

# CASE STUDY: THE MASTERS CONDOMINIUM

## BETTER BUILDINGS PARTNERSHIP



### Project Address

284, 288, 296 & 300 Mill Road  
Etobicoke, Ontario

### Key contacts

Nena Gajic, R.C.M.,  
Property Manager, Brookfield  
Residential Services Ltd.

### Project Background

Built in 1972, The Masters comprises two buildings with four municipal addresses. The buildings are honeycomb-shaped complexes of two-storey, split level and single level suites, housing approximately 1100 residents.

In 2009, The Masters was recognized by the Canadian Condominium Institute (CCI) as a finalist in Condo of the Year award.

### Project Snapshot

Project Cost: \$87,486

Annual electricity savings:  
417,852 kWh

Annual electricity demand  
savings: 47.7 kW

Annual cost savings: \$41,785

Annual CO<sub>2</sub> savings: 402  
tonnes

BBP incentives received:  
\$20,892

Payback: less than 2 years



Project results have been verified by a third party project evaluator according to industry references and the International Performance Measurement and Verification Protocol (IPMVP)

### Challenges

With 35% of the operating budget devoted to electricity costs, it was clear that the metal halide and T12 lighting systems in the common area of the two buildings needed updating. Metal halide bulbs are also an environmental concern, containing 10 times more mercury than fluorescent bulbs.

With the goal of maintaining current light levels, increased security, safety and a long term reduction in operating costs and energy consumption, The Masters collaborated with supplier and contractor Lighting Solutions and the City of Toronto's Better Buildings Partnership (BBP) to achieve this goal.



The goal of this project was a reduction of 450,000 kilowatt hours and savings of \$40,000 per year, which was significantly surpassed. Completion of this project also resulted in cash savings and a benefit to the environment.

### Solution and Results

A major pre-project study including the garage, stairwells, and all common area lighting systems was conducted in order to determine if large reductions could be achieved in both kilowatt load and kilowatt-hours without compromising perceived light levels, safety and security. As a result of this study, a decision was made to undertake a full retrofit of the lighting system with the assistance of BBP incentives which significantly improved the rate of return on investment.

The existing HID 50.6 total kW load lighting system from the garage was removed and replaced with a High Efficiency T8 lighting system. This retrofit resulted in a 74% reduction in kilowatt load and a yearly reduction of 291,129 kilowatt-hours.

The retrofit also included an update of lighting system in the stairwells, fitness area, meeting rooms and clubhouse, resulting in a yearly reduction of 126,723 kWh. The total electricity savings for the whole project represents taking 80 cars off the road.

*“We knew a lighting retrofit proposal with less than a 1.5 year payback, substantial reduction in future operating costs and a generous BBP incentive to boot would be a welcome winner!”*

Nena Gajic  
property manager

working within a non-profit environment. The owners' maintenance fees are the only source of budget income. Our ongoing mandate is to find ways to reduce operating costs,” said Nena Gajic, property manager. “We knew a lighting retrofit proposal with less than 2 year payback, substantial reduction in future operating costs and a generous BBP incentive to boot would be a welcome winner!”

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“As managers of condominiums, we are

### About the City of Toronto

The Better Buildings Partnership is an innovative partnership program that provides resources including financial assistance, to help energy efficiency and renewable energy projects in building renewal and construction in multifamily buildings, industrial, commercial, and institutional buildings. The BBP's primary goal is to reduce carbon dioxide (CO<sub>2</sub>) emissions which come from the energy used to heat, light, cool and operate buildings.



### For more information please contact:

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