

School Boilers running on Wood Fuel (Wood Chip and Pellets)

- Boilers**

The number of boilers now running on wood pellets in New Zealand (in particular in schools) continues to rise, as do the number of different parties offering installation and conversion services. There are a number of obvious advantages to using wood pellets or chips, the most obvious of which is that they are a relatively clean burning and sustainable fuel. Compared to coal, added advantages include ease of use, cleaning and maintenance.

Cost and current condition will always be a factor in anyone's choice of fuel and boiler technology. Many schools for example have funded replacement of their existing boilers and shifted from coal to pellets in the process. Others have been able to convert existing boilers from coal to run on pellets. For the 46 boilers listed below, the total capacity is 21,507 kW (note – details on 11 boilers in the table are not available) so this total is over 35 boilers.

- Wood Fuel – Quality**

Whatever the application, the use of high quality fuels is paramount. The BANZ Wood Fuel Classification Guidelines available [here](#) set out the standards for all wood fuel types. This is an industry lead initiative with Government support.

- Conversion Guidelines**

BANZ has developed a Technical Guide which is intended to provide guidance on the conversion of existing coal fired boilers to wood pellet operation. It is available [here](#).

	School	City	Conversion / Replacement	Fuel Used	Boiler output (kW)
1	Dunstan High School	Alexandra	Replacement	Wood Chip	900
2	Te Puke Intermediate	Bay of Plenty	Conversion	Wood Pellet	700
3	Edgecumbe College	Bay of Plenty	Conversion	Wood Pellet	645
4	Rangiora High School	Canterbury	Replacement	Wood Pellet	?
5	Cashmere High School	Christchurch	Replacement	Wood Pellet	1460
6	Mairehau High School	Christchurch	Conversion	Wood Pellet	660
7	Glenmoor School	Christchurch	Replacement	Wood Pellet	150
8	Papanui High School	Christchurch	Conversion	Wood Pellet	1125
9	Avonside Girls High School	Christchurch	Conversion	Wood Pellet	1000
10	Shirley Intermediate School	Christchurch	Conversion	Wood Pellet	?
11	Central New Brighton Primary School	Christchurch	Conversion	Wood Pellet	300
12	Kendal School	Christchurch	Replacement	Wood Pellet	150
13	Rudolf Steiner School	Christchurch	Conversion	Wood Pellet	400
14	Hillmorton High School	Christchurch	Replacement	Wood Pellet	?
15	Taieri College	Dunedin	Conversion	Wood Pellet	1460
16	Balmacewen Intermediate	Dunedin	Conversion	Wood Pellet	530
17	Otago Boys High	Dunedin	Conversion	Wood Pellet	1460
18	Logan Park High School	Dunedin	Conversion	Wood Pellet	1460
19	Katikati Primary School	Dunedin	Replacement	Wood Pellet	150
20	Tahuna Normal Intermediate	Dunedin	Replacement	Wood Chip	400
21	Clutha Valley School	Dunedin	Replacement	Wood Pellet	200
22	Golden Bay High School	Golden Bay	Replacement	Wood Chip	350
23	Westland High School	Hokitika	Replacement	Wood Chip	500
24	New River School	Invercargill	Conversion	Wood Pellet	?
25	Kaiapoi High School	Kaiapoi	Conversion	Wood Pellet	1000

26	Ellesmere College	Leeston	Conversion	Wood Pellet	430
27	Macleans College	Manukau	Conversion	Wood Pellet	533
28	Firth School	Matamata	Conversion	Wood Pellet	300
29	Matamata Intermediate	Matamata	Conversion	Wood Pellet	?
30	Matamata College	Matamata	Conversion	Wood Pellet	1400
31	Galatea Primary	Murupara	Conversion	Wood Pellet	150
32	Paekakariki School	Paekakariki	Conversion	Wood Pellet	200
33	Aorangi Primary School	Rotorua	Replacement	Wood Pellet	150
34	Rotorua Girls High	Rotorua	Conversion	Wood Pellet	?
35	Sunset Primary School	Rotorua	Conversion	Wood Pellet	?
36	Selwyn Primary School	Rotorua	Conversion	Wood Pellet	?
37	Western Heights Primary School	Rotorua	Conversion	Wood Pellet	?
38	Lake Rerewhakaaitu School	Rotorua	Conversion	Wood Pellet	?
39	Taumarunui High School	Taumarunui	Conversion	Wood Pellet	?
40	Otumoetai Intermediate	Tauranga	Conversion	Wood Pellet	400
41	Thames High School	Thames	Replacement	Wood Chip	300
42	Timaru Boys High School	Timaru	Conversion	Wood Pellet	1295
43	Tokoroa High School	Tokoroa	Replacement	Wood Pellet	200
44	Te Aroha Primary School	Waikato	Conversion	Wood Pellet	200
45	Henderson Valley School	Waitakere	Replacement	Wood Chip	149
46	Menzies College Trust	Wyndham	Replacement	Wood Pellet	800
				TOTAL (kW)	21,507+