



Excellent Management Leads to Top Building Performance

Executive Summary

The building at 4000 Lawrence, owned and managed by CAPREIT, leads over 200 other buildings in the GTA on the current Tower benchmark analysis. This is a prime example of how an excellent management approach pays off in terms of utility efficiency. The installation of high quality mechanical equipment, efficient lighting, building controls and interval monitoring, together with a supportive management philosophy resulted in 4000 Lawrence's first rate performance.

Building Specifications

Construction Year: 1967	Heating Fuel Source: Natural Gas
Number of Units: 142	DHW Fuel Source: Natural Gas
Gross Floor Area: 23,870 m ²	Cooling: No Central Cooling
Number of Floors: 12	Tenancy: Family / mixed

Introduction

With over 40,000 suites across Canada CAPREIT has taken on a leading role within the Property Management Industry in ensuring all buildings they acquire or upgrade undergo a retrofit and strategy review.

This can include one or all of the following:

- New Boilers
- New Domestic Hot Water Storage
- New Building Automation System, Tridium Niagara Jace, including temperature sensors in sample suites
- Waste diversion plan, working with tenants to separate garbage and recycling
- 3 litre toilets installation
- T5 lighting in hallways and parking garage
- Sensored lighting in common areas and garages
- Hourly meter monitoring for all meters
- Sub metering of utilities in suite
- A team management approach with a preventative maintenance and immediate response focus.





Quality Equipment

CAPREIT invests in premium quality equipment. For example, the company installs cast iron Viessmann boilers, with durable heat exchangers, in all retrofits. These boilers have a very long life expectancy, and an excellent reliability record resulting in lower maintenance and replacement costs. By using a uniform product in all their retrofits, CAPREIT is able to provide effective and efficient service through a combination of manufacturer approved service companies and in-house staff who have been trained on the system.

Team Management Approach

CAPREIT Management and site staff work together as a team with a focus on efficient performance and continuous improvement.

This team and partnership approach has created excellent working relationships with the equipment manufacturers, and because of the uniform product specification, CAPREIT staff have become well versed in the product operations. All contractors bidding on installation services must have specific training and certification to ensure quality is upheld on an ongoing basis.

Management practice also includes implementation of building automation and hourly meter monitoring. Hourly meter monitoring allows CAPREIT to quickly identify anomalies in building performance, which might otherwise go un-detected.

The combined result of these building management strategies has positioned 4000 Lawrence as a performance leader among the buildings in the Tower Benchmark.

Timing of Energy Retrofits

Since 1999 CAPREIT has been implementing energy retrofits at 4000 Lawrence,

ENERGY PROJECTS	Year Completed
Viessmann Boilers	1999
Building Automation System (BAS)	1999
Novitherm heat reflector panels	August, 2009
Window panels	Prior to CAPREIT's ownership
New garbage compactor	February, 2009
3-litre toilets and low-flow showerheads and aerators	June, 2010
T5 Lighting retrofit	November ,2010
Electric sub-metering	October, 2011
Booster pumps	December,2014



Economics

The combined impact of these efforts has been to move the building forward in terms of performance, tenant comfort, and quality maintenance, while providing consistently lower operating costs for more than 15 years.

Initial savings reported by Enbridge were over 42,000 m³ per year in gas consumption. But more importantly, the overall benefit of quality maintenance shows in the comparison of this building against others in the Greater Toronto Area.

When compared against the majority of buildings in the Tower Benchmark, 4000 Lawrence uses about half the energy of the average building of the same size in Toronto. Where the median value for energy consumption is 342.9 ekWh/m² per year, in comparison 4000 Lawrence uses 166.2 ekWh/m² per year, a reduction of 176.6 ekWh/m² per year.

For this 23,870 m² building, this translates into annual savings of about \$120,000 (assuming gas delivered at \$0.30 per m³), when compared with typical buildings of the same size. Given that the initial systems upgrade was made over 15 years ago this is a cumulative savings of almost \$2 million. Additional savings in maintenance and replacement costs would push that number well over the \$2.5 million mark.

Aside from simple paybacks, looking at the value of the property tells us that the net effect of these improvements is to increase the property value by \$ 2.4 million. This is because, at a 5% CAP rate, a savings of \$1 dollar on the bottom line increases the building value by about \$20 in the Toronto market. On many levels, good management just makes good sense and at CAPREIT this is second nature.