

Sanirajak MET Tower: Annual Report for Nunavut Research Institute

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The purpose of the Sanirajak MET Tower project is to collect wind data for a period of at least 12-18 months to assess the wind resources for potential wind energy production. Renewable energy developers need to measure the wind speed and direction, and temperature to know if a wind project could generate enough electricity to meet the community's energy needs year-round. The wind data will be correlated to the local airport weather station measurements to project the wind generation to a longer period, like 5-10 years.

There is no intrusive or extensive on-site research for this project. The instruments will gather continuous data that will periodically generate and send reports via satellite.

The period of installation of the MET Tower took place between September 14th, 2023 to September 21st, 2023 and officially commissioned on the last day. On average, the workdays were between the hours of 0900hr – 1800hrs with an hour for lunch each day.



The individuals who completed and assisted with the installation of the MET tower are as follows:

- Stephanie Adey (Growler Energy) – Project Engineer
- JP Pinard (Wind Heat North) – Installation Subcontractor
- Laura-Jeannie Gibbons (Nunavut Nukkiqsautiit Corporation) – Community Liaison
- Simon Curley (Resident of Sanirajak)
- Tyler Amarualik (Resident of Sanirajak)
- Colin Naqmalik (Resident of Sanirajak)

MET tower is short for a meteorological tower or a wind monitoring tower. The MET tower consists of a 34-m tubular guyed tower with industry standard wind sensors. The sensors are connected to a datalogger and a communication module that is attached to the tower for convenient access to the display panel.

Since the installation, tower communication has been going well. One weather event caused a single occurrence where local support was required to re-connect communication which was easily overcome and is still transmitting well to date. There is great appreciation for the local support in assisting with troubleshooting unplanned events.