



GHG Grant Program for Government

Current Projects

Łíídlı́ Kúé First Nation On-The-Land Camp Solar and Wind Project

On September 1, 2022, the Łíídlı́ Kúé First Nation was approved for a grant of \$77,105.54 under the GHG Grant Program for Governments.

The Łíídlı́ Kúé First Nation will install a 5,440 watt (W) solar array, 3,000 W wind turbine and 40 kWh battery storage. This will reduce off-grid diesel power generation at an on-the-land camp in the Deh Cho region.

With the solar array and wind turbine installations, diesel consumption is expected to be reduced by 5,200 litres per year, which is equivalent to reducing 14 tonnes of CO₂e emission reduction every year.

The total eligible cost of the project is \$102,807.38. The GNWT's GHG Grant Program for Governments the GNWT is providing \$77,105.54. Łíídlı́ Kúé First Nation is providing the remaining \$25,701.84.

Installation is expected to be completed by 2024.

Deh Cho First Nations Edézhzhíe Solar Project

On October 12, 2022, the Deh Cho First Nations was approved for a grant of \$81,153 under the GHG Grant Program for Governments.

The Deh Cho First Nations will install a 4,380 W solar array and 10 kWh battery storage. This will reduce off-grid diesel power generation at four guardian cabins located in Edehzhie – Dehcho Protected Area and National Wildlife Area. Through the installation of this system, the Deh Cho First Nations will also be working with the Edehzhie Land guardians at each site to build capacity and train community members in the installation and maintenance of an off-grid solar system.

With this new solar array, diesel consumption is expected to be reduced by 3,360 litres annually. This will reduce greenhouse gas emissions by nine tonnes of CO₂e per year.

The total eligible cost of the project is \$108,204.00. The GNWT's GHG Grant Program for Governments is providing \$81,153. The Deh Cho First Nations is providing the remaining \$27,051. Installation is expected to be completed by 2024.

Inuvik LNG Tank Project



The Northwest Territories Power Corporation (NTPC) was approved for a grant of \$878,000 under the GHG Grant Program for Governments in October of 2021.

The project will see NTPC install a third liquefied natural gas (LNG) tank for the Inuvik power plant and allow the community to rely less on diesel and generate most of its electricity from readily available LNG. Inuvik currently generates electricity with LNG and diesel.

One of the objectives of the 2030 Energy Strategy is to reduce GHG emissions from electricity generation in diesel communities by 25 per cent.

Completion of this project will reduce diesel use to generate electricity in Inuvik by an estimated one million litres annually and reduce GHG emissions by 606 tonnes per year. Installation of the LNG tank is expected to be completed in March 2023.

Gwich'in Tribal Council Multi-Use Camp Biomass Heating

The Gwich'in Tribal Council was approved for a grant of \$235,000 under the Greenhouse Gas (GHG) Grant Program for Government on May 26, 2021.

The approved project is a dual fuel 60 kW biomass system installed inside a 20-foot shipping container to heat camp buildings at a remote site. The total project cost of \$313,950. The project is expected to reduce up to 88 tonnes of GHG emissions and offset operational costs.

Installation is expected to begin in the summer of 2022 and be operational by March 2023.

Yellowknife Catholic Schools Wood Pellet Boiler Project at École St. Patrick High and Weledeh Catholic Schools in Yellowknife

On April 20, 2021, Yellowknife Catholic Schools (YCS) was approved for a grant of \$928,125 under the GHG Grant Program for Governments.

As part of the project, YCS will install a 540 kW wood pellet boiler that will serve both École St. Patrick School and Weledeh Catholic School. Both schools are currently heated with 3 oil-fired boilers.

With this new wood pellet boiler installation, oil consumption is anticipated to be reduced by 90%, representing 161,925 liters of oil annually. This will also reduce GHG emissions by 449 tonnes of CO₂e per year. There are also projected annual operating cost savings of about \$78,600 per year.

