



Ontario, Canada

CASE STUDY

CANLAN OAKVILLE

Radiance Energy efficiently retro-fitted Oakville's Canlan Ice Sports Arena.



CHALLENGE

Canlan's second highest operating costs, after labour, was electricity. The poor lighting quality affected 20 facilities and 57 ice pads across North America.

SOLUTION

Radiance Energy replaced the arena's outdated fluorescent lights with new LED lighting. This resulted in over 80% of energy savings, increased light output, and an annual electricity saving of \$46,000.

PROJECT SUMMARY

- \$46,000 saved in electricity costs annually
- 80% in energy savings
- Increased light output
- Won Oakville Hydro's Conservation Leadership award





CASE STUDY

CANLAN OSHAWA

Radiance Energy selected for LED retrofit for ice rinks, change rooms, restaurant, mechanical rooms, and hallways.

CHALLENGE

Canlan Oshawa sought to reduce operational costs while improving lighting quality for athletes and patrons. The existing lighting was energy-intensive and required frequent maintenance, leading to high costs.

SOLUTION

Radiance Energy provided a tailored LED retrofit plan featuring high-efficacy T8 LED tubes and 102,000-hour high bay lights. The solution offered:

- 76% energy savings (267,143 kWh annually)
- Annual cost savings of \$41,614
- Reduced maintenance needs and glare-free lighting

PROJECT SUMMARY

The project achieved a 3.1-year ROI with an estimated cumulative net savings of \$395,562 over 10 years. Enhanced lighting conditions improved player performance and reduced shadows on the ice, increasing customer satisfaction.





CASE STUDY

CANLAN WINNIPEG

Radiance Energy selected for LED lighting for four rinks, main lobby, offices, pro shop, and stairwells.

CHALLENGE

The Canlan Winnipeg facility was experiencing high energy consumption and inconsistent lighting quality. A solution was needed to modernize the facility while cutting costs.

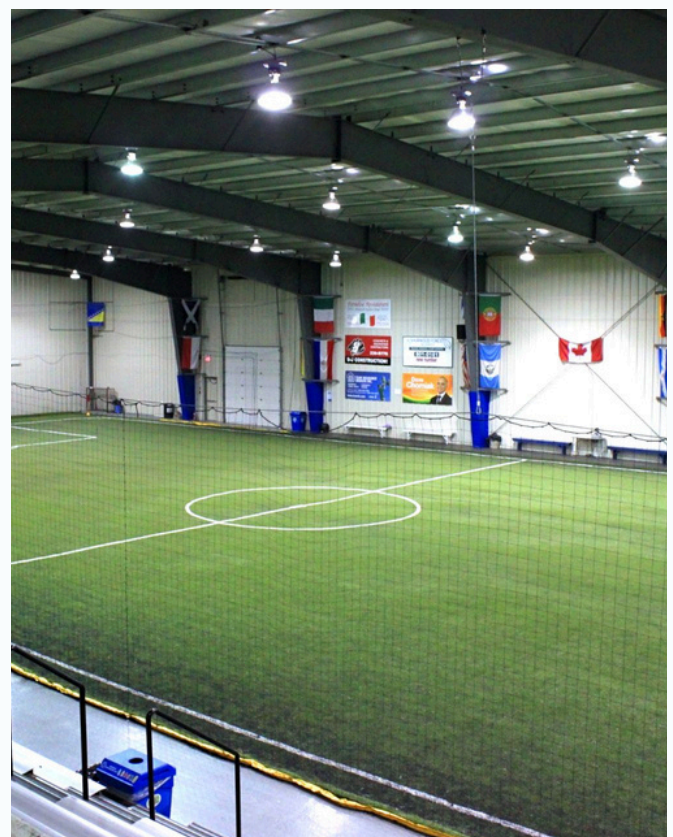
SOLUTION

Radiance Energy installed Linmore LED High Bays with integrated controls and high-efficacy 11W T8 LED tubes. Key benefits included:

- 74% energy savings (463,570 kWh annually)
- Annual energy & maintenance cost savings of \$57,117
- Improved visibility and reduced glare for athletes

PROJECT SUMMARY

With a 2.9-year ROI and a cumulative net savings of \$551,717 over 10 years, the facility significantly reduced operational costs while creating a superior lighting experience.





Illinois, Canada

CASE STUDY

CANLAN ROMEOVILLE

Radiance Energy selected for LED retrofit for three ice rinks, main lobby, gallery, and locker rooms.

CHALLENGE

Canlan Romeoville struggled with inefficient lighting and high maintenance costs, which affected both the budget and user experience. A modern solution was required to enhance brightness and minimize operational expenses.

SOLUTION

Radiance Energy introduced a wireless & central control system with LED Eliminator High Bays and flat panel fixtures. The project delivered:

- 77% energy savings (342,040 kWh annually)
- Annual cost savings of \$27,363
- Enhanced lighting uniformity and reduced shadows

PROJECT SUMMARY

The project resulted in a 4.1-year ROI with projected cumulative savings of \$231,573 over 10 years, providing a high-efficiency lighting solution that met Canlan's sustainability and performance goals.





Illinois, Canada

CASE STUDY

CANLAN LAKE BARRINGTON

Radiance Energy selected for LED upgrade for all facility levels, including exterior lighting.

CHALLENGE

Canlan Lake Barrington's facility faced excessive energy consumption and outdated lighting systems. They needed a cost-effective solution that would deliver immediate and long-term savings.

SOLUTION

Radiance Energy implemented a cutting-edge wireless lighting control system combined with high-performance LED fixtures. The upgrade provided:

- 83% energy savings (712,072 kWh annually)
- Annual savings of \$46,285
- Improved lighting aesthetics and energy efficiency

PROJECT SUMMARY

With a 3.8-year ROI, the facility is projected to achieve \$404,029 in cumulative savings over 10 years, making it a model for energy-efficient sports facilities.

