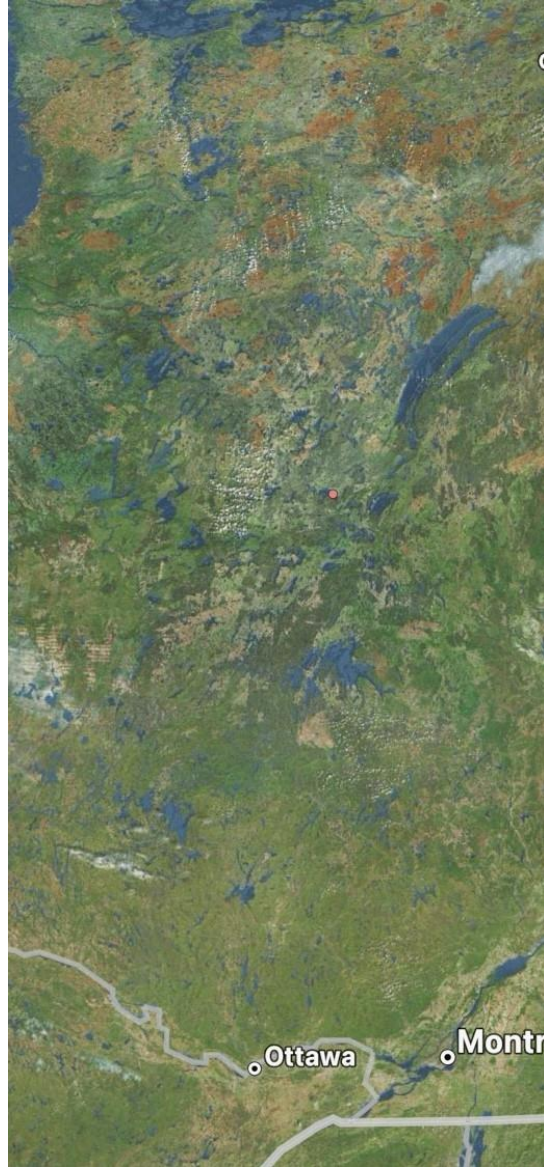


An aerial photograph of the Ouje-bougoumou District, a small Cree community in Eeyou Istchee, north of Quebec. The town is nestled in a valley, surrounded by dense green forests. It features a mix of residential houses, commercial buildings, and a large green sports field. The town is bordered by a sandy beach and a body of water on the right side. The sky is blue with some light clouds.

Ouje- bougoumou District Heating System

Ouje-bougoumou is located in Eeyou Istchee, north of Quebec. It is a small Cree community with a population of approximately 900 residents.



In the mid-1980s,
community leaders in Ouje-
bougoumou envisioned an
alternative energy system
that would be both
sustainable and self-
sufficient.

'92 7 23



With the nearby Barrette-Chapais sawmill, the community recognized an opportunity to implement a district heating system.

In the early 1990s, the Government of Canada (CERRC) contributed to the development of the district heating system. Construction of the first plant began around 1992.

By 1993, the first plant was operational, featuring a 1.2 MW biomass boiler and a 1 MW oil boiler for backup.





"In 1995, Ouje-bougoumou was awarded the global citizen award by the united nations in recognition of the community's efforts to develop an **environmentally** and people-friendly community."

By 1998, Oujebougoumou added a second energy plant for oil boilers.

Over the years, two additional oil boilers were added to the plant, bringing the total to three oil boilers.





In 2018-2019, we received additional funding from NRCan for a new biomass boiler, as well as for repairs and other modifications.

Canada's biggest containerized biomass boiler at the time (1.25 MW Viessmann Boiler)



Other repairs and modifications:

