



## Grundfos Energy Optimization Case Study - Neo and Montage

# High-rise condos save \$37,000 CAD a year with energy optimization improvements

Payback time  
of 3 years



Saved  
**\$50,000**  
the first year



Reduced energy  
use by **85%**



The Grundfos Canadian Energy Optimization team proactively looks for innovative ways to help building owners, facility teams, and building management groups meet corporate or government regulated sustainability targets by finding ways to improve efficiency, save money and deliver reliable comfort to residents.

### The Situation

Neo and Montage at Concord are two luxury high-rise condominium buildings located in CityPlace, Toronto, one of the busiest and largest cities in Canada. Combined, the two buildings total 883 luxurious condo apartments, both of which overlook the Lake Ontario waterfront. The two buildings were experiencing several operational and maintenance issues, as well as consuming large amounts of electricity due to the aging equipment. These inefficiencies led the building management company to ask Grundfos to perform an energy check.

### The Solution

After assessing the building's existing booster pumps, the Grundfos team recommended a full pump audit and energy analysis be performed in order to recommend the most efficient pumping solution.

The audit revealed the existing systems were oversized for the building's needs and consuming more energy than needed. It also found the pumps were operating in constant speed mode and unable to vary their speed with the building's water demand. Pressure reducing valves were being used to regulate fluctuations in pressure, which led to significant energy waste and expense.

**GRUNDFOS** 

Possibility in every drop



## The Result

Based on the audit finding, two Grundfos Hydro MPC integrated packaged pumping systems were installed. Using intelligent controls and smaller, space-saving pumps, the Grundfos Hydro MPC systems harness the power of parallel pumping for greater flexibility, scalability and efficiency in ever-changing load conditions, providing optimal performance. This significantly reduces energy consumption and provided an incredible 85% reduction in pumping operation and maintenance costs.

Grundfos also assisted the two buildings in applying for a one-time government incentive rebate of \$23,000 CAD. Including the rebate, the first years' total savings were \$50,000 CAD, and \$37,000 CAD each year after that. This retrofit efficiency upgrade paid for itself in just three years.



Both systems were successfully installed in 2019 and the property manager, Mario Gambelic, told Grundfos District Sales Manager, Ammar Harastani, ***“I’m enjoying the savings and the flawless operation of our Grundfos boosters.”***



Oversized, inefficient HVAC systems originally installed in Neo and Montage condos.

Visit [grundfos.us/pei](http://grundfos.us/pei) to learn more about Department of Energy (DOE) pump energy index (PEI) requirements and PEI ratings on specific Grundfos models.