



**Testimony of**

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**Before the Committee on Energy, Utilities and Technology in Support of LD 597 –  
An Act to Establish the Wood Energy Investment Program**

**Tuesday, March 16, 2021**

Senator Lawrence, Representative Berry and members of the Joint Standing Committee on Energy, Utilities and Technology, my name is Dana Doran, and I am the Executive Director of the Professional Logging Contractors of Maine. The Professional Logging Contractors of Maine (PLC) is a trade association that represents logging and associated trucking contractors throughout the state of Maine. The PLC was formed in 1995 to give independent contractors a voice in a rapidly changing forest industry.

As of 2017, logging and trucking contractors in Maine employed over 3,900 people directly and were indirectly responsible for the creation of an additional 5,400 jobs. This employment and the investments that contractors make contributed \$620 million to the state's economy. Our membership, which includes 200 contractor members and an additional 100 associate members, employs over half of the individuals who work in this industry and is also responsible for 80% of Maine's annual timber harvest.

Thank you for providing me the opportunity to testify on behalf of our membership in support of LD 597 – An Act to Establish the Wood Energy Investment Program. I would also like to thank both Senator Jackson and the other co-sponsors for re-introducing this important legislation. As you might recall, LD 912, which was almost a carbon copy of this bill, passed this committee unanimously in 2019, but was unable to move forward because of the utilization of previously prescribed funds by the Administration and the COVID 19 pandemic. After a longtime in the making, it is time for this legislation to finally move across the finish line.

As I have stated in previous testimony, the PLC and our membership are in full support of any legislation that might come before you this session if it will facilitate development of new renewable modern wood heat and power projects that could positively impact the management of Maine's forests, provide new markets for our members and contribute positively to our climate. As you heard from the Governor in her State of the Budget Address, forest products is one of Maine's heritage industries and we need to do everything we can to support it. The Governor has also stated that she is in support of this legislation this session as a way to help our industry, but also as a solution to support a recommendation made by the Maine Climate Council and the Economic Recovery Committee.

The forest products industry in Maine was in the midst of a reinvention process until the onset of COVID 19 and the digester explosion at the Jay mill in April 2020. From 2011 to 2016, Maine experienced the closure of five pulp and paper mills and the periodic idling of two wood energy electric facilities. As a result, Maine lost 50 percent of its softwood pulp market and has also seen a two-million-ton reduction

of biomass utilization. Between 2014 and 2016, the total economic impact of the forest products industry fell from \$9.8 billion to \$8.5 billion, and more than 5,000 jobs were lost.

<b>Forest Products Industry</b>			
	<b>2011</b>	<b>2014</b>	<b>2016</b>
Total Economic Impact	\$8.5 billion	\$9.8 billion	\$8.5 billion
Total Jobs	38,789	38,956	33,538

However, from 2017-19, there was positive progress as over \$1 billion of new investment in manufacturing upgrades had been announced with new markets for cross laminated timber and insulation made out of wood.

All of this progress came to a grinding halt because of COVID 19. The negative impacts of the pandemic on the forest products industry began here in the state one year ago as a result of reduced export capability and have steadily worsened. In mid-March 2020, COVID-19 crashed lumber markets as housing starts ground to a halt. In the months since, paper mills across the state have shut down for periods of time or drastically cut output in response to reduced global paper consumption.

As a result of mill closures and curtailments due to COVID 19, it led to a 30% reduction in harvesting capacity and the layoff of nearly 1,000 people in harvesting and hauling. This means that over 11,000 truckloads of wood were not delivered to a Maine mill in 2020. Further, for an industry that is responsible for over \$620 million of direct economic impact each year, it will mean a direct loss of over \$186 million of economic activity as a result.

As it relates to wood for energy production – electricity, heating and combined heat and power – is a critical part of Maine’s forest economy. In 2010, 3.7 million tons of wood for the energy market were produced from Maine timber harvests, representing 25 percent of all timber volume. By 2016, the harvest of biomass had shrunk to 2.5 million tons and in 2021, it is now down to an all-time low of 1.5 million tons.

These lost markets have impacted the entire forest industry supply chain. Landowners have lost a market for low-grade stems and harvest residues (e.g., tops and branches). In 2010, Maine landowners received an estimated \$11.9 million in stumpage payments for biomass; by 2016 this figure had declined by two-thirds, to \$3.8 million and today it is less than \$2 million.

