private property likely significantly higher. The Maine Climate Council's 2020 report on "the costs of doing nothing" outlines the scale of projected climate impacts in Maine if we fail to address this escalating problem. Just a small sampling includes: $17.5 billion in damage to coastal buildings, and billions more from inland flooding; tens of thousands of lost jobs in forestry, agriculture, tourism, and in coastal communities; threats to the fishing industry; and increases in vector-borne diseases like eastern equine encephalitis and Lyme disease.[1]

End-use electrification – for example the adoption of high-efficiency heat pumps or vehicle electrification – is inherently more efficient than using fossil fuels for heating or mobility. It reduces local air pollution, improving health, and it saves families, businesses, and drivers on fuel costs. For deep emissions reductions in the long term, however, it's important to pair that progress with an increasing supply of zero- or low-carbon electricity

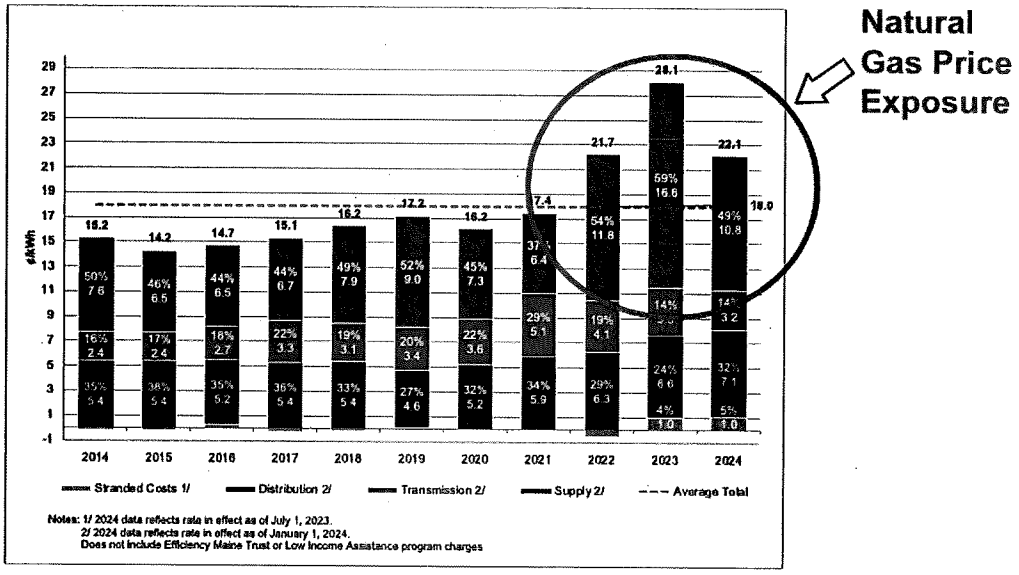
[1] Eastern Research Group for the Maine Governor's Office of Policy Innovation and the Future (GOPIF). *Assessing the Impacts Climate Change May Have on the State's Economy, Revenues, and Investment Decisions: Volume 2: Cost of Doing Nothing Analysis Final.* August 7, 2020. https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/ERG_MCC_Vol2_CostOfDoingNothing_9-1-2020.pdf

generation sources like solar and wind. LD 1868 would ramp up Maine's clean energy policies, raising the state's renewable portfolio standard (RPS) to 90% by 2040, and establishing a new clean energy standard (CES) of 10% by 2040. This will reduce emissions directly from the power sector, while also increasing the emissions reductions from every single electrified appliance over its lifetime, pairing beneficial electrification and clean energy for a win-win for the climate.

LD 1868 is Maine's pathway to more affordable electricity

Energy burdens are high in Maine, primarily due to our dependence on out-of-state fossil fuels. The fact is that the largest rate increases Maine families and businesses have experienced since 2021 have been due to volatile natural gas prices. Electricity supply costs in Maine are driven by the cost of natural gas power generation on the New England grid. When standard offer supply rates spiked in 2022 and 2023,[2] Maine Public Utilities Commission (PUC) Chair Phil Bartlett confirmed that: "*The substantial increase is a result of wholesale market prices in the region, which are driven in large part by increases in natural gas prices.*"[3] While global natural gas prices have declined somewhat from that peak, Maine families and businesses will continue to be exposed to significant fossil fuel price risk as long as we are dependent on these sources of energy.

CMP Rate Components 2014 - 2024



Clean energy on the other hand, presents an opportunity for price stabilization. Renewable energy comes with stable prices and no fuel costs. Clean energy sources like wind and solar will never run out; they don't create pollution; they're produced right here in Maine; and they will provide a reliable energy supply long into the future. Maine's existing renewable energy policies are already saving ratepayers $21.5 million per year.[4] Reaching 100% clean electricity by 2040 as LD 1868 lays out could reduce average household energy costs by

[2] The average CMP bill increased by $29.50/month in 2022 and $31.98/month in 2023.

