

The Government of Nunavut Iqaluit Pilot Project EPC

Address ([Map](#)): 5100 Kangiq & Iniq, Iqaluit, Nunavut X0A 0H0 Canada
 Sector: Institutional Delivery Type: Energy Performance Contract
 MCW Office: Toronto Status: Complete
 Sub Categories: Government



Project Initiated In:
2006

Project Investment:
\$15.6 M

Scope of Project:
39 Buildings - 681,000 Square Feet

Annual Energy Cost Savings:
\$2 M

Annual GHG Emissions Reductions:
960 Tonnes eCO2

Project Description

MCW was contracted to provide energy management services for 39 Government of Nunavut facilities, representing over 780,000 sq. ft., through a third party-financed, guaranteed Energy Performance Contract. The project - dubbed the Iqaluit Pilot Project - was the first EPC implemented as part of the Nunavut Energy Management Plan (NEMP) - the Territory's energy conservation master plan. Facilities included a hospital, health centres, legislature, community college, justice facilities, schools, residences, offices, and maintenance & storage facilities.

Nunavut's remote communities such as Iqaluit benefit substantially from energy conservation initiatives. Minimizing the consumption of high-carbon, imported fuel oil - the predominant source of heating and electrical energy - has the dual benefits of reducing greenhouse gas emissions to the bare minimum and keeping costs for energy as low as possible, too. Energy conservation projects such as this one also enable investment in cleaner sources of energy such as renewables, and upgrades to buildings to make them as energy-smart as possible.

Project Highlights:

- Early demonstration of LED Lighting Redesign and Retrofits through a pilot project. After proven performance, LED retrofits were expanded to include more buildings. Lighting controls upgrades coupled with occupancy sensors were also implemented in numerous buildings.
- VAV conversions and VSD installations in facilities such as Inukshuk High School, Nakasuk School, Joamie School and the Nunavut Justice Centre.
- Building envelope sealing in virtually every facility in the project scope – a valuable measure to insulate the buildings as best as possible from the arctic climate.
- Upgrading existing controls systems in smaller facilities, and the implementation of a new DDC system in larger facilities such as Nakasuk High School, 40 Bed Residence, Nanook School, the Correctional Centre, and more.
- Implementation of building-level renewable and green energy technologies such as SolarWall air pre-heating systems and solar hot water pre-heating systems