



BEAVER CREEK BIOMASS PROJECT

PROJECT DESCRIPTION

The community of Beaver Creek YT, home of the White River First Nation (WRFN), currently receives its electricity from diesel-powered generators. Copper Niisuu Limited Partnership, the development branch of the WRFN, is already developing a solar project and they are now exploring the feasibility of operating a Biomass Combined Heat and Power (CHP) plant which can provide heat and electricity during the months that solar generation is limited.

SERVICES

- Pre-Feasibility Study

PROJECT AT A GLANCE



REGION:
BEAVER CREEK, YUKON



CLIENT:
COPPER NIISUU LIMITED
PARTNERSHIP



STATUS:
COMPLETED



TYPE:
BIOMASS

KEY STATS

80%

average diesel generation
reduction over 30 years

180,000

litres of diesel that would be
displaced for electricity
generation

75,000

litres of propane and diesel
that would be displaced for
heating



PROJECT SHEET: BEAVER CREEK BIOMASS PROJECT



CHALLENGE

- Develop a business case for an industrial-scale biomass plant in a remote community
- Consider the lack of biomass CHP expertise in the Yukon and a relatively small biomass regional supply
- Design a district heating system in permafrost conditions

SOLUTION

- Integrate the biomass CHP plant with the planned solar and battery storage facility
- Identify costs, type (pellets, wood chips) and quality of biomass feedstock option for Beaver Creek
- Identify regulatory challenges to access biomass supply in the Yukon

RESULTS

- Potential business and job opportunities for Beaver Creek
- Grant funding for construction will be required for the economic viability of the project