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August 2, 2016

Senator Saviello, Representative McCabe, and Members of the “Maine Biomass Study Commission”:

Thank you for this opportunity to speak to the importance of “**thermal** biomass”.

Our association represents Maine’s pellet manufacturers, pellet boiler equipment firms, and numerous other firms involved in supplying pellet heat to Maine homes, schools, and businesses throughout our state. Our customers range from The Jackson Laboratory in Bar Harbor, heating their entire campus with a pellet system, to the many thousands of Mainers heating their homes with pellet stoves.

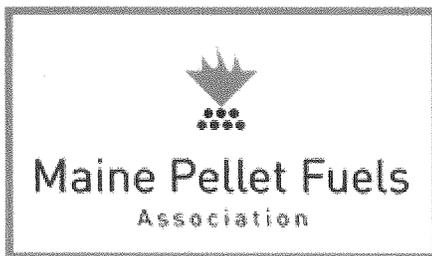
Maine’s four pellet manufacturing plants employ about 100 persons and we have created numerous additional jobs in the assembly of pellet boilers in Bethel, in the installation of pellet heating equipment, and the delivery of pellets. **However, the real impact of our industry is in Maine’s forests, where we contribute to employment of about 500 persons.**

Our sector has become a valued part of the Maine forest products economy. We are a customer for fiber—sawdust and chips—generated by Maine’s sawmills. When low oil prices, warm weather, and Canadian competition sharply reduced operations at Northeast Pellets in Ashland at the end of this past winter, for instance, it quickly created backups of sawdust at the Irving and Maibec lumber mills in the Ashland area.

The biomass electric plants, in turn, are important customers for fiber which we cannot use, such as wet sawdust, or off-grade pellets.

Efficiency Maine and the Maine Forest Service have been important partners in the growth of our industry. The homeowner heating equipment incentives currently provided by Efficiency Maine have led to the installation of over 500 pellet boilers in Maine homes and helped make possible the Farmington Model Neighborhoods demonstration project where a concentrated group of homeowners and business firms installed pellet heat. **Pellet boilers are clearly the most promising growth area of our industry.**

Even larger, in terms of biomass jobs, has been the \$11.5 million made available, from about 2009 to 2013, by the Maine Forest Service using federal Recovery Act funds to install pellet and chip heating systems—replacing fossil fuels—in 24 public buildings, most of them schools, in Maine, from the University of Maine campuses at Fort Kent and Presque Isle down to public schools in Oxford Hills, Waterville, and Falmouth.



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The U.S. Forest Service, which disbursed these funds to Maine, remains vitally interested in assisting our sector, and recently approved a \$130,000 grant to assist in establishing a Maine State Wood Assistance Team. This team would provide education and technical assistance, particular to schools and other public building administrators, to “promote and stimulate the market for high efficiency, low-emissions biomass heating technology.” The grant application, of which I am herewith providing a copy to the Commission’s staff, includes support from many stakeholders who will be contributing matching support, and notably includes our Governor’s Energy Office, which would through the grant be strengthening the very popular weekly report on fuel prices to provide more information about wood heat.

We hope this Commission will encourage the Maine Forest Service to get this grant, for which the federal funds are now available, working.

We have the wood, here in Maine, and we have the biomass infrastructure to deliver modern wood heat. **More than any other state in the country, we have the pellet mills, the chip suppliers, the heating system installers, and the delivery trucks, to deliver wood heat.**

Modern wood heat –or what we today are calling “thermal biomass”, is about efficiency, particularly in the reduction of carbon emissions in order to meet our state’s goals. But most of all, it is about our Maine economy—keeping Maine money in Maine. **78% of every Maine dollar spent on heating oil leaves Maine.** We want Maine’s oil dealers, who are now “energy marketers”, to be delivering pellet fuel to our homes, businesses, and schools, as is done in Austria, Germany, northern Italy, and Scandinavia. **Expanding modern wood heat to 10% of Maine homes would keep hundreds of millions of Maine fuel dollars here in Maine, with incredible benefit to our forestry sector and citizens.**

William Bell

Executive Director

8-2-16
 Provided by Bill Bell
 Maine Pellet Fuels Assoc.
 © Biomass Study Mtg.

