



New Brunswick Community College

Project Background

When New Brunswick Community College required a building expansion for students undertaking programmes focussed on trades and renewable energy, but had a tight budget, they turned to plans from an existing building at the Bathurst campus, took advantage of electrical infrastructure already in place, and selected geothermal energy to lower operating expenditures.

This building will be home to students in numerous programmes, and the design is meant to encourage collaboration and creativity in its many multi-use trade shops, classrooms, common areas and study spaces. The renovation adds 1,489 square metres, and updates an existing 425 square metres. The building is unique in that it provides students access to demonstration equipment for geothermal heating, solar hot water and electricity, along with wind turbines and lighting technology.

Quick Facts

- **Location** — Bathurst, NB
- **Nordic Model** — W400
- **Unit Capacity** — 35 tons
- **Units Installed** — 2
- **Total System Capacity** — 70 tons
- **Unit Type** — Water-to-water heating or cooling (reversible) units.
- **Unit Functionality** — Simultaneous Heating and Cooling
- **Project Size** — 16,300 sq. ft.
- **Project Value** — \$4.7 Million



Geothermal Advantage

The building is heated with two W400 Nordic geothermal heat pumps. These industrial water-to-water units operate on 20 wells at a depth of 400 feet, providing heating, cooling and hot water.

The Result

Maritime Geothermal's heat pumps provide a great opportunity for students to learn about how renewable energy as they undertake related courses. There is a well available for educational purposes. This part of the installation features a "cut-away" section showing the in-floor circuit of glycol lines, and creates an opportunity for in-depth teaching offering students in related courses the chance to come away with first class knowledge on geothermal systems.

For more on how Maritime Geothermal Ltd.'s Nordic® heat pumps can impact your property, call to **Speak with one of our experts** or **find your local dealer** today.

