

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

Benefits to Maine in 2017

Economic Benefits

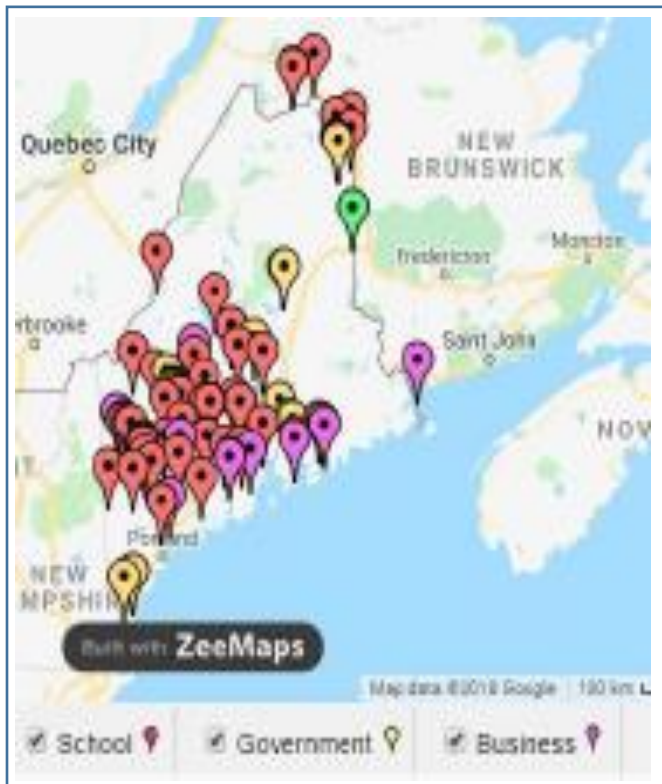
\$5.5 million saved in heating costs

\$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

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 Economic Impact of Maine's Forest Products Industry , 2014 and 2016; June 30, 2016; James Anderson III and Mindy Crandall PhD; School of Forest Resources, University of Maine