**Costs and Savings of
 Maine ARRA Wood to Energy Conversions**

Location	Gallons of Oil displaced	115,000 NET BTU / unit	45% tons of chips	Chip moisture 13,600,000 tons of pellets	Oil Cost		Pellets / ton	
					Gallon	\$	← Chips / ton	← Pellets / ton
Carrabec Schools	52,200	6,003,000,000		441.4	\$ 190,530	\$ 92,693	\$ 97,837	
UM Cooperative Ext. Presque Isle	1,850	212,750,000		15.6	\$ 6,753	\$ 3,285	\$ 3,467	
Falmouth Schools	41,030	4,718,450,000	726		\$ 149,760	\$ 42,103	\$ 107,656	
Ft. Fairfield Schools	39,611	4,555,265,000	701		\$ 144,580	\$ 40,647	\$ 103,933	
City of Gardiner	6,301	724,615,000		53.3	\$ 22,999	\$ 11,189	\$ 11,810	
Greenville School	40,489	4,656,235,000		342.4	\$ 147,785	\$ 71,898	\$ 75,887	
Houlton School	65,000	7,475,000,000	1,150		\$ 237,250	\$ 66,700	\$ 170,550	
Limestone School	62,975	7,242,125,000	1,114		\$ 229,859	\$ 64,622	\$ 165,237	
Madawaska School	64,000	7,360,000,000	1,132		\$ 233,600	\$ 65,674	\$ 167,926	
Town of Mechanic Falls	7,685	883,775,000		65.0	\$ 28,050	\$ 13,647	\$ 14,404	
Messalonskee Schools	70,838	8,146,370,000	1,253		\$ 258,559	\$ 72,691	\$ 185,868	
Millinocket Regional Medical Center	79,954	9,194,710,000		676.1	\$ 291,832	\$ 141,977	\$ 149,855	
Northern Maine Community College	46,988	5,403,620,000		397.3	\$ 171,506	\$ 83,438	\$ 88,068	
Northern Maine Medical Center	50,817	5,843,955,000	899		\$ 185,482	\$ 52,146	\$ 133,336	
Oxford Hills School	88,543	10,182,445,000	1,567		\$ 323,182	\$ 90,859	\$ 232,323	
Phillips School	25,000	2,875,000,000		211.4	\$ 91,250	\$ 44,393	\$ 46,857	
Poland School	42,000	4,830,000,000	743		\$ 153,300	\$ 43,098	\$ 110,202	
Town of Strong	4,700	540,500,000		39.7	\$ 17,155	\$ 8,346	\$ 8,809	
Town of Thordmike	1,000	115,000,000		8.5	\$ 3,650	\$ 1,776	\$ 1,874	
UM Fort Kent	37,292	4,288,580,000		315.3	\$ 136,116	\$ 66,221	\$ 69,895	
UM Presque Isle	20,000	2,300,000,000		169.1	\$ 73,000	\$ 35,515	\$ 37,485	
Waterville School	50,215	5,774,725,000		424.6	\$ 183,285	\$ 89,169	\$ 94,116	
	898,488	103,326,120,000	9,285	3,160	\$ 3,279,481	\$ 663,546	\$ 2,615,935	

Note: Conversion from #2 heating oil to chips and pellets has been computed as net to net BTU/unit. Green wood 45% moisture content was used as the standard for chips. Net heat content figures were taken from the Fuel Value Calculator published by the US Forest Service Forest Products Laboratory, 5th edition, 2004.

ARRA	\$ 11,424,000	Total owner Cost Share + Total Extra Costs
Cost share	\$ 20,150,855	
Total	\$ 31,574,855	
ARRA cost ROI/ yrs	4.4	
Tot cost ROI / yrs	12.1	
Owner cost ROI/ yrs	7.7	
15 yr savings	\$ 39,239,026	less total cost \$ 7,664,171
20 yr savings	\$ 52,318,702	\$ 20,743,847
25 yr savings	\$ 65,398,377	\$ 33,823,522

\$663,546 in annual wood fiber usage equates to 7.2 FTE in local jobs annually.

In operation now
 On line by Dec 2012