Northwest Territories:

Clean Electricity Snapshot

2022-2024

The Northwest Territories (NWT) is not connected to the North American electrical grid. As a result, the Northwest Territories electricity system that supplies its communities is made up of 27 electrical grids, each with their own separate power generation facilities, transmission and distribution lines. The Government of the Northwest Territories and regional Indigenous governments, Indigenous communities, researchers, and renewable energy developers in the Northwest Territories are working to develop renewable energy generation projects to enhance energy security, reliability and adorability while reducing reliance on diesel power generation in remote communities.

Powering Canada's Future is the Government of Canada's strategy for clean electricity. It combines historic investments and balanced, fair regulations to lay out the path forward to build grids that will provide power that is reliable, affordable and clean and serve as the backbone of our economy.

Federal Investments

In November 2024, the Government of Canada invested $25 million to support the Government of the Northwest Territories to complete feasibility and regulatory work for the Taltson Hydro Expansion project.

Budget 2023's clean electricity measures will support projects that reduce communities' reliance on diesel, such as the Ikayuut Solar Project.

In June 2022, the Government of Canada invested over $21.6 million in funding to 14 Indigenous communities to help implement clean energy projects with three communities located in the Territory.

Emissions and Electricity Generation

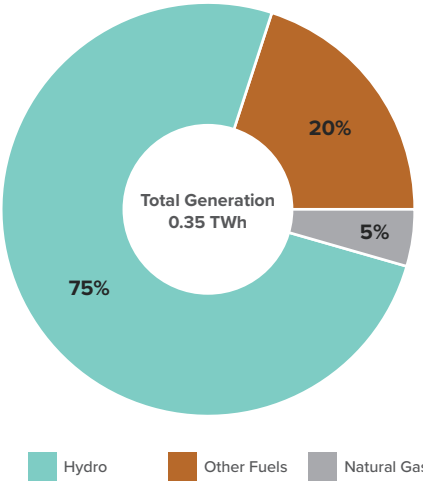
According to the National Inventory Report, in 2022, 75% of Northwest Territories' electricity was generated from renewable resources including hydro. Twenty-five percent was generated from natural gas and other fuels such as diesel.

Hydro Power

The Northwest Territories generates most of its electricity through two hydroelectric grids, the Taltson Grid (South) and the Snare grid (North).

- The Taltson Hydro facility currently generates up to 18 megawatts (MW) of electricity, but this will increase to 22 MW after its refurbishment is completed. The Taltson Hydro Expansion project proposes to add an additional 60 MW and connect the Taltson and Snare grids via a transmission line that would pass under Great Slave Lake. After project completion, the Taltson Hydro Expansion will help stabilize electricity rates for 11 communities and over 70% of the Northwest Territories population.
- The Snare grid is currently made up by the 28 MW Snare Hydro facility and the 6.6 MW Bluefish Hydro facility.

Northwest Territories' Electricity Generation in 2022



Wind Power

The Inuvik Wind project can produce 3.5 MW of electricity and will supply 30% of Inuvik's annual electrical energy needs. The project will also reduce 7,000 tonnes of greenhouse gas (GHG) emissions annually.

Economic Opportunities

In addition to cleaner air and lower greenhouse gas emissions, a clean electricity grid can stimulate investment in innovation, provide economic opportunities, and create good jobs.

New Jobs

Electrification and the transition to cleaner forms of electricity generation is expected to create good jobs across Canada. For instance, independent experts from Clean Energy Canada forecast that there will be 6,800 clean energy jobs added in Northern Canada between 2025 and 2050.

Electrification and clean energy development will create high quality jobs, including for Indigenous peoples in the Northwest Territories.

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