

# Quality Hardwoods

Pellet Boilers



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# One of 10 kilns



# Air Drying with Mother Nature



# Cost of Oil!

- ✦ In 95' oil was approx. \$0.26/litre
- ✦ In Dec. 07 oil was approx. \$0.82/litre
- ✦ In August 08 oil was approx. \$1.10/litre
- ✦ In Jan. 08 we had to make a change
- ✦ Decided to move ahead with investment in alternate fuels.

# Pellets vs. Oil

- ✦ 1 gigajoule = 947815 btu's
- ✦ Furnace oil is 36700 btu/litre
- ✦  $947815/36700=26$  litre
- ✦ @ \$0.80/litre = \$20.80/gj



# Pellets vs. oil contd.

- ◆ Pellets is 8000 btu/ pound
- ◆ 1 tonne=2200lbs.
- ◆  $2200 \times 8000 = 17,600,000 \text{btu}$
- ◆ = 18.6 gj/tonne
- ◆ \$170/tonne
- ◆ = \$9.20/gj

# Pellets vs oil savings.

- ◆ 06 oil used was 505970 litres
- ◆ = 19591 gj @\$20.80/gj
- ◆ = \$407492.80
- ◆ @\$9.20/gj for pellets
- ◆ = \$180237.20
- ◆ Savings \$227255.60!!!!
- ◆ Need to get er done!!

# Pellet boilers



# boilers

- ◆ 2 Dekker boilers + Scrubber
- ◆ Hot water target temp. 195F
- ◆ 3.5 million btu/hr. each
- ◆ Our avg. use 3-5million/hr.
- ◆ Keep the oil furnaces as slave/back up to pellet boilers.





# Water distribution



# Distribution

- ◆ Approx. 4000 gallons water in system
- ◆ Operating temp. at 195F
- ◆ Each kiln has PLC with mixing valve and circulating pump
- ◆ Distribution to fin pipe coils in each of 10 kilns and warehouse "E"

# Main distribution



# Warehouse heating



# Domestic pellet boiler