[3] https://www.newscentermaine.com/article/money/average-versant-power-customer-will-see-30month-rate-hike-in-2022-central-maine-power-maine-public-utilities-commission/97-a256b962-8c31-4e23-936d-ef6a0081b000

[4] Maine Governor's Energy Office. *An Assessment of Maine's Renewable Portfolio Standard.* March 21, 2024. https://www.maine.gov/energy/sites/maine.gov.energy/files/inline-files/Maine-RPS-Impacts-and-Procurement-Policy-Options-Report-Master-FINAL.pdf

~$1,300 per year as lower-cost and more efficient electricity replaces higher-cost fuels.[5]

LD 1868 will create jobs and boost Maine's economy

Clean energy is a proven job creator and source of economic growth for Maine. Maine's clean energy industry contributed $2.31 billion to the state's economy in 2022 alone and includes more than 2,500 clean energy businesses. Clean energy jobs have helped lead Maine's economic growth, with the sector growing faster than the economy-wide average. The clean energy industry now employs more than 15,000 Mainers.[6]

Maine sends more than $4 billion out of state every year to pay for imported oil and gas – money that could be invested in Maine's economy creating homegrown clean energy jobs instead. Clean energy projects like wind and solar can also provide significant benefits to municipalities, including local tax revenue, contribution to municipal budgets, and stabilization or reduction in property taxes for residents.

Provisions in the sponsor's amendment to LD 1868

The Governor's Energy Office's Pathways to 2040 analysis, released early this year, showed that reaching 100% clean energy by 2040 was not only feasible, but could be achieved affordably in several different ways. LD 1868 leverages that first-of-its-kind hourly analysis of Maine's energy system to chart an achievable, affordable pathway to reaching 100% clean electricity.

By raising Maine's RPS requirements to reach 90% renewable energy by 2040, LD 1868 leverages well-known renewable energy technologies that have experienced rapidly declining costs over the past decade to supply the bulk of Maine's energy needs.[7] The remainder is met by a new clean energy standard, which includes nuclear energy and hydroelectricity, but is otherwise technology neutral, with eligible resources defined by the Department of Environmental Protection as producing energy "in a manner that produces no more than a de minimis level" of net greenhouse gas emissions using a full lifecycle analysis. Critically, renewable resources can also compete for this final 10% as well.

It is well-established in energy system modeling that building a grid supplied by wind and solar resources alone can be easily done over short time spans, however using these resources exclusively over longer time spans requires additional balancing resources as the system encounters more varied weather and load conditions. In essence, for a wind-and-solar-only system to be guaranteed to supply energy over several weeks of calm, cloudy, and cold conditions where load is high and renewable generation is lower, significant overbuilding of renewable capacity to meet the last few percentage points of supply while guaranteeing resource adequacy may be necessary. Allowing a broader array of zero-carbon resources, carefully defined, to compete for those final few percents of supply as LD 1868's 10% clean energy standard does, strikes the best balance between taking advantage of the low and declining costs of renewables and the supply properties of other resources.

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[5] Maine Governor's Energy Office. *Maine Pathways to 2040: Analysis and Insights.* January 2025. https://www.maine.gov/energy/sites/maine.gov.energy/files/2025-01/Maine%20Pathways%20to%202040%20Analysis%20and%20Insights.pdf

[6] Maine Governor's Energy Office. *2023 Maine Clean Energy Industry Report.* https://www.maine.gov/energy/sites/maine.gov.energy/files/2024-05/2023%20MECEIR%20Report%20Final.pdf

[7] Lazard. *Lazard's Levelized Cost of Energy Analysis Version 17.0.* June 2024. https://www.lazard.com/media/xemfey0k/lazards-lcoeplus-june-2024-_vf.pdf

The definition of clean, which LD 1868 assigns the responsibility of determining to DEP, is crucial. Many power plant fuels that are marketed as clean or renewable rest on dubious accounting. Hydrogen and biofuels could be eligible, but DEP should apply strict guidelines to ensure that lifecycle emissions of these fuels are fully accounted for and that partial credit is not given for co-firing with fossil fuels, which would only serve to funnel subsidies to existing fossil fuel plants.

Conclusion

LD 1868 is based on a foundation of detailed research and modeling of Maine energy system and strikes a reasonable balance between leveraging low-cost renewable energy with a modest amount of clean balancing resources to achieve the above benefits in a cost-effective manner. When paired with new procurement authorities proposed in other legislation before this committee, LD 1868 will provide clear standards and direction, and LD 1270 will provide implementation authority – together, a major step for Maine toward a future powered by clean, affordable, and reliable energy.

Reaching 100% clean energy by 2040 will power Maine forward, stabilizing energy costs, creating new jobs, and reducing fossil fuel dependence by investing in homegrown clean energy. NRCM strongly supports this bill, and we encourage the Committee to vote Ought To Pass on LD 1868.

Thank you, and I would be happy to answer any questions the Committee has.