

# Wood Pellet Boiler

## St. Joe's School, Yellowknife

### System Overview:

A single KOB 540kW Wood Pellet Boiler was installed in St. Joe's School in 2009. The system supplies both space heating and hot water to the facility. Also there is storage at St. Joe's School to contain up to ## tonnes of wood pellets for the fuel source

The system was installed by the Government of the Northwest Territories (GNWT) and is also being operated by the GNWT.

The Wood Pellet Boiler is the Primary heat source for the building while the original Oil fired boilers are still installed and provide a back up if the KOB Pellet Boiler should fail. Also during peak loads the Oil boiler can start to help meet the heating requirements.



St. Joe's School in Yellowknife

### Performance Data:

**Boiler Rated Output:** 540 kW (1,840 MBH)

**Equivalent Annual Oil Amount<sup>1</sup>:** 102,000 L

**Annual Pellet Usage<sup>2</sup>:** 199 tonnes

**Potential Annual Savings<sup>2</sup>:** \$68,900

**Annual GHG Reduction<sup>1</sup>:** 270 tonnes CO<sub>2</sub><sup>eq</sup>

Based on the estimated GHG Reduction using the Wood Pellet Boiler it is equivalent to removing up to 50 midsize passenger vehicles from operation.

<sup>1</sup> GNWT Estimation

<sup>2</sup> Calculation based on GNWT estimated values