Iqaluit Feasibility Study for 4.7 MW Wind Power Installation

At the request of the Qikiqtaaluk business development corporation, TUGLIQ Energy carried out a feasibility study for the deployment of a windfarm in Iqaluit.

Solutions Considered

The preliminary study addresses site selection; wind turbine model and energy yield; technology analysis; construction and integration work; logistics and execution; as well as the economic variables including evaluation of investment costs, operational costs, and power purchase agreement.

Projected Results

The study concludes positive results and indicates that the project is economically viable with the installation of two class III wind turbines at 2.35 MW. However, the project faces considerable challenges due to relatively week winds, high fixed costs (routes, transmission lines, logistics, etc.), as well as weak production value. Annual production is projected at 11.23 GWh.

Project Status

To confirm the results of the study, Tugliq Energy installed a meteorological tower at the end of March 2017 and launched a one-year wind measurement campaign that will provide viable data to confirm the bankability of the project.



Client: Qikiqtaaluk Business Development Corporation

Study Date: 2017

Wind Power: 4.7 MW

Location: Nunavut, Canada

GHG Reductions: 8,114 TCO_{2eq./} year (forecasted)

Diesel avoided: 2.9 M L / year (forecasted)

