

# The Rankin Inlet Clean Energy Project



*“Together we have the opportunity to truly impact the trajectory of how energy is delivered in our communities; for now and for future generations” – Malek Tawashy*

## The Problem to Solve

- Nunavut communities rely on imported fossil fuels for 100% of their energy demand
- Fossil fuels are causing climate change, harming the health and wellbeing of the planet, and the wildlife we depend on for survival
- Importing fossil fuels from the south is an expensive process, driving up the cost of energy to unaffordable rates

## The Solution

- A clean energy project in Rankin Inlet has the opportunity to use a world-class wind resource and provide clean energy from this renewable resource
- A 2MW project has the opportunity to provide over 33% Rankin Inlet’s energy demand, displacing over 1.4 Million Litres of diesel a year
- Clean energy from wind power can provide energy below the avoided cost of diesel, reduce dependency on imports and reduce energy costs

## The Vehicle for Change

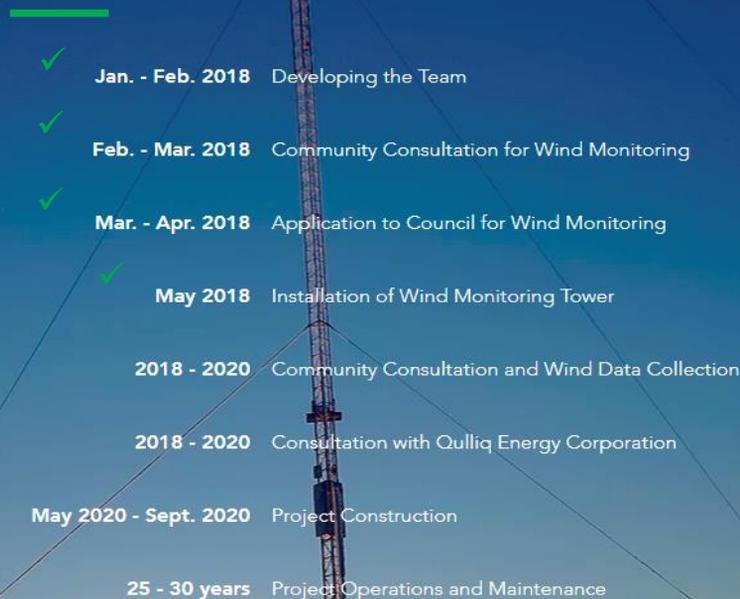
- Power Purchase Policies: Policies exercised by governments or utilities that support the independent generation and selling of power by a third party Independent Power Producer (IPP) to a utility through a legally binding Power Purchase Agreement (PPA)
- Qulliq Energy Corporation has stated an IPP Policy is being developed for Government approval anticipated to be in the first quarter of 2019

## Work Completed to Date

- Site selection and required permitting has been obtained for a wind project site on the outskirts of Rankin Inlet
- A met tower has been constructed on site and is collecting site-specific wind and solar data to be used in feasibility studies
- The project has been positively received by the community and partnerships with local businesses are developing to own the project



## PROJECT TIMELINE



## Engineering and Project Design

We are developing an intelligent energy management system with energy storage for the following outcomes:

- Extending ramp rates, allowing operators sufficient time to dispatch diesel generation as required
- Providing operators added flexibility to run diesel generators at higher efficiency points to lower fuel consumption
- Shedding excess generation as required
- Maintaining overall system reliability with voltage and frequency control

