



# GRESHAM PLACE APARTMENTS KITCHENER, ONTARIO

## PROJECT OVERVIEW

Gresham Place is a pair of multi-family apartment buildings owned by Balnar Management with 442 total residences in Ontario, Canada. YANMAR Distributor Toyota Tsusho Canada together with Kontrol Energy installed eight (8) of YANMAR's 35 kW Combined Heat and Power (CP35D1-TNUG) systems to support the two buildings' existing electric supply, as well as supply heat for domestic hot water and space heating uses.



## REASON FOR CHOOSING YANMAR

Gresham Place is located in the Waterloo region's largest city, and as such offers a creative and culturally diverse environment for the area's residents.

Balnar Management was attracted to YANMAR's CHP systems primarily due to the cost savings offered by switching from electricity to natural gas, which is provided by Kitchener Utility. Additional factors contributing to this project's cost savings included funding support from the Independent Electricity System Operator (IESO) in Ontario and the systems' long maintenance interval of 7,500 hours.

Because the property has multiple units installed, when maintenance does need to be completed, it can be scheduled for one unit at a time, ensuring that the other units remain operational for continuous heat and power offerings. Plus, remote monitoring capabilities and quiet operation of just 64 dB(A) assures high reliability without disturbing the buildings' residents.

## ABOUT CP35D1

Using natural gas, the CP35D1's high-efficiency generator provides 35 kW of electrical power. The engine heat is captured, and heats water at a rated temperature of 176°F for immediate use or storage in your facility.

## QUICK FACTS

**Application:** Multi-Family

**Location:** Kitchener, Ontario

**Commissioning Date:** February 2017

**Product Installed:** CP35D1-TNUG x 8

### Results:

- Quiet operation: 64 dB(A) at 3 ft.
- 7,500-hour maintenance interval
- Consistently reliable operation
- Remote monitoring capabilities



# GRESHAM PLACE APARTMENTS CP35D1-TNUG

**“Combined Heat and Power generation greatly benefits this large multi-residential community. Benefits for the landlord, residents and utility system include significantly lower utility costs, more secure power supply, potentially lower greenhouse gas emissions and an increase in overall efficiency. The financial incentives that were provided made this project possible, and we are excited to bring this technology to Gresham Place.” - Michael Balnar, President, Balnar Management, Ltd.**



### RESULTS

- Overall, the CP35D1’s electric utilization is high, averaging 92% over six months.
- The CP35D1 has resulted in an average monthly savings of \$14,558 by switching to natural gas driven electric and heat production.
- The eight units have provided consistently reliable operation with a combined average of 3600 operating hours per month or 450 hours per unit.

### CONCLUSION

- The project successfully demonstrates the application of YANMAR’s CHP systems for multi-family housing. The units have lived up to their promise of high reliability and savings during the first six months of operation due to a well-designed project application.

**YANMAR CHP Savings - March through August 2017**