Loggers and truckers have suffered even more from the erosion of this market. In 2010 there was \$90.5 million in economic activity associated with logging and trucking of biomass fuel; in 2016 this had shrunk to \$48.2 million and today it is less than \$30 million.

For those who were on this committee back in 2016, you might recall the actions that the 127<sup>th</sup> Legislature took to slow this erosion and create a plan for the future. LD 1676 provided a short-term bridge to help a struggling industry continue to provide significant economic impact to the state.

Also, in 2016, the Legislature supported LD 1693, Resolve, Establishing the Commission to Study the Economic, Environmental and Energy Benefits of the Maine Biomass Industry. This Commission’s charge was to study the use of biomass in a thoughtful and meaningful way with the intent to creating a long-term roadmap at a critical point in time.

This commission looked at biomass from a very broad perspective, not just with respect to harvest residuals for electric generation, but also at the entire value chain, to understand the relationships and the impacts. The commission learned that biomass is more than just a byproduct from harvesting, it is also sawmill and manufacturing residuals, pellets and it is also not just an asset, but an opportunity.

The Commission published its report in 2016, with five broad goals and 15 recommendations. Recommendation 2.2 and 2.3 state specifically that Maine should provide greater financial resources to incentivize conversions to wood based thermal and power systems. The commission considered these to be important recommendations because they could provide long term cost savings as well as environmental and educational benefits.

The executive summary of the final report is attached and the work that the Biomass Commission did in 2016 has become very important as a basis for implementing sound policy. It helped create a thermal renewable portfolio standard (RPS) as part of the RPS reform that this committee moved forward in 2019. The intent of LD 597 is to further formalize the recommendations of the Biomass Commission and be sure that low-cost capital and incentives are available for the installation of modern wood energy applications in commercial spaces.

It is firmly established that modern wood energy systems, after installation, save taxpayers large amounts of money which otherwise would be spent on fossil fuels. Put simply, instead of spending \$745 million on heating with fossil fuels in the state and exporting over \$581 million of that to other states and countries before the fuel is consumed, a larger share of that money should stay circulating within the state's economy and provide greater benefits than just warmth. Leadership for this commonsense solution should come from this committee.

There are currently, thanks in large part to federal funds made available from 2010-13, over 100 Maine schools, hospitals, municipal buildings, and business firms that are now heated with wood pellets or chips. According to a third-party study submitted to Maine's Wood Energy Team (attached), these heating installations in 2017 saved \$5.5 million in heating costs and put \$6.5 million into local economies in Maine. Additionally, almost all of the schools in Maine using modern wood heat were contacted for the survey. The vast majority indicated a very high degree of satisfaction with their heating system, and they were very enthusiastic because they felt their systems were providing a great example to the larger community by providing forest jobs to Maine workers, as opposed to buying fuel originating from far away.

As you consider this bill, please do so through lens that public policy should serve the greatest number for the greatest good. We can achieve this goal and provide not only economic benefits, but educational, environmental and social benefits as well through this one small program. We can also use this philosophy to build an economy that transcends time and economic challenges and provides a roadmap for prosperity in rural Maine.

Thank you for the opportunity to provide the opinion of our membership before you today and I would be happy to answer any questions you may have.



**STATE OF MAINE  
127th LEGISLATURE  
SECOND REGULAR SESSION**

**Final Report of the Commission to Study the  
Economic, Environmental and Energy Benefits of the  
Maine Biomass Industry**

**December 2016**

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## Executive Summary

The 127<sup>th</sup> Maine Legislature established the Commission to Study the Economic, Environmental and Energy Benefits of the Maine Biomass Industry (referred to in this report as the “commission”) with the passage of Resolve 2015, chapter 85. Pursuant to the resolve, 13 members were appointed to the commission: two members from the Maine Senate, three members from the Maine House of Representatives, a commercial wood harvester who supplies biomass, a representative of the biomass electric industry, a representative of a sawmill located in Maine, a scientist from the University of Maine who studies forest health and silviculture, a representative of a conservation organization, a representative of a pulp and paper manufacturer located in Maine, a representative of commercial timber holdings in Maine, and a representative of a business that uses biomass for thermal generation or cogeneration or an expert in the use of biomass energy for thermal generation or cogeneration.

The resolve set forth the following duties for the commission:

- Review and evaluate the economic, environmental and energy benefits of Maine’s biomass resources, as well as public policy and economic proposals to create and maintain a sustainable future for the Maine biomass industry;
- Consider the interconnection of economic markets for biomass and forest products and the energy policy of the State;
- Consider whether the environmental, economic and energy benefits of biomass support updating the State’s energy policy to strengthen and increase the role that biomass and the forest products industry play throughout the State;
- Consider the costs of implementing any recommendations and the effect of leaving current policies in place; and
- Examine any other issues to further the purposes of the study.

