BCIT Factor Four Wood-Waste-to-Energy Project
August 13th (2014) info session
Answers to questions asked during the info session

Q: Can my program get involved?
A: Yes, all BCIT programs are welcome to join. Please email Alex Hebert (Alexandre_Hebert@bcit.ca) to discuss possibilities and level of engagement.

Q: What if we run out of wood?
A: Wood will be available as long as there are teaching activities in Joinery (NE2) and Carpentry (NE4). We know that the amount of wood waste varies over the year. That is why the system includes a storage space that can store up to 10 days of wood chips.

Q: Will the energy be stored?
A: No, the energy will not be stored as there is no need since the system is connected to the district energy system. If the wood-waste-to-energy system is producing more energy than what NE1 requires the excess energy will go be injected back to the district energy system.

Q: How does the wood physically get to the chipper?
A: By forklift, similarly as how currently the wood waste gets removed from the collection systems and thrown into the waste bin located close to NW3.

Q: What do you need to preheat the boiler before injecting wood chips as fuel?
   Natural gas, diesel, bunker oil?
A: The boiler comes with an electric hot air gun that blows hot air until the wood is ignited.

Q: Why 200KW? How was the size/scale determined?
A: The boiler was sized based on the amount of waste wood available (from Joinery and Carpentry) and assuming continuous operation during the heating season. 200 kW is the maximum output but the output can be varied depending on the amount of fuel available.
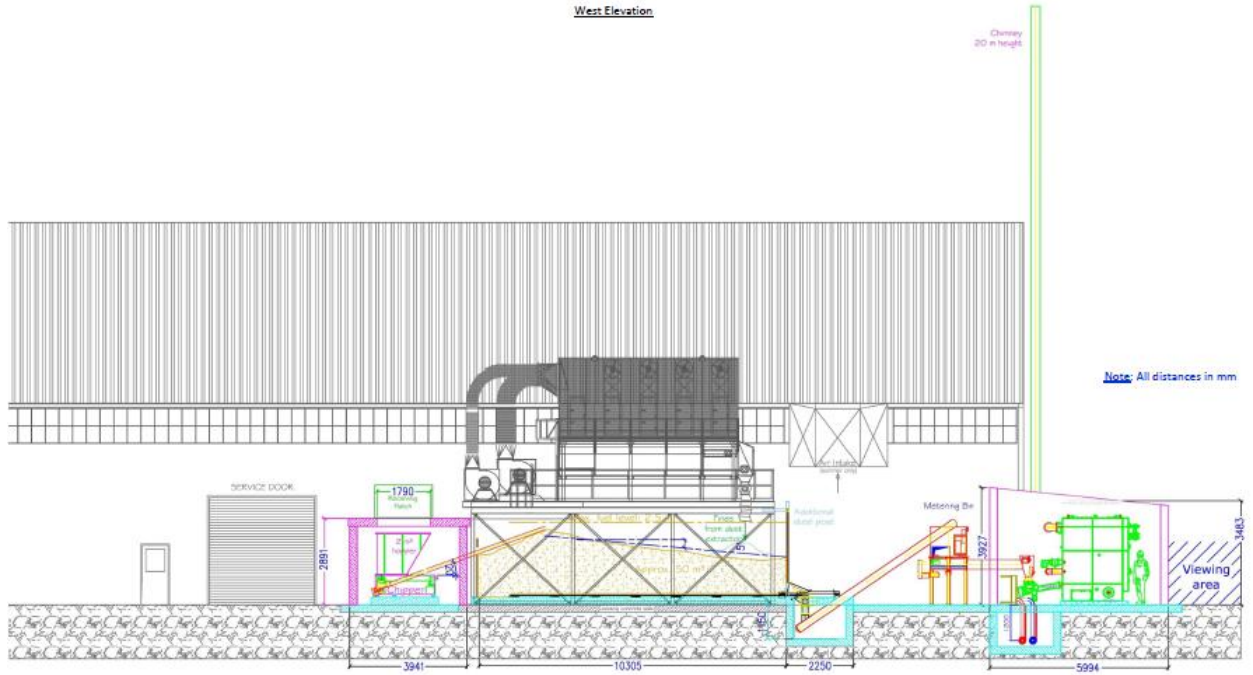
Q: Will this project create more work for Facilities?
A: Yes, although the system is completely automatic it will require some operation and maintenance time. The project has been approved by Facilities and the amount of time required to maintain the system was part of the project's business case.

Q: How big is the building, the boiler, etc.? Where exactly will the facility be located?
A: Below are some preliminary drawings that show the location and scale of the system.

West Elevation

Chimney
20 m height

Note: All distances in mm

SERVICE DOOR

1790

2891

Viewing area

3483

3941

10305

2250

5994

South Elevation

Note: All distances in mm

7249

Chimney
20 m height

Air Intake

Chimney ports
for emission testing

Walk Way

Parking