

# LEED PROJECTS A CONTRACTING PERSPECTIVE

By David Lavender



Involvement in a LEED project for the first time should raise questions of responsibility, process and profitability. Contractors who have participated in LEED projects note that documentation and supervision of LEED criteria are an important focus during a project.

They also understand that LEED experience broadens their competitive position in the marketplace where governments at all levels are requiring sustainable building practices for their facilities. Further, although they find additional effort is required, cost is minimal in the context of the entire project, and balanced by the cost of implementing LEED features. Following are the perspectives of two contractors and an engineering consultant. Project descriptions are courtesy of the Canada Green Building Council ([www.cagbc.com](http://www.cagbc.com)):

## ENERMODAL ENGINEERING

This Kitchener company has participated in 23 LEED certified projects in Ontario. Its experience reveals several trends in the performance of contractors on these projects.

“We’ve always done it this way,” is the response that Braden Kurczak ([bkurczak@enermodal.com](mailto:bkurczak@enermodal.com)) of Enermodal has heard frequently from contractors. For some, this is a confirmation of the link between good construction practices and LEED requirements, and for others it is the challenge of overcoming the mindset of traditional construction practices that focus on aggressive schedules to maximize profit.

“Contractors getting involved the first time need to shift their understanding of construction from the short-term construction process to include the long-term building operation.” says Kurczak. “Contractors can overcome traditional approaches to the construction process if they invest in educating themselves about the LEED process. Participation in an integrated design process (IDP), seminars, reading the specifications, bidders meetings and onsite meetings conducted by the consultants are all designed to guide them.”

Kurczak says the key to a successful LEED project is the use of the IDP which “provides clear objectives and an understanding of the benefits of design trade-offs to achieve LEED certification among all the parties.”



## TEDCO/CANPAR FACILITY TORONTO

This project was LEED® Canada certified in 2006. Highlights include:

- *Revitalization of an urban brownfield site*
- *Optimizing energy cost performance 29% better than the model National Energy Code*
- *Potable water use reduction performance of 70% through captured rainwater to be used in landscaping and for sewage conveyance*
- *Greatly exceeding the LEED Canada requirement for resource reuse (25%), recycled content in materials (23%) and the use of regional materials (55%)*
- *95% of landfill waste diversion from the construction site to recycling or salvage.*

“We were excited about extending our previous construction experience to our first LEED certified building,” says Harold Reinders, ([harold@maple.ca](mailto:harold@maple.ca)), VP of Buildings for the Maple Reinders, a contractor with a history of plant site development. “Working with an industrial building differs from the LEED advantages of an office building type, and the decision to go LEED by the owner was made after the design process was complete limited our options.” He adds that finding the design elements that would meet the short-term budget and long-term payback was the first of several challenges that also included: soil remediation, and concrete aggregate reclamation, educating the subtrades and processing the paperwork required by LEED.

“There was a significant benefit to the owner who received a building that is better designed to function over the next 40 to 50 years, and the low environmental impact on the greater community. Having a LEED building on our resume doesn’t hurt either.”



## VAUGHAN FIRE AND RESCUE STATION NO. 7-9, VAUGHAN, ONTARIO

Station No. 7-9 (LEED® Canada-NC Gold July 31/07) is a central station for the Vaughan Fire and Rescue Service as well as for the York Region Emergency Medical Services.

Project highlights include:

- *Optimizing energy cost performance of almost 35% better than the model national energy code for buildings through: outdoor air sensible heat/cool recovery systems; double paned low-e windows; and significantly lowered lighting power density*
- *Reducing indoor potable water use by over 55% with waterless urinals and ultra low flow lavatories and showers*
- *Use of certified wood products*
- *Achieved the majority of indoor environmental quality credits as well as an innovation credit for a green housekeeping program.*

Danny Sirizzotti (dsirizzotti@maystargeneral.com), project manager for Maystar General Contracting Inc. says, "LEED is easy if you understand the compliance requirements before you bid." The company is now beginning its second LEED project, the \$30 million Vaughan City Hall. Maystar was able to handle the documentation for the project between the construction supervisor and the project manager. "We will need to have a full-time person just to control the documentation and waste management required by this next project," says Sirizzotti. He notes that there was a challenge in obtaining and documenting recycled content and regional material sources required by some LEED credits. "We had to document our sustainable materials and we had difficulty finding FSC certified dimensional lumber then, although Home Depot carries it now. "You also need to take staff costs into account, but the cost of documenting and supervising compliance is built into the additional costs related to constructing LEED elements of the building." In the future, Sirizzotti sees more LEED projects. "We're seeing more municipalities calling for LEED certification of buildings they construct and in their ordinances."

A working relationship with the construction supervisor provides the site with additional guidance during construction, and the consultant with a means to monitor construction quality. "We rely heavily on the contractor to obtain documentation and the supervision of construction to achieve LEED points," says Kurczak. Some examples he cites involve insulating without adequate weather protection, failure to bag ductwork during dust creating activities to preserve indoor air quality, and preventing non-approved material substitutions.

"A lot of bidders underbid their first LEED project to get the experience, while others overbid due to the 'fear' factor. Clearly, those contractors who become familiar with LEED requirements by experience or education have the advantage."

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## UWO RESEARCH PARK GETS \$15 MILLION FOR BIOINDUSTRIAL INNOVATION

**SARNIA, ON** - The Sarnia-Lambton Campus of the University of Western Ontario Research Park has received the federal boost it was looking for in the award of \$15 million in funding for a new centre of excellence for commercialization and research.

The federal funding follows a \$10 million investment by Ontario's ministry of research and innovation announced last August. Renovation started in 2007 to upgrade and modernize 60,000 sq. ft. of existing labs and pilot plant space. Construction begins this spring on a new 75,000 sq. ft. facility.

A Bioindustrial Innovation Centre at the campus will support commercialization of industrial biotechnology.

"The centre will allow bench scale research performed at public institutions and labs to be tested at a large industrial scale," says Don Hewson, managing director, industrial liaison at the Sarnia-Lambton campus. Funding will also support collaborative and entrepreneurial projects with industry and academic partners across Canada. The goal is to attract over \$1 billion in new investments by 2014.

The UWO Research Park is home to over 55 organizations and a workforce of over 2,000 across its two locations in London and Sarnia.