

Centennial Recreation Centre

172 kW_t Solar Pool Heating

BACKGROUND

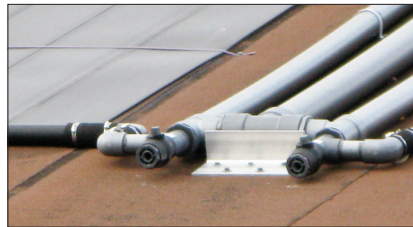
The City of Toronto chose to install a 172 kW_t solar pool heating system at the Centennial Recreation Centre to collect heat from the sun and deliver it to the indoor swimming pool. Designed to reduce the need for a conventional natural gas pool heating system, the system will function during the Spring, Summer and Fall when there is no risk of freezing.

MONITORING

A flow meter was installed during Summer 2011 that will enable more accurate data measurement.

FINANCIAL

The City of Toronto, through the Energy Retrofit Program, funded 61% of the project with Natural Resources Canada contributing \$13,375 and the Toronto Atmospheric Fund contributing \$26,393 towards monitoring and reporting.



For more information, contact:

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Project Overview

Owner: City of Toronto
Address: 1967 Ellesmere Road
Building type and use: Indoor City Pool
System type: Solar Pool Heating
System power rating: 172 kW_t
Installation date: November 2006
Installer: Optimira Energy

System Configuration

System surface area: 246 m²
Collector manufacturer: 56, Techno Solis T5-48-sm (4'x12') unglazed collectors

Annual Performance

Estimated: 85,230 kWh_t

Financial

System Cost: \$101,798
Grants: \$39,768
Net System Cost: \$62,030
Cost per kW_t (excluding external funding): \$413
Annual Cost Savings: \$2,781*
Simple Payback (excluding external funding): 36.6 years

Environmental Benefits

Estimated emission reduction: 14.8 tonnes eCO₂/yr**

*based on 35 ¢/m³

**based on 1.86 kg eCO₂/m³

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