



Wood Bioheat Webinar Canadian Success Stories

March 11, 2021

Introduction to BSB

- BSB was established in 2011.
- We are a leading Biomass provider, offering sales of BTU'S and/or Heating Equipment.
- BSB is an official distributor of Mesy's (ÖkoFen), Herz, Binder and Mabre Products.
- Our shareholders are Jean-Claude Savoie (Groupe Savoie) & Malcolm Fisher (Compact Appliances & Northeast Distributors US).



COMPACT

APPLIANCES LIMITED



Sackville, NB,



NORTHEAST DISTRIBUTION LTD



Exeter, NH,

Saint-Quentin



Wood Pellet Plant (90,000 MT)



Delivery Truck

- First specialized pellet delivery truck in Canada.



Delivery Truck

- Closed loop with dust recovery for sealed bins
- On board scale and slip print out





Typical Small installation



Saint-Quentin Church Wood Pellet Heating System

- 2 oil boilers of 96 kW = 192 kW.
Oil consumption in 2012 of 32,000 liters
- In November 2013, BSB installed 2 OkoFen boilers of 56 kW = 112 kW. The system included 2 buffer tanks of 120 gal, one 9 tonnes pellet silo with vacuum pellet extraction as well as a new liner in the existing chimney.
- Savings were estimated at \$24,000/yr. minus oil usage for peak demand @ \$7,000/yr. for a total yearly saving of \$17,000. Payback 5.5 years.



Saint-Quentin Church Wood Pellet Heating System

➤ Heating Fuel cost;

- Fuel cost - 2011-12=\$30,810.00. \$1.10/Liter.
- Fuel cost - 2012-13=\$26,841.00. \$.98/liter.
- **Pellet & Fuel cost -2012-13=\$10,656.00.**

➤ Heating cost Savings:

- Compare to 2011-12 = \$20,159.00. 65% Savings.
- Compare to 2012-13 = \$16,185.00. 60% Savings.

➤ **Pay-back period was 4.5 years.**



Saint-Quentin Church Wood Pellet Heating System

- In 2018 the Federal carbon tax in New Brunswick was established at \$20.00 per tonne.
- From 2018 the Biomass installation at the church have saved an additional \$1,750.00/year.
 - $87.5 \text{ t} \times 3 \text{ years}(2018-21) \times \$20 = \$5\,250$
- If you take Carbon Taxes into consideration, the return on their investment would be even quicker



Photos - Saint-Quentin Church



ÖkoFEN
CHAUFFAGE AUX GRANULES
PELLET HEATING



Photos – Saint-Quentin Church



Saint-Quentin Town Hall Wood Pellet Heating System.

- 2 oil boiler of 96 kw = 192kW. Oil Consumption (12) 22,000 liter/yr. of oil @ \$1.13 =\$25,000/year.
- March 2014, BSB installed 2 OkoFen @ 56 kw = 112 kw wood pellet boiler, including 2-120 gal. buffer tank, 1-9 Ton Pellet container with feeding system. Total cost pellet: 45-T \$10,000.00.
- Total Savings: \$15,000.00 for 2014-15.
- Return on Investment : 6.5 years.



Saint-Quentin Town Hall

- 2015 Maintenance building add to the biomass heating system to replace oil furnace. (50-ft x 85-ft = 4250 sq.ft.)
- Since that addition to the system they still are saving \$ 7,000 a year.
- The replacement of the oil consumption reduced the emission of CO₂ by 61.3 tonne per year. (\$1,226.00).



