



Wind Energy in the NWT

The Northwest Territories has significant wind potential that—if developed—could help remote communities reduce their reliance on diesel fuel for power generation. The GNWT has been monitoring wind speeds in the NWT since 2005, and has found that the best wind potential is in the Beaufort Delta region.

Wind feasibility studies indicate that four (4) Beaufort communities—including Sachs Harbour, Paulatuk, Ulukhaktok and Inuvik—have wind

speeds suitable for wind turbine technology. In Inuvik, feasibility work is being completed on a site close to the Inuvik airport that may be able to generate 2 – 5 MW of wind energy.

At this time, no wind projects provide wind energy to an NWT community. However, in 2013, Diavik Diamond Mine successfully deployed 9.2 megawatts of wind energy on their diesel microgrid.

Key Facts

- Wind energy does not need fuel and does not produce greenhouse gases.
- Wind energy is variable source of energy that must be used when it is available or stored in batteries for later use.
- A good wind site can produce more than three times the amount of solar energy for the same installed capacity.
- Good winds sites are often on hills and hard to access, increasing the costs and challenge of projects.
- The only large scale wind turbines in the NWT are at the Diavik mine site and have a total capacity of 9.2 MW.