profiles

POWER SMART FOR BUSINESS

RONA reduces its footprint with energy efficient measures

RONA is a well-known Canadian retailer of home renovation, construction, and home décor products, with stores across the country. The company strives to be an industry leader in sustainable development, which means working to reduce its environmental footprint and encouraging customers to do the same.

RONA chose to lead by example, making use of Manitoba Hydro's Commercial Building Optimization Program (CBOP). The program provides funding for retro-commissioning (RCx), a process that seeks to optimize how building equipment and systems function together, resulting in energy savings and improved building operation.

Through retrocommissioning, RONA's equipment and operations were assessed through functional testing, analysis of the energy management system data, and observation of daily operations. RONA was responsible for implementing all of the energy saving measures that have a two-year payback or less.

Results

Energy savings:
Electricity 222,539 kW.h/yr
Natural gas 57,746 m^3/yr

Annual savings:
$28,581/yr

Payback period (including incentive):
4 months

Power Smart* incentive:
$21,437

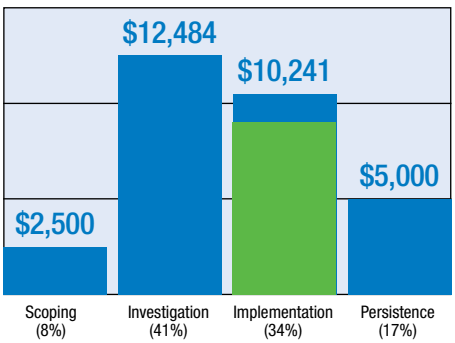
During the investigative process, more opportunities were identified to participate in other Power Smart programs. RONA also received an incentive from Manitoba Hydro's Commercial Lighting Program for updating the entire store's lighting system, further increasing their energy savings.

Manitoba Hydro's Commercial Building Optimization Program helped RONA run more efficiently, lower their energy consumption, and provided store staff with training to ensure that the benefits of the implemented energy savings measures persist over time.

Cost Breakdown

Total project cost: $30,225

- Manitoba Hydro (71%)
- RONA (29%)



"As RONA has gone 'green' in other ways, it made sense to take the next step in raising our 'green' standards by lowering our energy consumption."

Sébastien Gétin
RONA

"The program management with Manitoba Hydro went very well, and there was excellent collaboration with its staff. With such a program, there can be a certain amount of red tape, but in this case it was reduced to the simplest level. This helped us to maximize our efforts in investigating RONA's systems and implementing the necessary measures."

Louis Vincent
TST Energy Systems Inc., Commissioning provider

"A retrocommissioning project of this type is like a three-legged stool. Without support from all three legs, it falls down. In the RONA projects, this did not happen, as RONA, TST, and Manitoba Hydro all supported the projects with a genuine effort, which led to success."

Dieter Bartel
Manitoba Hydro
CBOP team member

Manitoba Hydro POWER SMART*

RCx winning measures

RONA Kenaston implemented the greatest number of retrocommissioning measures out of all three participating Winnipeg locations. Those measures are outlined here.

Optimize HVAC equipment

The store temperature was set to remain the same whether the store was occupied or not. This was an inefficient practice, given that higher temperatures are typically only needed to satisfy the comfort of those inside a building. For this reason, it was determined that HVAC equipment can be set back several degrees when the building is unoccupied.

In addition to scheduling a temperature reduction, the retrocommissioning process identified some HVAC equipment that was operating incorrectly and could be shut down. This provided immediate, cost-free energy savings.

Annual savings: $20,146
Payback: Less than two months

Create lighting schedules

The lighting in the main sales area was also on 24-7, regardless of whether anyone was in the store. Since lighting levels could be significantly reduced during unoccupied periods, a lighting controller was installed and a schedule was set to provide appropriate amounts of lighting throughout the day.

Annual savings: $2,635
Payback: Less than three months

Install photocells in outdoor area

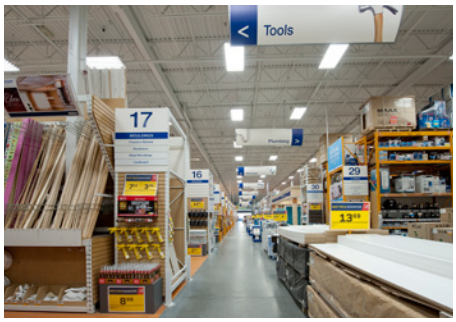
Natural light is sufficient for illuminating the canopy and greenhouse areas of the store during the day. A photocell was installed to ensure the light fixtures in these areas would turn off when additional lighting was not needed.

Annual savings: $816
Payback: 2.2 years (including incentive)

Implement exhaust fan controls

If an exhaust fan runs when it isn't needed, not only is energy wasted but conditioned air is also extracted prematurely from the space. The addition of exhaust fan timers and controls to washroom, cafeteria, and maintenance areas reduced both natural gas and electricity consumption.

Annual savings: $4,990
Payback: Less than 11 months



Visit our website for more information about retrocommissioning:

- Definition of retrocommissioning;
- Glossary of terms;
- Opportunities to save energy;
- Case studies;
- How to participate in the CBOP program.

CBOP Team

Customer: RONA

RCx Consultant: TST Energy Systems Inc.

Manitoba Hydro

For more information on Power Smart for Business programs, contact your Manitoba Hydro account representative or:

Call: **204-360-3676** (Winnipeg) or **1-888-625-9376**
Email: **powersmartforbusiness@hydro.mb.ca**
Visit: **hydro.mb.ca/psfb**

Power Smart for Business guidelines and incentive levels are subject to change without notice. March 2014.

Manitoba Hydro
POWER SMART*