

GREENING update



The Special Report on the Greening of Municipalities that we featured last issue (Summer 2008) was still warm from the press when the following story crossed our desks.

With the LEED acronym quickly becoming part of the municipal vocabulary, we thought this story – about a LEED Gold City Hall – would be of interest to our members. While LEED Canada currently applies only to new construction, new criteria in the works will be available for existing buildings, hopefully by 2011. In the meantime, read the Cambridge example for inspiration:

CAMBRIDGE CITY HALL: THE FIRST LEED GOLD CITY HALL IN CANADA

On July 31, 2008, the new Cambridge City Hall, completed in 2008, was awarded LEED® Gold from the Canada Green Building Council (CaGBC), making it the first city hall in Canada to receive LEED (Leadership in Energy and Environmental Design) certification. This city hall is the result of collaboration between architects Diamond Schmitt, LEED consultant Emermodal Engineering, and the City of Cambridge. City officials see this building as a chance to show their city's commitment to being a regional trendsetter and living by the motto of "being a good neighbour."


The curtainwall building has eye-catching horizontal sun shades that reduce interior glare and temperatures. The landscaping around the city hall is comprised exclusively of native or naturalized species which do not require irrigation. Native sedum, grasses, and bulbs are also featured on the green roof, which can be accessed by visitors and employees. The green roof is an improvement over the traditional dark-coloured roofs because the plants cool the surroundings—thus this city hall does not contribute to what is known as the "urban heat island."

But it is inside where the true innovation is really noticed. Visitors and city employees entering the building pass by a four-storey "living wall," featuring tropical plants that filter the air as it passes through the wall. The clean air is then circulated through the ventilation system to the rest of the building causing a noticeably more refreshing work environment.

The building focal point is a beautiful, multi-storey atrium with operable skylight windows that automatically open under appropriate conditions to allow rising hot air out and let cool air in. In addition, a weather monitoring system on the roof sends an email to occupants when it is appropriate to open their windows to let cool air in to stimulate this stack ventilation system. Another energy saving and quality of life enhancing feature is the daylighting control system, which automatically dims or shuts off artificial lighting when there is sufficient natural sunlight.

Cambridge City Hall is a water miser. Water usage is reduced through a cistern that collects rainwater for non-potable water uses like flushing toilets. Low-flow faucets and waterless urinals also help the building save 2.9 million litres of water every year—an annual water savings of 39%. City hall also achieves 39% energy savings through various engineering innovations, including an ultra-efficient boiler, chiller, and water heater.

Visitors can find out why Cambridge residents are justifiably proud of their new city hall. An interactive computer "kiosk" provides information and performance data on the building's environmental features.

LEED is the most recognized and prestigious green building rating system in North America. LEED Canada is administered by the Canada Green Building Council, which uses the rating system to designate buildings: Certified, Silver, Gold, and Platinum – according to the green features they incorporate. 



Welcome to Cambridge City Hall.
(photo credit: Linda Fegan)



The living wall enhances the natural beauty of City Hall while providing air purification.
(photo credit: Tomasz Adamski)



A portion of the roof is made up of plants, grass and shrubs to retain heat in the winter and cool things off in the summer. (photo credit: Tomasz Adamski)

