

Vermont Fuels for Schools - - Wood Fuel Survey Results for 2010-2011 Heating Season

Presented by: The Vermont Department of Forests and Parks, Vermont Superintendents Association's School Energy Management Program, and the Biomass Energy Resource Center

Total Tons of Wood Chips Used in Vermont Schools	25,420
Total Gallons of Oil Equivalent	1,557,648
Total CO2 avoided (in tons)	17,095

Summary Data	Bldg. Sq. Ft.	Boiler H.P.	Chip Bin Tons	Chips Tons	Net MBTU	\$/Sq. Ft.	Net BTU/s.f.	% of BTUs from Wood	Total Cost if	Actual	Percent Savings	
									100% fossil fuel	Fuel Cost with wood		Savings
Totals:	5,627,676		48	25,420	198,536				\$4,919,612	\$2,312,341	\$2,607,271	53%
Average:	130,876		48	591	4,617	\$0.44	36,306	80%	\$114,410	\$53,775	60,634	53%

Range - Low:	23,000	30	20	68	695	\$0.15	19,736	38%	\$ 16,921	\$9,212	\$3,948	9%
Range - High:	390,000	332	90	1,500	11,480	\$1.00	83,424	97%	\$ 291,355	\$145,881	\$175,564	79%

Facility	Bldg. Sq. Ft.	Install Date [yyyymm]	Boiler H.P.	Chip Bin Tons	System Mfr.	Wood Chip Supplier	Days on line	Chips Tons	Net MBTU	\$/Sq. Ft.	Net BTU/s.f.	% of BTUs from Wood	Total cost			
													if 100% fossil fuel	Actual Fuel Cost w/ wood	Estimated Savings	Percent Savings
1 Barre City Elementary School	126,594	1994.09	180	35	Chiptec	Lathrop	215	572	4,150	\$0.39	32,782	87%	\$104,877	\$49,198	\$55,678	53%
2 Barre Town Elementary School	158,000	1996.10	180	60	Messersmith	Lathrop	170	517	4,040	\$0.31	25,571	81%	\$92,514	\$48,454	\$44,060	48%
3 Berlin Elementary School	37,058	1994.12	35	20	SylvaTech	A. Johnson Company	178	140	1,983	\$1.00	53,514	45%	\$50,393	\$37,106	\$13,287	26%
4 Blue Mountain Union School District #21	77,000	1998.10	125	50	Messersmith	Heath Bunnell	166	318	2,635	\$0.48	34,222	76%	\$84,272	\$37,327	\$46,945	56%
5 Brattleboro Union High School	390,000	2004.03	332	60	Messersmith	D.H. Hardwick & Sons	187	1,290	9,615	\$0.28	24,655	85%	\$229,466	\$110,694	\$118,772	52%
6 Browns River Middle School	100,000	1994.09	91	35	Chiptec	Lathrop	0	420	3,655	\$0.34	36,549	73%	\$88,636	\$33,859	\$54,777	62%
7 Burlington High School	240,000	2006.10	322	90	Messersmith	Lathrop	175	1,200	8,924	\$0.38	37,181	85%	\$129,391	\$91,040	\$38,351	30%
8 Cabot School	60,000	2009.00	59	40	Chiptec	Limlaw	170	414	3,144	\$0.63	52,407	83%	\$89,624	\$37,558	\$52,066	58%
9 Calais Elementary School	23,000	1986.10	30	30	Messersmith	A. Johnson Company	195	90	695	\$0.40	30,217	82%	\$16,921	\$9,212	\$7,710	46%
10 Camel's Hump Middle School	87,000	1994.09	90	30	Chiptec	Lathrop	174	354	2,530	\$0.31	29,081	89%	\$72,845	\$27,320	\$45,525	62%
11 Champlain Valley Union High School	220,000	2005.10	180	40	Messersmith	A. Johnson Company	280	840	5,845	\$0.23	26,567	91%	\$142,872	\$51,500	\$91,372	64%
12 Danville School	80,000	2008.10	80	45	Biofuel	Heath Bunnell	156	405	3,459	\$0.52	43,234	74%	\$72,473	\$41,284	\$31,189	43%
13 East Montpelier Elementary School	37,000	1989.08	30	35	Chiptec	A. Johnson Company	110	115	916	\$0.31	24,747	80%	\$28,752	\$11,370	\$17,382	60%
14 Frances C. Richmond School	107,000	2005.10	180	60	Messersmith	Cousineau	187	345	2,291	\$0.21	21,416	95%	\$56,014	\$22,195	\$33,819	60%
15 Grand Isle Elementary School	42,500	1991.10	50	30	Chiptec	A. Johnson Company	125	68	1,059	\$0.56	24,915	41%	\$32,125	\$23,823	\$8,302	26%
16 Hanover School	187,000	2006.03	200	60	Messersmith	Cousineau	187	968	6,501	\$0.34	34,766	94%	\$158,921	\$64,031	\$94,890	60%
17 Hartford High School	157,580	1995.10	180	35	Chiptec	Cousineau	192	484	8,007	\$0.93	50,814	38%	\$194,184	\$145,881	\$48,304	25%
