

As a corporation, Northern Energy Capital exists to empower and enable community-owned renewable energy projects that transform the way energy is delivered in our northern communities, and in the process leave citizens with greater reliability, resilience and economic opportunities.

Our advanced wind turbine de-icing and anti-icing technology will allow our Nunavut clean energy projects to continue to generate power during an icing event. Internal hardware, software, and gearboxes are internally heated to enable the wind turbine to operate in temperatures down to -40°C. The result is more power, when it's needed the most.

We have two proposed projects in the Kivalliq region of Nunavut, and the timeline for construction of the wind turbines is summer 2021, with the wind assessment occurring prior to this.

Rankin Inlet

The Rankin Inlet Clean Energy Project will be the first renewable energy development in Nunavut capable of displacing fossil fuel on a commercial scale. With a population of 2,700 and an annual energy demand of over 18 GWh the 2 MW project has the capacity to generate over 30% of Rankin Inlet's total electricity.

A 2MW wind farm provides the capacity to displace 37 million litres of diesel (100,000 tonnes of carbon emissions) over its lifetime and, in the process, generate new economic opportunities for citizens and business to participate in renewable energy production.

Baker Lake

With an average annual wind speed of 7.4 m/s Baker Lake is the perfect candidate for a wind energy project.

Energy demand in Baker Lake is approximately 8.9 GWh annually, and a 2 MW project will have the capacity to generate over 50% of Baker Lake's total electricity. This will reduce carbon emissions by over 4,000 tonnes annually; or over 1.5 tonnes per person annually.