

Project Highlights

Original

- 9 x 70W bollards
- 12 x 70W wall packs
- 31 x 150W wall packs
- 10 x 250W floods
- 9 x 400W floods
- 3 x 1,000W floods
- 1 x 250W pole top

LED

- 9 x 22W
- 12 x 35W
- 1 x 75W
- 48 x 105W
- 10 x 285W

The Numbers

- kWh Reduction: 51%
- light level improvement: 30 – 100%
- First Year Savings: \$11,585
- Utility Incentive: \$8,317

Energy Manager **Ryan Ram** spearheaded the project and commented:

“the main objective of the project was to improve the light levels around the plant for safety and security reasons. New security cameras were being installed and the existing lighting coverage and levels were not adequate. Tradeforce presented their ideas for fixture options and completed lighting designs that contained a more significant energy savings component than I expected. The results were great and the feedback from everyone has been very positive”



Project Overview

Exterior site lighting is not at the top of the priority list of energy conservation measures in most organizations. When compared to interior lighting, the lower operating hours and higher per fixture costs make the payback period for such projects less attractive if purely *financial* measures are used as the basis for evaluation. However, exterior lighting is required for site safety and security and high performance LED fixtures will significantly improve light levels, light quality and eliminate maintenance costs.

Canadian General Tower in Cambridge Ontario undertook a site lighting improvement project designed to address the need for improved light levels and coverage in addition to reducing energy consumption and maintenance costs.

Beyond the 51% reduction in energy consumption this project achieved, the high colour rendering index (CRI) of the LED fixtures chosen significantly improved security staff's ability to discern vehicle colours in parking lots. The original high pressure sodium lamps made it impossible to see the difference between red and brown or green and blue for example. See sidebar image at left showing the impact of higher CRI.

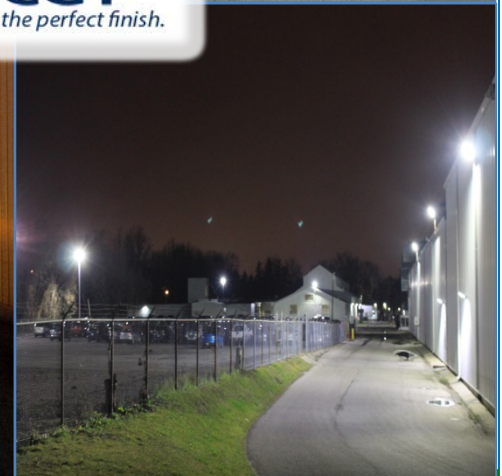
Similarly the increased illumination levels and coverage improved the performance of the video security system. The pictures below are indicative of the improvements experienced across the site.

BEFORE

AFTER



 **CGT**
the perfect finish.





**Make energy management and conservation part of
your organizations cultural DNA**

Improving financial sustainability is the concern of organizational leaders everywhere and engaging in smart energy management practices is becoming an increasingly critical competence.

When you make a decision to make energy management a key business process you are making a commitment to a more sustainable future for all of your business' stakeholders. Identifying and quantifying the most appropriate solutions for energy conservation is only half the job. Implementing the measures using expert project management processes that maximize stakeholder engagement and minimize business interruption is the real key to gaining sustainable, repeatable results over time.

**TradeForce Tech wants to earn a spot on your Energy
Management Team !**

TradeForce Tech

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