The total eligible cost of the project is \$1,237,500. As noted, under the GHG Grant Program for Governments the GNWT will be providing \$928,125 with the balance of the funding provided by YCS in the amount of \$309,375.

Installation is expected to be completed in 2022.

Fort Smith Electric Heat Project

The Town of Fort Smith was awarded \$360,000 under the Greenhouse Gas (GHG) Grant Program for Government on January 19, 2020.



The project proposal includes conducting energy efficient and heating upgrades in three municipal buildings: a water treatment plant, animal shelter and public works garage. The water treatment plant and public works garage will switch to electric heat, taking advantage of the electric heating rate incentive in that region.

This project is expected to reduce up to 510 tonnes of GHG emissions and reduce operational costs by up to \$67,000 per year.

The total cost of the project is expected to be up to \$480,000. Of that total, 75 % (\$360,000) is being funded by the GHG Grant Program and the remainder is contributed by the recipient.

These energy efficient upgrades are expected to be completed by March 2023.

YK1 School Board Biomass Heating

The Yellowknife Education District No. 1 (YK1) school board was awarded \$1.05 million under the GHG Grant Program for Government on April 30, 2020.

The project proposal includes the installation of wood pellet boilers in two Yellowknife school facilities — Mildred Hall School and Range Lake School. Both installations are expected to reduce up to 578 tonnes of GHG emissions annually. In addition to this reduction in annual emissions, the schools' cost of operations may drop by up to \$97,000 per year.

The total cost of the project is expected to be up to \$1.4 million. Of that total, 75 per cent (\$1.05 million) is being covered by the GHG Grant Program.

The project is expected to be complete by October 2022.

City of Yellowknife – New Aquatic Center Biomass District Heating System Connection

On June 1, 2022, The City of Yellowknife was awarded \$330,000 under the GHG Grant Program for Government.

The project involves connecting the City's new aquatic centre to an existing biomass district heating system (DHS).

This project is expected to reduce up to 645 tonnes of CO₂e annually and avoid oil use by approximately 234,600 litres per year.

Total cost of the project is expected to be approximately \$440,000, with 75% (\$330,000) being covered by the GHG Grant Program. It is scheduled to be completed by the spring of 2024.

Northwest Territories Power Corporation – DC Fast Electric Vehicle Charging Station



On June 1, 2022, The Northwest Territories Power Corporation was awarded \$468,000 under the GHG Grant Program for Government to install a DC fast electric vehicle (EV) charging station.

This project involves the installation of one DC fast charging station at Behchokò, NWT. Clean and renewable power will be supplied to the EV charging station from the Snare hydroelectric grid. GHG reductions will come from the potential adoption and use of more electric vehicles by NWT residents. This project also furthers the GNWT's goal to develop a zero-emission corridor to the NWT-Alberta border.

This project is expected to reduce up to 140 tonnes of CO₂e annually and reduce gasoline use by approximately 61,000 litres per year. The GHG reduction calculation has been done in conjunction with a study on EV adoption and forecasts released in 2021. That study found that increasing the number of EV charging stations in the NWT will lead to more EVs being used in the territory and more reductions in transportation-related GHG emissions.

Total cost of the project is expected to be approximately \$624,000, with 75% percent (\$468,000) being covered by the GHG Grant Program. It is scheduled to be completed by the spring of 2024.

City of Yellowknife – Water Treatment Plant

On June 1, 2022, The City of Yellowknife was awarded \$2.25 million under the GHG Grant Program for Government for a biomass boiler at the local water treatment plant.

The project will replace the existing oil-fired heating system at the Yellowknife Water Treatment Plant with a biomass boiler. The biomass boiler will be used for water temperature adjustment and space heating requirements for the water treatment plant and an adjacent pump house.

This project is expected to reduce up to 740 tonnes of CO₂e annually and displace approximately 329,000 litres of heating oil per year.

Total cost of the project is approximately \$3 million, with 75% (\$2.25 million) being covered by the GHG Grant Program. It is scheduled to be completed by the spring of 2024.