

Savings for 500 homes converted from oil burning to pellet fueled central heating systems

This table below shows the annual total heating bill savings for 500 homes that use wood pellet fuel instead of home heating oil. The table shows a number of combinations of annual usage and heating oil cost.

Total Net Annual Savings for 500 Homes Using Wood Pellet Fuel Instead of Home Heating Oil (Pellet Fuel Cost = \$250/ton)						
Annual Oil Usage per Home (gallons)	Heating Oil Price per Gallon					
	\$ 3.25	\$ 3.50	\$ 3.75	\$ 4.00	\$ 4.25	\$ 4.50
700	\$ 568,750	\$ 612,500	\$ 656,250	\$ 700,000	\$ 743,750	\$ 787,500
750	\$ 609,375	\$ 656,250	\$ 703,125	\$ 750,000	\$ 796,875	\$ 843,750
800	\$ 650,000	\$ 700,000	\$ 750,000	\$ 800,000	\$ 850,000	\$ 900,000
850	\$ 690,625	\$ 743,750	\$ 796,875	\$ 850,000	\$ 903,125	\$ 956,250
900	\$ 731,250	\$ 787,500	\$ 843,750	\$ 900,000	\$ 956,250	\$ 1,012,500
950	\$ 771,875	\$ 831,250	\$ 890,625	\$ 950,000	\$ 1,009,375	\$ 1,068,750
1000	\$ 812,500	\$ 875,000	\$ 937,500	\$ 1,000,000	\$ 1,062,500	\$ 1,125,000
1050	\$ 853,125	\$ 918,750	\$ 984,375	\$ 1,050,000	\$ 1,115,625	\$ 1,181,250
1100	\$ 893,750	\$ 962,500	\$ 1,031,250	\$ 1,100,000	\$ 1,168,750	\$ 1,237,500
1150	\$ 934,375	\$ 1,006,250	\$ 1,078,125	\$ 1,150,000	\$ 1,221,875	\$ 1,293,750
1200	\$ 975,000	\$ 1,050,000	\$ 1,125,000	\$ 1,200,000	\$ 1,275,000	\$ 1,350,000
1250	\$ 1,015,625	\$ 1,093,750	\$ 1,171,875	\$ 1,250,000	\$ 1,328,125	\$ 1,406,250
1300	\$ 1,056,250	\$ 1,137,500	\$ 1,218,750	\$ 1,300,000	\$ 1,381,250	\$ 1,462,500
1350	\$ 1,096,875	\$ 1,181,250	\$ 1,265,625	\$ 1,350,000	\$ 1,434,375	\$ 1,518,750
1400	\$ 1,137,500	\$ 1,225,000	\$ 1,312,500	\$ 1,400,000	\$ 1,487,500	\$ 1,575,000

This table shows the annual savings per household.

Total Net Annual Savings per Household Using Wood Pellet Fuel Instead of Home Heating Oil (Pellet Fuel Cost = \$250/ton)						
Annual Oil Usage per Home (gallons)	Heating Oil Price per Gallon					
	\$ 3.25	\$ 3.50	\$ 3.75	\$ 4.00	\$ 4.25	\$ 4.50
700	\$ 1,138	\$ 1,225	\$ 1,313	\$ 1,400	\$ 1,488	\$ 1,575
750	\$ 1,219	\$ 1,313	\$ 1,406	\$ 1,500	\$ 1,594	\$ 1,688
800	\$ 1,300	\$ 1,400	\$ 1,500	\$ 1,600	\$ 1,700	\$ 1,800
850	\$ 1,381	\$ 1,488	\$ 1,594	\$ 1,700	\$ 1,806	\$ 1,913
900	\$ 1,463	\$ 1,575	\$ 1,688	\$ 1,800	\$ 1,913	\$ 2,025
950	\$ 1,544	\$ 1,663	\$ 1,781	\$ 1,900	\$ 2,019	\$ 2,138
1000	\$ 1,625	\$ 1,750	\$ 1,875	\$ 2,000	\$ 2,125	\$ 2,250
1050	\$ 1,706	\$ 1,838	\$ 1,969	\$ 2,100	\$ 2,231	\$ 2,363
1100	\$ 1,788	\$ 1,925	\$ 2,063	\$ 2,200	\$ 2,338	\$ 2,475
1150	\$ 1,869	\$ 2,013	\$ 2,156	\$ 2,300	\$ 2,444	\$ 2,588
1200	\$ 1,950	\$ 2,100	\$ 2,250	\$ 2,400	\$ 2,550	\$ 2,700
1250	\$ 2,031	\$ 2,188	\$ 2,344	\$ 2,500	\$ 2,656	\$ 2,813
1300	\$ 2,113	\$ 2,275	\$ 2,438	\$ 2,600	\$ 2,763	\$ 2,925
1350	\$ 2,194	\$ 2,363	\$ 2,531	\$ 2,700	\$ 2,869	\$ 3,038
1400	\$ 2,275	\$ 2,450	\$ 2,625	\$ 2,800	\$ 2,975	\$ 3,150

The annual usage does not necessarily correlate with the size of the home. Many low income homes are not very well insulated.¹ The proportional effect of a drop in the annual heating bill for a low income family is very significant.

¹"Improving Energy Performance in Low Income Housing," HUD, March, 2006. Energy use in most units could be reduced by 20%-30%.

The Direct Economic Benefit to Maine if 10% of homes convert to wood pellet fueled home heating systems.

Maine households	550,000
percent that use heating oil	80%
average oil per season per house (gallons)	900
heating oil price	\$4.00
annual oil bill per house	\$3,600
pellet cost as a percent of oil for equivalent BTUs	50.0%
annual savings per household	\$1,800
If 10% of Maine homes that use oil convert to pellets	
Total Fuel Savings	\$79,200,000

total gallons of oil that would have been used	39,600,000
total money that would have been spent on oil	\$158,400,000
total tons of pellets that will be used	334,969
pellet price	\$250
Total Spending on Pellets	\$83,742,353
Taking the fuel savings and the value of keeping the money spent for fuel in Maine instead of sending it to the OPEC:	
TOTAL NET added to Maine Economy in One Year	\$162,942,353
Total One Year Net with a 2X multiplier	\$325,884,706
Total Net over 10 Years	\$1,701,161,000
Total Net over 10 Years with 2X multiplier	\$3,402,323,000

That is \$3.4 billion dollars added to the Maine economy over 10 years!

The projected economic benefits to the forest products industry and its workers if Maine homes convert to pellet fuel

If 10% of Maine homes convert to wood pellet fuel.

Number of Forest Products Jobs Created	1230
Number of Pellet Home Heating Jobs Created	310
<i>Total New Annual Income to Maine Workers</i>	\$61,560,000

Forest products jobs include logging, trucking, chipping, and pellet manufacturing.