In addition, the commission was required to seek public input and to consult and collaborate with stakeholders and experts in the fields of economic development, natural resources and energy policy. The commission is required to submit a report, with findings and recommendations, including suggested legislation, to the Joint Standing Committee on Energy, Utilities and Technology and the Joint Standing Committee on Agriculture, Conservation and Forestry in December 2016.

Over the course of five meetings the commission received presentations from stakeholders, in-state and out-of-state utility regulators, state office representatives, subject matter experts, and visited a logging operation, sawmill, biomass facility and combined heat and power (CHP) facility.

With this information and through several discussions the commission developed five broad goals, and 15 recommendations to increase support for Maine’s biomass industry (Appendix E). The commission developed the following broad goals:

- Encourage investment in biomass facilities and promote greater efficiency;

- Encourage investments in combined heat and power systems to promote efficiency;
- Enable and encourage co-location and other innovative projects utilizing behind-the-meter technologies to incentivize manufacturing growth and increase system reliability;
- Promote and develop Maine's forest-related resources in-state and abroad and take advantage of federal grant funding and other collaborative efforts to bolster the forest-based economy in Maine; and
- Create state policies that encourage biomass energy production and heating with biomass.

The commission developed the following recommendations to assist and encourage further investment in the biomass industry:

- Amend the renewable portfolio standards by creating a thermal class to incentivize increased efficient biomass use for thermal;
- Amend the renewable portfolio standards to explicitly extend new renewable capacity resource portfolio requirements beyond 2017;
- Create an addition under the renewable portfolio standards that provides incentives for facilities that create in-state jobs and economic benefits;
- Offer incentives through Efficiency Maine Trust or other avenues to those converting to combined heat and power (CHP) systems;
- Incentivize schools and other public institutions to convert to CHP systems;
- Provide greater flexibility in the establishment of back-up and standby charges in order to alleviate the burden for large energy users who are seeking to use alternative systems to lower their energy costs and lessen their demand on the transmission system;
- Amend existing laws to explicitly allow microgrids statewide;
- Amend existing law regarding permitting of electrical lines, including poles and other related structures in, upon, along, over, across or under a road, street or other public way for persons other than transmission and distribution utilities;
- Amend existing law, or encourage the Public Utilities Commission through rulemaking, to increase the cap on installed capacity of a jointly owned generating facility under "shared ownership" net energy billing, as well as eliminate the cap of 10 accounts or meters for net energy billing;
- Review the federal Economic Development Assessment Team's final report on Maine's forest economy and a final report on biomass energy under the auspices of the Governor's Energy Office to avoid duplicative efforts and to take advantage of collaborative efforts to address Maine's issues with its forest-based economy;
- Encourage the Maine Forest Service to support efforts toward fostering growth and innovation across Maine's forest products industry, including full utilization of recently awarded grants from the U.S. Department of Agriculture (USDA) for a State Wood Energy Assistance Team and the "Strengthening and Expanding Maine Wood Markets" project;
- Establish a program similar to the "Get Real. Get Maine!" campaign to encourage the use of Maine wood energy among residents to heat their homes, businesses and public institutions and to promote local forest products locally, nationally and globally;
- Provide funding, through bonds and tax incentives, for research and development of new wood-based technologies and to get these new technologies from the incubator phase into the marketplace;

- Through statutory changes, categorize biomass-derived carbon dioxide emissions as carbon neutral and exempt from regulation under certain air pollution laws; and
- Encourage the Governor's Energy Office to make biomass a more focused, greater priority in Maine's Comprehensive Energy Plan.

In making its recommendations, the commission ensured that its recommendations addressed the biomass industry as a whole and did not just focus on energy production. The commission through its recommendations hopes to diversify the biomass industry, encourage more in-state investment and provide more stability to the industry.

