

Wawanesa Recreation Centre scores with energy efficient lighting

Located at the heart of the Oakland-Wawanesa municipality, the Wawanesa Recreation Centre houses a full-sized artificial ice hockey rink and a four-sheet curling rink with artificial ice. The recreation centre is run by a local volunteer board of about six people who care enough about the community to dedicate their spare time to operating the facility year-round. The ice-making starts in September and ends in April with the winter months providing a home and a hang-out for local hockey leagues and curling leagues. The summer months are less busy hosting auctions, socials, and other special events for the community.

Constructed in 1975, the Wawanesa Recreation Centre was in need of a lighting upgrade. "We were spending about \$2,000 per year re-lamping, re-ballasting, and maintaining the metal halide fixtures," said Brent Cullen, manager of the Wawanesa Recreation Centre. "Some of the T12 fluorescents in the curling rink were starting to give off a yellow light."

Additionally, Cullen said the variation in brightness on the hockey and curling rinks produced light and dark patches on the ice. He recognized that something needed to be done and reached out to the Brandon Power Smart* representative, who advised him of the Commercial Lighting Program and assisted him in completing the application.



LED fixtures make the rink brighter for those on and off the ice.

LED fixtures were installed to replace the aging metal halides and the difference was immediately evident. One hockey player asked Cullen, "How did you make the rink bigger?" to which Cullen replied, "The boards didn't move—the new LED fixtures just make it that much brighter."

Needless to say, both the hockey players and spectators were very pleased with the lighting quality. The lighting contractor tested the lighting levels after the LED fixtures were installed and advised Cullen that the rink is now bright enough that hockey parents and scouts can record video in HD quality.

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LED fixtures can seriously reduce your lighting energy usage. When upgrading from metal halide fixtures to LED fixtures, the wattage can be reduced by up to one-half and still produce the same amount of usable light.



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The curling rink upgraded T12 fluorescents to T5 high-output fluorescents in enclosed fixtures, reducing energy use by up to 30 per cent and vastly improving colour rendering. It's a combination of the brightness, lighting uniformity, and single colour temperature of the T5 high-output lamps that make for a professional level curling experience. "The curlers immediately noticed the improvement in the lighting quality and loved it," said Cullen.

T12 fluorescents were upgraded to T8 fluorescents throughout the facility, providing much better colour rendering and increasing energy efficiency by up to 20 per cent. Motion sensors were added to the entrance and basement, saving additional energy. "I love those," said Cullen. "There's no need to turn the lights on or off."

LED running man exit signs were also installed, replacing the old incandescent exit signs.

The facility's exterior lighting, which formerly consisted of metal halide wall packs and high power incandescents, was upgraded to LED fixtures. "It's great to have a well-lit parking lot," said Cullen. "Before, it was dark and dingy. Now it's much safer for people."

Cullen added that he's looking forward to the lower maintenance costs of LEDs, as well as no longer having to replace metal halide and incandescent lamps.



With new T5 high-output fluorescents in the curling rink, energy use was reduced by up to 30 per cent.

Manitoba Hydro's Commercial Lighting Program provided over \$22,000 in financial incentives to support the facility in upgrading to energy efficient lighting.

The Commercial Lighting Program was the second Power Smart program the Wawanesa Recreation Centre participated in, after receiving an incentive for roof and wall insulation through the Commercial Building Envelope Program in 2012.

Benefits of LED fixtures

- Longest life – up to 100,000 hours or more
- Most energy efficient – over 100 lumens per watt
- Sealed construction with minimal maintenance required
- Environmentally friendly – no mercury
- Dimmable and unaffected by on-off cycling
- Various correlated colour temperatures are available – 2,700-6,500K

"The insulation reduced the heating usage needed to keep the curling rink the right temperature for curlers," said Cullen.

Through the Commercial Lighting Program, commercial, industrial, and agricultural customers can receive guidance and financial assistance to install energy efficient lighting systems. Financial incentives can be up to \$1,000 per kilowatt saved and as high as 100 per cent of the product cost, depending on the efficiency of the upgrade.

Cullen said the facility and its users were very pleased with the new lighting and he was proud to make the facility safer and bring the lighting up to modern standards.

"I would definitely recommend Manitoba Hydro's Power Smart programs. The financial incentives allowed the lighting upgrades to be completed in one shot instead of having to do them piecemeal as money became available."

~ Brent Cullen, manager, Wawanesa Recreation Centre

For more information about the Commercial Lighting Program or other Power Smart for Business programs, contact your Manitoba Hydro account representative or:

Call: 204-360-3676 (Winnipeg) or 1-888-624-9376

Email: powersmartforbusiness@hydro.mb.ca

Visit: hydro.mb.ca/psfb

Power Smart for Business guidelines and incentive levels are subject to change without notice. April 2016.

