

WOOD		PROPANE		NATURAL GAS		ELECTRICITY	
6,900 BTU/LB		24,000 BTU/LT		1,000,000 BTU/MCF		293 KW = 1,000,000 BTUs	
77 % Efficiency		80 % Efficiency		80 % Efficiency		100 % Efficiency	
PRICE	COST PER	PRICE	COST PER	PRICE	COST PER	PRICE	COST PER
PER TON	1,000,000 BTU	PER LT	1,000,000 BTU	PER MCF	1,000,000 BTU	PER KWH	1,000,000 BTU
\$40.00	\$3.76	\$0.30	\$15.63	\$4.00	\$5.00	\$0.050	\$14.65
\$42.00	\$3.95	\$0.31	\$16.15	\$4.50	\$5.63	\$0.055	\$16.11
\$44.00	\$4.14	\$0.32	\$16.67	\$5.00	\$6.25	\$0.060	\$17.58
\$46.00	\$4.33	\$0.33	\$17.19	\$5.50	\$6.87	\$0.065	\$19.04
\$48.00	\$4.52	\$0.34	\$17.71	\$6.00	\$7.50	\$0.070	\$20.51
\$50.00	\$4.70	\$0.35	\$18.23	\$6.50	\$8.12	\$0.075	\$21.97
\$52.00	\$4.89	\$0.36	\$18.75	\$7.00	\$8.75	\$0.080	\$23.44
\$54.00	\$5.08	\$0.37	\$19.27	\$7.50	\$9.37	\$0.085	\$24.90
\$56.00	\$5.27	\$0.38	\$19.79	\$8.00	\$10.00	\$0.090	\$26.37
\$58.00	\$5.46	\$0.39	\$20.31	\$8.50	\$10.62	\$0.095	\$27.83
\$60.00	\$5.65	\$0.40	\$20.83	\$9.00	\$11.25	\$0.100	\$29.30
\$62.00	\$5.83	\$0.41	\$21.35	\$9.50	\$11.87	\$0.105	\$30.76
\$64.00	\$6.02	\$0.42	\$21.87	\$10.00	\$12.50	\$0.110	\$32.23
\$66.00	\$6.21	\$0.43	\$22.39	\$10.50	\$13.12	\$0.115	\$33.69
\$68.00	\$6.40	\$0.44	\$22.91	\$11.00	\$13.75	\$0.120	\$35.16

### COMPUTING FUEL COST SAVINGS

Let's assume you are heating your building with Propane and your annual propane cost, during the last heating season, was \$100,000. Assuming propane in your area costs 40 cents (\$0.40) per litre (including sales tax) your cost savings calculation is as follow:

#### Sample Calculation:

1. Annual Heating Cost using Propane ..... **\$100,000**
2. Cost of Litre of Propane ..... \$0.40
3. Total Litres of Propane Used (\$100,000/\$0.40) ..... 250,000 Litres
4. BTU/Litre of Propane ..... 24,000 Btu/Litre
5. Total BTUs used(250,000\*24,000) ..... 6,000,000,000Btu
6. BTU / Ton of Wood (2,000Lbs\*6,900Btu/Lb) ..... 13,800,000 Btu/Ton
7. Tons of Wood used (6,000,000,000/13,800,000) ..... 451.7 Tons\*
8. Cost of Ton of Wood (delivered – WOOD Table) ..... \$60.00
9. Annual Heating Cost using Wood (451.7\*\$60) ..... **\$27,102**
10. Total Annual Cost Savings (\$100,000-\$27,102) ..... **\$72,898**

In this case you would have saved approximately **\$ 72,898** per heating season. The same method can be used to compare Wood to Natural Gas or Electricity.

\* This calculation is based on the assumption that the efficiency of wood system is 77% and propane is 80%, therefore the wood used was multiplied by 1.0389 (0.80/0.77).