



Baking up healthy buildings

LEED certification is one option for greening up your business

Written by **Stephanie Ortenzi**

It pays to get green. Just look at these compelling numbers. TD Canada Trust released the results of its Green Business Survey (conducted with Ipsos-Reid) last year. There was no mincing of words. In fact, there's a touch of reprimand in the language.

The survey reported that 38 per cent of Canadians say they "want to buy from a business that cares about the environment"; 20 per cent want businesses to know that "if you are not considering the environment, your business may suffer"; 25 per cent would consider paying more for goods and services if the company could demonstrate environmentally responsible business practices; and 40 per cent say they seek out environmentally responsible products and services.

What's the best way to get responsibly green?

LEED certification is one way we're going to investigate in this article. LEED's full name is a mouthful: Leadership in Energy and Environmental Design (LEED) Green Building Rating System, which is trademarked. LEED is "a third-party certification program [and] an international benchmark for the design, construction and operation of high-performance green buildings," says the Canada Green Building Council (CaGBC), the system's administrator.

LEED is a scorecard that operates on a point system. There are four grades: Credited (40 to 49), Silver (50 to 59), Gold (60 to 79) and Platinum (80 to 100).

A building's "greenness" is judged in seven categories: sustainable site, water efficiency, energy efficiency, materials selection, indoor environmental quality, innovation in operations and regional priority.

Ideally, it's good to connect your building to LEED at the design stage, as Canada Bread did in Hamilton with its new \$100-million facility, where the first loaves of bread will be rolling out mid-summer.

LEED has an acronym for bakers in existing buildings and looking at operations and maintenance as the road to green: EBOM, pronounced ee-bomb. EBOM is a specialty for Erika Mayer, a LEED accredited professional (AP), who guides people through the LEED process.

"The nice thing about EBOM," says Mayer, "is that there are a lot of credits related to policy development and implementation." This means there isn't always a considerable amount of expenditure required at every level.

Seemingly small changes are worthy of good credit. For example, you can chalk up five credits solely by looking at your cleaning practices. If you can develop a green cleaning program, do an assessment of custodial effectiveness, buy sustainable cleaning products, materials and equipment, including the materials for your pest management, you will have earned more credits than those given to a building with LEED-certified design and construction.

It's no surprise that optimizing energy efficiency can get you major points, as many as 18 points, but other big credits are not always where you'd expect them. For example, employee car-pooling, using public transit and cycling to work can get you as many as 15 credits. See sidebar for a look at more key credits, as well as some prerequisites for LEED, essentially many basic best practices, such as water metering and efficient plumbing.

Also, you can never assume how you're going to score. Says Mayer: "You can have a business with an efficient heating and cooling system, but its operation isn't optimal. And you can have another business with a less efficient system, but its operation is better, and both businesses could score the same.

Mayer, who has a bachelor of architecture from Carleton University in Ottawa, was the second employee hired to establish the CaGBC. She was involved in launching LEED in Canada in 2004, which operates under a licensing agreement with the USGBC. She is a champion of environmental causes, especially in relation to building. All of this makes her description of LEED a bit of a surprise. She seamlessly presents the

business value in using LEED to green your building.

“LEED is a market transformational tool. It provides third-party verification of your practices. It’s a label proving that you’re doing what you say you’re doing, which is why people want to get certified,” she says.

Businesses can then leverage their certification from a marketing standpoint, Mayer continues. “It says, ‘We’re walking the talk. We’re not just an energy-efficient bakery.’”

You can start slow, making some immediate changes, like green cleaning and sustainable packaging. When you’re ready, you can use EBOM as a goal, as a capital plan and a roadmap on how to move forward, says Mayer. A feasibility study can give you a baseline, show you what you can do and help you put a plan in place.

You’re going to want to. It has never been more substantiated that it’s good for business to do good.

Five years ago, in an Industry Canada study called “Business Case for Green Buildings in Canada,” the ecological goals were straightforward: reduce the use of energy and water, improve indoor air quality and ventilation, increase the use of natural light and use safe materials.

The key benefits sold themselves: lower operating costs, productivity gains, increases in property value and retail sales, improved image and reduced risk.

The study went on to sweeten the business case with win-win findings. Good daylight increases productivity 13 per cent, and it can increase retail sales by 40 per cent. Increased ventilation increases productivity by four to 17 per cent. Better quality ventilation reduces illness by nine to 50 per cent. Increased ventilation control increases productivity by 0.5 to 11 per cent. High glare reduces performance by 15 to 21 per cent.

A good basic start to considering LEED certification is to have a discussion with an AP (a directory can be found on at www.CaGBC.org). If you’re in a position to make capital expenditures but need a little help, there are 11 government funds to tap into. See sidebar below. It’s good news to find out that businesses can afford to be sustainable.

CREDIT RANGES BY CATEGORY

Sustainable Sites

Alternative Commuting Transportation	3-15 points
Storm Water Quality Control	1
Light Pollution Reduction	1

Water Efficiency

Prerequisites:**

Water Metering and Minimum Indoor Plumbing and Fixture and Fitting Efficiency

Performance Measurement	1-2
Indoor Plumbing Fixture Fitting Efficiency	1-5
Water Efficient Landscaping	1-5

Energy and Atmosphere

Prerequisites:

Energy Efficiency Best Management Practices: Planning, Documentation and Opportunity Assessment

Minimum Energy Efficiency Performance
Refrigerant Management: Ozone Protection

Optimizing Energy Efficiency Performance 1-18

Materials and Resources

Prerequisites:

Sustainable Purchasing Policy
Solid Waste Management Policy

Reduced Mercury in Lamps 1

Waste Stream Audit 1

Indoor Environment Quality

Prerequisites:

Minimum IAQ***Performance
Green Cleaning Policy
IAQ Management Program, Outdoor Air
Delivery Monitoring, Increased Ventilation

Reduced Particulates in Air Distribution 1-4

* A full checklist can be found in “LEED Canada EBOM Rating System” on CaGBC.org

** Industry Standards

*** Indoor Air Quality

SCORES FOR GOOD LIGHT AND AIR

Good daylight increases productivity by 13%
can increase retail sales by 40%

Increased ventilation increases productivity by 4-17%

Better quality ventilation reduces illness by 9-50%

Increased ventilation control increases productivity by 0.5-11%

High glare reduces performance by 15-21%

Source: Industry Canada’s “Business Case for Green Buildings in Canada,”
2005A Sampling from the EBOM Rating System*

GOVERNMENT FUNDING

- Environment Canada: EcoAction
- Natural Resources Canada: Buildings Group
- Natural Resources Canada: Canmet
- New technologies
- Natural Resources Canada: New Buildings Program
- Federal Buildings Initiative (CBIP and IBIP)

- New buildings and energy improvements in federal buildings
- Canadian Industry Program for Energy Innovation:
- Energy audits
- Energy Innovators Initiative
- Energy retrofits
- Federation of Canadian Municipalities
- Municipal governments
- Renewable Energy Deployment Initiative
- Incentives for renewable energy systems
- Office of Energy Efficiency- publications
- Reports and statistics
- Canadian Mortgage and Housing Centre
- Information on all aspects of building – straw bale and water use

Source: www.CaGBC.org