

# LEEDing The Way



For the past century, Aecon has earned its position as an industry leader by building things that matter—many of them major urban and rural landmarks—in Canada and around the world.

Today, Aecon is the largest publicly traded construction and infrastructure development company in Canada. Aecon's leadership is based on continuous improvement and responsiveness to market changes and customer demands.

Around the world, the growing awareness of our planet's limited supply of energy, water and material resources is becoming a major market force. It's driving change across all sectors.

A measure of that is the growing importance of a building certification program known, appropriately enough, as LEED – *Leadership in Energy and Environmental Design*. It's an area in which Aecon is already demonstrating a successful track record.

"We see a lot of this change driven from the university level," says Frank Ross, President of Aecon buildings. "New students want to know what our position is on LEED buildings and CSR. Five years ago, we never heard that. Now it's a major issue in the industry. And our new, younger employees see being green and environmentally responsible as normal business practice, not an add-on."

Across the construction industry, leading companies are responding by paying more attention to their effect on the environment and society at large, and taking appropriate action.

## **Aecon – LEEDing the Way**

"Since we started constructing LEED certified buildings," said Ross, "people are beginning to take greater interest in how we manage our work, and how we manage the environment. And we've been getting a lot of support from our employees and clients. It's now central to just about every project that we're doing today."

Operated by the Green Building Council, LEED represents a set of global sustainable "green" building standards in building design, maintenance and construction processes. Aecon is building these standards into its business.

Sustainable design principles make buildings more energy efficient, lighter and airier and more carbon-neutral. The US Green Building Council (USGBC – in Canada, the CaGBC)

awards points for the use of recycled materials, for incorporating energy efficiency into design, and other environmental benefits. Based on its total score on this rating system, a building is certified, Silver, Gold or Platinum.

## **LEED is gaining momentum**



The US took the initiative on LEED projects and even in today's slow economy, there's been no reduction in US LEED applications. Here in Canada, the situation is similar. In Halifax today, every project for universities, blue-chip private clients, and power corporations is either LEED-certified, or applying for certification.

“At Aecon,” reports Keith Williams, SVP, Aecon Buildings, GTA, “we've advanced to such a level that our design and trades people are LEED-accredited professionals. As testament to how the younger generation view that ‘green is the norm’, we're also finding that people coming to their first job at Aecon have already completed LEED-accredited training on their own. They recognize how important it is in the whole industry. And 90% of the commercial projects have some form of certification. These days LEED silver is pretty much the standard point-of-entry.”

Some of the benefits of LEED-certified buildings include a strengthened reputation as an environmentally conscious organization, improved energy, water efficiencies and air quality, reduced environmental footprint and innovative design. It all contributes to stakeholder trust and leadership positioning.

“We're finding that everyone's jumping on the bandwagon. It just makes sense,” says Ross. “You tear down a building and recycle 97% or 99% of a building – that's pretty neat stuff to do. Before, we were just throwing it in a landfill or dumping it somewhere. We all know better now. It's part of the learning curve.”

## **LEED Certified Aecon Project Highlights**

### **1. Union Gas – Three Buildings**

- ***Burlington Facility*** — LEED® Silver, striving for Gold. (Completed July 2008)  
This 22,500 square-foot, multi-use building is situated on a Greenfield site and incorporates both office and warehouse components. This project incorporates three divisions of Aecon Group (Buildings, Infrastructure and Industrial).
- ***Windsor Service Facility*** — LEED® Silver, striving for Gold. (Completion, May 2009)  
This 23,000 square-foot, two-storey building is part of an ongoing Master Service Agreement (MSA) Aecon holds with Union Gas to support 63 sites across Ontario.

- **Kingston Facility** — LEED® Silver, striving for Gold (Completion in July 2009)

Common LEED® features: All *three Union Gas buildings* feature a unique **co-generation system powered by natural gas**, which produces electricity for the building with capacity to sell power back to respective municipalities in off-hours.

2. **Nova Scotia Power Inc., New Corporate Facilities—LEED® Gold and pushing to platinum.** Completion, October 2010

Aecon's role is construction manager for the project. This project is a reuse of an old existing coal fired generating plant located on Lower Water Street in Halifax, owned by Nova Scotia Power. To preserve this historical landmark (it was constructed in stages between 1940 – 50), Aecon is building a new five-storey corporate headquarters inside this power plant. Designed for 500 people, the concept provides over 129,000 square feet of office area, 10,000 square feet public meeting hall, 7,000 square feet of boardwalk retail and 75,000 square feet of parking and service space.

Designed as a showpiece of maximized sustainable content, climate responsive and minimized lifecycle cost, the project is hoping to achieve LEED Platinum status.

3. **TEDCO Toronto Economic Development Corp—LEED® Silver.** Completion: December 2008.



Aecon's role was to source, monitor and manage "green" components. Major LEED features include high recycled content, a "living wall" 15 metres high, 45,000 square feet of green roof, heat recovery from the sea water for building heating and cooling, solar panels and reuse of the existing building structure.

4. **Saint Mary's University Atrium Building —LEED® Silver.** Completion, September 2009

This building connects three existing buildings on the university campus. Currently there are 36 target points. Aecon is acting as the Construction Manager for the University. LEED components include a living wall and green roof.

5. **Dalhousie University —LEED Silver.** Completion: August 2010.

The project involves the demolition of the existing tower structure and a church on the site of the new building, and the subsequent construction of the 104,000 square-foot academic building. The new building will be four levels high and include storage and mechanical and electrical rooms and an atrium to separate the classroom wing from the faculty office spaces. LEED components include a solar wall, green roof, premium mechanical controls, air quality monitoring systems, and 97% recovery of the torn down structures.

## Going Forward

Nobody sees green building standards going away. “In fact,” says Ross, “many of our clients, such as Union Gas, now set LEED as a standard for all their new buildings going forward.”



Aecon Buildings, Ross and Williams, view sustainable construction and infrastructure development as the new norm. It’s doing what’s right for clients and the environment. Green building standards, energy-efficient technologies, innovative building materials and recycling methods – and LEED-accredited professionals – are all helping Aecon leverage its core capabilities. Aecon continues to build things that matter – and now they matter to the environment.

Looking ahead, no-one knows the future. “But what we do know,” says Williams, “is that we’re creating places that are a lot easier and better to work in. That has a clear benefit for everyone – from building owners, to managers, and ultimately to tenants.”

Ross sums it up: “We take a lot of pride in what we do. It’s nice to be able to build something that makes a lot of sense for our clients, our business, for the environment, our surroundings. You just feel good about it.”