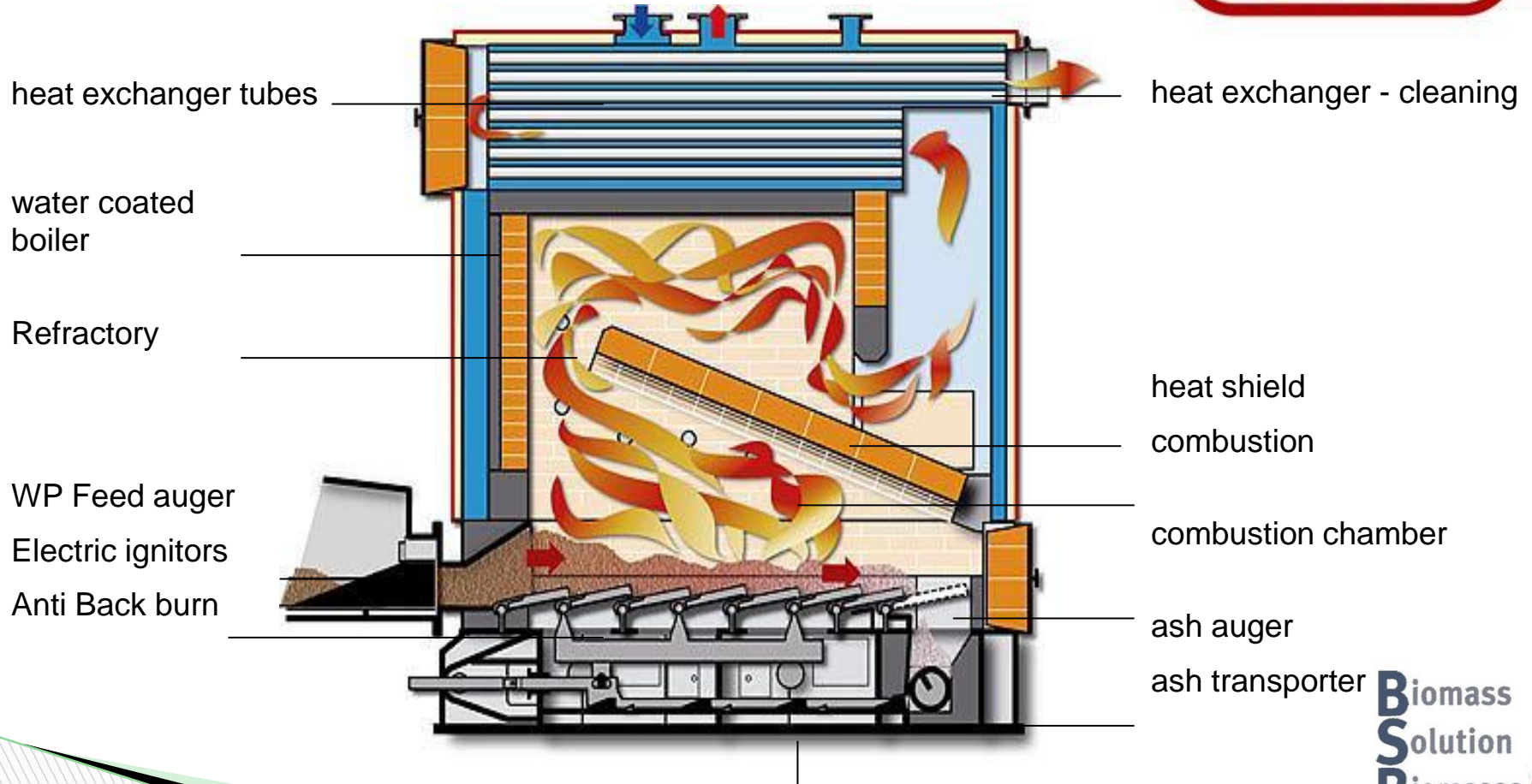
Photos - Saint-Quentin Town Hall



Photos - Saint-Quentin Town Hall



Typical Commercial/Industrial Biomass Boiler



GRAND FALLS HOSPITAL PROJECT

Government Renewable Energy Contract Agreements:

- RFP was call by the Province in Fall 2011.
- Grand Falls Hospital, NB. Wood Pellet fuel source.
- Renewable Energy Contractor Award 2012 to BSB
- Long Term Energy Agreement -10 years from 2013-23.
- BSB owns the BR, maintain & operates the plant for 10-years.
- Supply heat and domestic hot water to the Hospital.
- System monitor with a BTU Meter and invoice monthly.



Grand Falls General Hospital

- 840 kW Binder Boiler (20%)



Grand Falls General Hospital

❑ Buffer Tank (23,000 L) & Distribution System



Grand Falls General Hospital

Boiler's Combustion Chamber





Fueling a Greener Tomorrow!
La solution de chauffage écologique!
bsbheating.com

Pellet Boiler Room
Chaudière à granules



Grand Falls General Hospital

- Winter 2014-2015
 - Savings of 168,000 L of oil
 - Consumption of 425 tonnes of pellet
 - **Avoid the emission of 512 tonne of CO₂**
 - That would represent a saving of \$ 10,240 if we had a carbon tax. (\$20.00/TON)
- Winter 2015-2016
 - Savings of 246,500 L of oil adding the domestic water.
 - Consumption of 480 tonnes of pellet.
 - **Avoid the emission of 784 tonne de CO₂**
 - That would represent a saving of \$15,680 if we had a carbon tax. (\$20.00/TON)

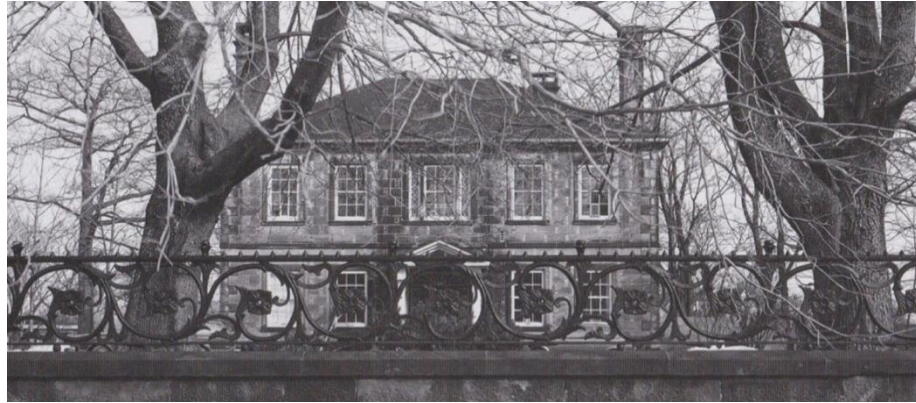




Other examples of different projects in various sector.



Cranewood – Sackville, NB



- 56 kW ÖkoFen boiler with a buffer tank and indirect water heater

CDC Hydraulique - Edmundston



- 56 kW ÖkoFen boiler with 2 buffer tanks

Northwest Potato Farm – St-André



- 2-56 kW MESys boilers with 2 horizontal buffer tanks

Westco – Chicken Barn

- 210 kW Mabre forced air furnace
- Replace direct fire propane heaters
- Reduce the moisture and ammonia, Improve chicken health



Greenhouses - Gallichan, QC

- 1,000-kW Binder biomass boiler (75,000sq.ft)



King Street Elementary - Miramichi

- 300 kW Binder biomass boiler with 2 propane back-up boilers



CCNB UDM - Shippagan

- 1.1 t/h steam Binder biomass boiler



Ferme Nadeau - Laurierville Qc

- Herz firematic 500 kW



Monquart Malthouse - Johnville NB

Mabre 725-kW



Questions ?

Thank You !



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