

# The Olympic Village chooses blue

## Conversion of domestic hot water system from electricity to natural gas

Owned by El-Ad Group  
and managed by Cogir Management Corporation



Olympic Village, Montréal, Québec

### Project description

The Olympic Village was built in 1976 to house the athletes during the Montréal Olympic Games. After the event, the complex, which consists of two 23-floor buildings in the form of a pyramid, was converted into a rental apartment building.

Located at 5111 Sherbrooke Street East in Montréal, today the complex includes almost 1,000 units, from studios to 5½-room suites, and more than 200,000 square feet of commercial space. Owned by the El-Ad Group, the Olympic Village has been managed since January 2010 by Cogir Management Corporation.

Initially, each pyramid had a 113,550-litre water tank heated by a system of electric heating elements. Over time, the electrical system proved no longer able to produce a sufficient quantity of the domestic hot water required. Also, the increased costs of maintenance and of producing hot water became an important issue for the Olympic Village.

Following a meeting with Gaz Métro's commercial representative, as well as an energy efficiency advisor, a more economical and more efficient solution was proposed to the customer. A technical and economic analysis also helped establish the cost-effectiveness of the project.

Thanks to the assistance programs, the competitive price of natural gas, as well as the many advantages of its use, the Olympic Village decided to convert its two apartment towers to natural gas in May 2010.

### Savings generated

#### Choice of equipment for the two towers:

- 6 natural gas condensing boilers
- 4 pressure tanks, 9,463 litres each

#### Assistance from Gaz Métro:

Thanks to Gaz Métro's Energy Efficiency Programs and the Consumption Rebate Program, the Olympic Village was able to benefit from financial assistance equal to 40% of the investment costs.

#### Expected annual savings: \$65,350/year

Based on the costs of electricity and natural gas in 2010.

#### Payback period: 3.3 years

### Advantages of natural gas

For 12 years, natural gas has been cheaper than electricity in commercial and industrial markets.

#### Cost of natural gas compared with electricity

| Commercial & industrial customers, by consumption | Savings in 2010 | Price in Jan. 2011 |
|---|-----------------|--------------------|
| 15,000 m <sup>3</sup>                             | - 28%           | - 33%              |
| 100,000 m <sup>3</sup>                            | - 33%           | - 38%              |
| 1 million m <sup>3</sup>                          | - 47%           | - 51%              |

Thanks to the energy efficiency programs offered by Gaz Métro, Québec companies can benefit from financial assistance to convert their heating appliances to natural gas. These programs facilitate the purchase of high energy efficiency natural gas appliances that help achieve energy savings. The financial assistance can total up to 40 % of the purchase and installation costs, depending on the type of appliance installed.