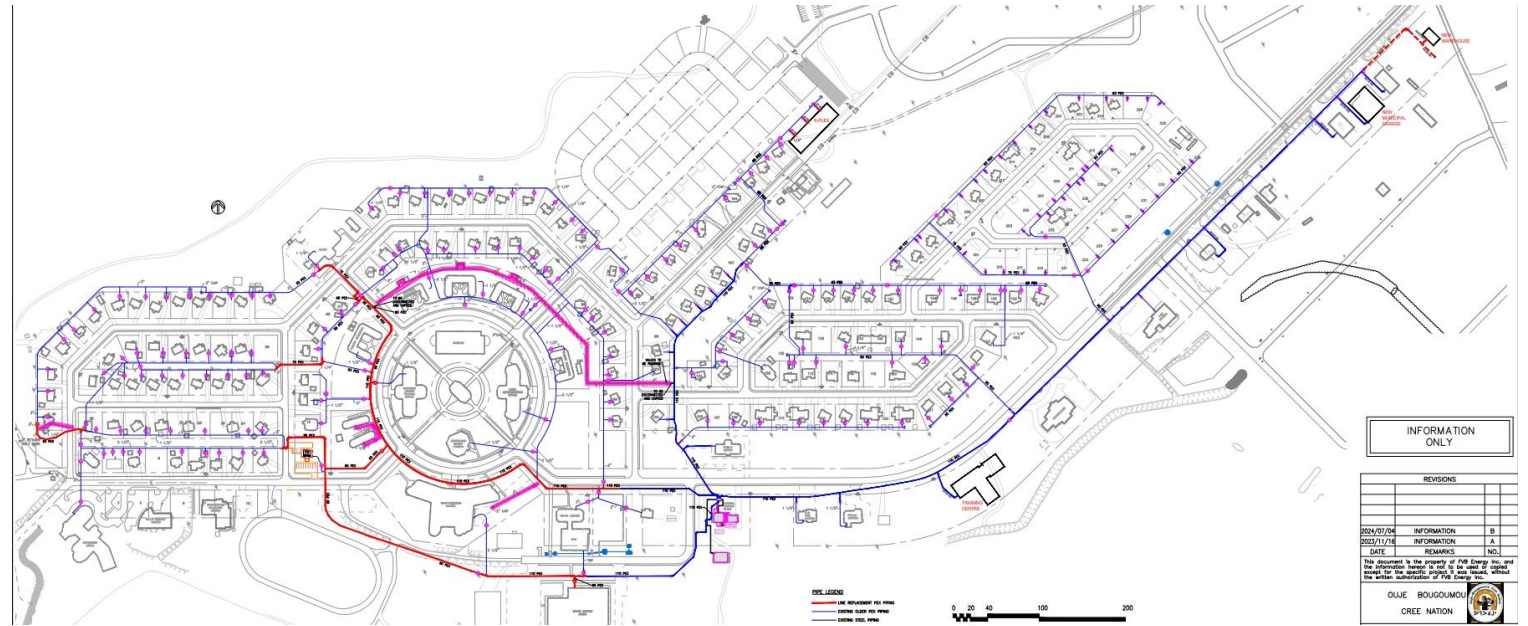
- Pipe replacement
- Electrical upgrades
- Manifold building (Plant separation and zone distribution station)
- heat transfer station upgrades (Substations)
- And more



Today, we operate two central plants capable of producing over 25,000,000 BTU per hour (7.45MW). The biomass plant is equipped with three biomass wood chip boilers, while the oil plant has three backup oil boilers.

FINK
Furnace Integrated Network System
www.finkmachine.com





The district heating system provides heating services to the entire community, including both space heating and domestic hot water. The distribution network spans approximately 5 kilometers.



200 family homes/
Apartments
21 commercial/ public
buildings

Each customer is directly connected to the
network through a heat transfer station
(substation).

3 main types of substations for heat transfer:

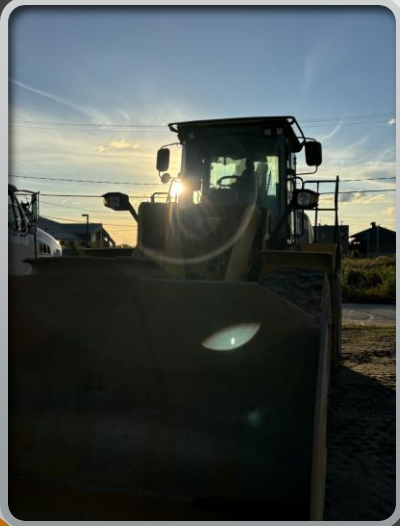
Radiant baseboard heating

In-floor heating

Air/ heat exchanger (forced air) heating

Hybrids (mix of both or more)





Our daily tasks and responsibilities vary significantly.

Answer all calls

Maintain both plants

Reporting

Plumbing

Electricity

Heavy machinery

And much more



We hope to continue upgrading our system in the near future to enhance its performance.



- Hydraulic feed
- Heat exchangers
- Buffer tanks
- Boiler repairs
- Building repairs
- Fencing the perimeter
- And more



The Heart of Ouje.

"It reminds me of a giant heart pumping blood in the veins that link all the buildings and houses together. The used blood then returns to the heart to be pumped again."

Quote and drawing by Yolanda Bosum

Meegwetch
Thank You
Merci

