

# Aadri Heat Recovery System

*Providing Lower Cost Heat in Fort McPherson for More than 20 Years*

The Aadri Heat Recovery System in Fort McPherson is a quiet success story here in the North. The system has been delivering excess heat from the Northwest Territories Power Corporation's (NTPC) diesel power plant to local customers for more than 20 years. This has contributed to keeping heat costs down and lowering the amount of greenhouse gases (GHGs) produced and emitted in the community. Fort McPherson is located approximately 200 kilometers south-west of Inuvik.



The system was built in 1996 through an equal partnership between NTPC and the Gwich'in Development Corporation (GDC). Although Aadri has faced several challenges since it began operation, including a fire that destroyed the Fort McPherson power plant in 2004, the system and the partnership have worked well, providing heat at a reduced cost to customers.

## Over the past decade, Aadri has delivered the following benefits to the school:

- Avoided diesel consumption of approximately **1,684,603 litres** compared to use of diesel for heating
- Avoided GHG emissions by approximately **4,723 tonnes** of carbon dioxide equivalent compared to use of diesel for heating
- Saved the school approximately **\$450,000** due to the lower cost of heat from Aadri compared to diesel



The Chief Julius School has been the primary customer for the past several years but in 2020 we look forward to reconnecting the water treatment plant once MACA finishes the construction of its replacement.

A heat recovery system uses the residual heat from the power plant's engines and exhaust to heat water. The water is then piped out to near-by buildings allowing them to use this heat so they don't have to use fuel fired boilers. Residual heat is an excellent way to reduce heating costs and GHG emissions when buildings are located near a power plant.

The GDC and NTPC are pleased to partner on innovative projects that reduce GHG emissions and help customers lower their energy costs. Aadri achieves both these objectives.