# Modern Wood Heat: Local Renewable Energy for Commercial and Institutional Building Owners

## *Benefits to Maine in 2017*

### Economic Benefits

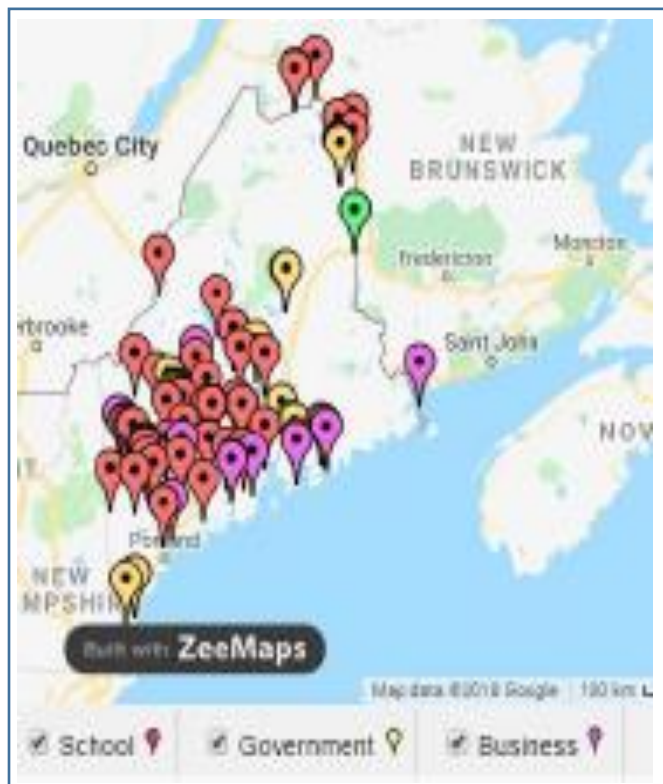
***\$5.5 million saved*** in heating costs

***\$6.3 million direct spending*** on local wood pellets and chips

***\$20.6 million in total economic benefit to*** Maine

### Proven Reliability

***At least 106 public and private buildings stay warm*** with  
Maine-produced wood pellet and wood chip fuels



See interactive map of installed wood  
energy systems in Maine at  
[www.woodheatmaine.org](http://www.woodheatmaine.org)

**106 commercial, institutional and  
small industrial sites were analyzed for  
this economic impact study.** The map  
and link above provide detailed  
information on each site, coded as  
follows:

- B** business
- S** school
- H** hospital
- G** government (state, county,  
municipal)

**More being added all the time!**

**Please flip the page to see the full story!**



## The Full Story

By using sustainably sourced wood chips and wood pellets instead of fossil fuels to heat commercial and institutional buildings, Maine benefits economically and environmentally.



**Proven:** In 2017, more than 106 Maine schools, hospitals, municipal buildings, and businesses used modern wood chip and pellet heating instead of imported fossil heating fuels.



**Local:** These facilities consumed an estimated 19,000 tons of pellets and 45,000 tons of wood chips, nearly all from Maine forests and wood manufacturing residues.



**Renewable:** Nearly all these facilities burned imported heating oil in the past. By switching to modern wood heating they reduced oil use by the equivalent of 5.2 million gallons.



**Cost Effective:** By switching fuels, these facilities saved about \$5.5 million in heating costs, based on heating oil at \$2.25/gallon.



**Beneficial:** Money spent on wood chips and pellets pumped \$6.3 million into the local economy.



**Powerful:** Direct spending on wood fuels, combined with retained wealth through heat cost savings and jobs and taxes associated with this sector generated an estimated \$20.6 million in economic activity in Maine.



**Carbon Better:** Reducing use of high carbon fossil fuels and using low carbon wood chips and pellets from sustainable sources instead reduced overall carbon dioxide emissions.

**Analysis by Maine Statewide Wood Energy Assistance Team — data and calculations available upon request**

### Key Assumptions in Analysis

Moisture Content	Bone dry wood at 0% moisture content = 4.9 MWH per ton energy content; Chips at 45% moisture content = 2.9 MWH/ton; pellets at 4% moisture content = 4.7 MWH/ton.
Fuel Cost	Green chips delivered price/ton = \$55/ton; bulk pellets delivered price/ton = \$200/ton average
Energy Equivalents	1 MWH = 3,412,000 BTU; 1 Gallon #2 Heating Oil = 138,500 BTU
Savings Calculation	Heat cost savings vs. oil calculated by using heating oil at \$2.25/gallon
Economic Impact Calculation	Total Economic Impact = (\$ spent on fuel + heat cost savings) x multiplier of 1.76 (multiplier per <u>Economic Impact of Maine's Forest Products Industry</u> , 2014 and 2016; June 30, 2016; James Anderson III and Mindy Crandall PhD; School of Forest Resources, University of Maine

2018 Maine Statewide Wood Energy Assistance Team, Maine Forest Service

[www.woodheatmaine.org](http://www.woodheatmaine.org)