18 Harwood Union High School	169,000	2008.10	180	60	Messersmith	Limlaw	182	910	6,806	\$0.42	40,273	85%	\$153,222	\$71,530	\$81,692	53%
19 Hazen Union High School	80,000	1993.07	60	30	Chiptec	Lathrop	175	351	2,504	\$0.36	31,299	89%	\$77,658	\$28,443	\$49,215	63%
20 Johnson Elementary School	50,500	1997.04	50	34	Messersmith	Lathrop	215	247	1,918	\$0.47	37,979	82%	\$53,369	\$23,511	\$29,859	56%
21 Lamoille Union High School	253,300	2007.10	265	47	Messersmith	Lathrop	198	1,200	8,659	\$0.38	34,186	88%	\$272,744	\$97,180	\$175,564	64%
22 Leland & Gray Union High School	100,000	1992.07	45	30	Chiptec	Bloom Tree Service	210	320	2,132	\$0.19	21,321	95%	\$59,122	\$18,847	\$40,275	68%
23 Lyndon Town School	105,000	1991.03	30	30	Chiptec	Limlaw	150	268	2,072	\$0.20	19,736	82%	\$43,047	\$21,140	\$21,907	51%
24 Milton Elementary School	160,000	2009.11	180	50	Messersmith	Lathrop	118	751	6,191	\$0.40	38,696	77%	\$97,513	\$63,804	\$33,708	35%
25 Milton Middle/High School	140,000	2009.12	180	50	Messersmith	Lathrop	118	561	4,415	\$0.32	31,536	81%	\$69,537	\$44,377	\$25,160	36%
26 Missisquoi Valley Union High School	180,000	2009.03	180	80	Messersmith	Pete Foster	208	534	3,762	\$0.15	20,898	90%	\$37,617	\$27,810	\$9,807	26%
27 Mount Abraham Union High School	159,647	2006.11	180	60	Messersmith	Lathrop	202	871	6,457	\$0.37	40,446	86%	\$152,848	\$59,514	\$93,333	61%
28 Mt Anthony Middle School	150,000	2004.08	180	60	Messersmith	Plumb	186	850	7,091	\$0.70	47,271	76%	\$213,063	\$104,632	\$108,431	51%
29 Mt Anthony Union High School	225,000	2007.01	332	60	Messersmith	Gagnon	186	1,210	9,696	\$0.61	43,094	79%	\$291,355	\$136,999	\$154,355	53%
30 Mt Mansfield Union High School	150,000	1997.01	180	50	Messersmith	Lathrop	181	984	6,646	\$0.43	44,306	94%	\$185,570	\$64,748	\$120,821	65%
31 North Country Union High School	191,000	1998.10	180	70	Messersmith	St. Onge	0	1,049	8,828	\$0.62	46,217	75%	\$208,107	\$118,405	\$89,702	43%
32 North Country Union Junior High School	56,160	2007.12	85	60	Messersmith	St. Onge	180	357	2,573	\$0.48	45,809	88%	\$60,650	\$26,946	\$33,704	56%
33 Randolph Union High School	140,000	1995.10	180	45	Chiptec	Lathrop	192	352	3,895	\$0.45	27,823	57%	\$108,766	\$62,920	\$45,846	42%
34 Richford Jr Sr High School	120,000	2009.00	73	60	Chiptec	Pete Foster	183	432	3,429	\$0.35	28,573	80%	\$95,409	\$42,068	\$53,340	56%
35 Spaulding High School	210,522	2002.10	332	70	Messersmith	Lathrop	240	1,314	8,577	\$0.41	40,743	97%	\$247,790	\$85,887	\$161,902	65%
36 Springfield High School	270,000	2001.11	180	60	Messersmith	Cousineau	180	1,500	11,480	\$0.47	42,517	83%	\$270,628	\$127,360	\$143,268	53%
37 St. Albans Town Ed. Ctr	120,815	1995.05	101	25	Chiptec	Lathrop	97	245	3,693	\$0.33	30,571	42%	\$44,335	\$40,387	\$3,948	9%
38 U-32 Jr and Sr High School	200,000	2001.04	180	70	Messersmith	A. Johnson Company	240	855	5,726	\$0.30	28,628	95%	\$139,626	\$59,163	\$80,462	58%
39 Weathersfield Elementary and Middle School	50,000	2008.10	60	40	Messersmith	Cousineau	180	237	1,604	\$0.30	32,076	94%	\$37,965	\$15,162	\$22,803	60%
40 Westford Elementary School	50,000	1993.08	60	25	Chiptec	A. Johnson Company	170	180	1,687	\$0.55	33,740	68%	\$52,159	\$27,439	\$24,720	47%
41 Westminster Center School	52,000	2006.03	81	50	Messersmith	S. M. Gallivan	190	253	1,804	\$0.33	34,687	89%	\$83,078	\$17,357	\$65,721	79%
42 Whitingham Elementary School	45,000	2008.03	85	45	Messersmith	Robert Bros., MA	184	550	3,754	\$0.98	83,424	93%	\$125,717	\$44,108	\$81,609	65%
43 Williamstown Middle and High School	70,000	2006.11	180	45	Messersmith	Limlaw	180	500	3,689	\$0.58	52,693	86%	\$94,440	\$40,750	\$53,690	57%