ABOUT PROLOGIS

Prologis, Inc. is the leading owner, operator and developer of industrial real estate, focused on global and regional markets across the Americas, Europe and Asia. As of September 30, 2011, Prologis owned or had investments in, on a consolidated basis or through unconsolidated joint ventures, properties and development projects expected to total approximately 600 million square feet (55.7 million square meters) in 22 countries. The company leases modern distribution facilities to more than 4,500 customers, including manufacturers, retailers, transportation companies, third-party logistics providers and other enterprises.

LOCATION

ADDRESS: 70 Pillsworth Road, Caledon, Ontario
EMAIL: info@prologis.com
WEBSITE: www.prologis.com

GREEN BUILDING – LEED CERTIFIED BUILDINGS

As a key component of its corporate responsibility, Prologis develops buildings that aspire to minimize their environmental impact and maximize energy efficiency. Prologis is committed to implementing best practices in sustainable design and construction and typically registers its development projects with the intent to seek certification in accordance with recognized green building standards. In North America, Prologis has constructed all its new facilities following best practices that are consistent with the Leadership in Energy and Environmental Design (LEED) rating system.

In Caledon, the Prologis Park Bolton is a 416,000 square-foot distribution center located on approximately 22 acres. The building received a LEED Silver certification for Core and Shell Development. The project was assisted by the Town of Caledon through their Green Development Program, which provided a rebate on development charges of around $170,000.
CASE STUDY

in exchange for Prologis’ decision to seek LEED Silver certification.

“Prologis has a long standing commitment to the principles of sustainability. Prologis Park Bolton was completed in partnership with the Town of Caledon’s Green Development Program, which enabled us to pursue a higher level of LEED certification, helping to secure two long-term leases that occupy the entire facility,” said Jeff Miller, Prologis’ investment officer for the Toronto market. “This is an excellent example of a municipality and developer working together to achieve maximum results.”

GREEN WAREHOUSE FEATURES

Given Prologis’ approach of developing, holding and managing a facility, it takes a life-cycle approach to the construction and management of its buildings. When looking to build, the company gives consideration to a facility’s entire life cycle which includes the method of construction, its functions and the way the building is replaced. Since Prologis holds onto the building over the long-term, it wants to ensure the building can continue to compete for tenants over the long-term, thus embracing a green building ensures top quality construction with lower operating costs than conventional buildings.

Completed in 2009, the Prologis Park Bolton is fully leased and features a number of sustainable elements:

INDOOR AIR QUALITY

Most people spend up to 90 per cent of their time indoors. Some conditions common to indoor spaces, including poor ventilation and high humidity, can serve to increase the concentration of certain pollutants. In an attempt to reduce the quantity of indoor air contaminants that are odorous, irritating and harmful to the comfort and well being of occupants, Prologis commissioned the use of low VOC (volatile organic compounds) emitting materials. All interior paints and coatings, along with installed carpets were low VOC emitting.

BUILDING DESIGN

Conventional roofing often increases the heat island effect. As the surface of the roof heats up relative to its surrounding area, the higher temperatures increase energy demand for cooling. At this site, Prologis installed a white thermoplastic polyolefin roof that offers the same performance as conventional roofing at essentially the same cost, but reduces the urban heat island effect by reflecting sunlight.

In order to encourage the use of alternative transportation, Prologis equipped the building with secure bicycle storage and change rooms. In addition, carpool vehicle parking spaces were included, providing 27 preferred parking spaces reserved for car pools and van pools which accounts for 10 per cent of the total parking provided at the facility.
WATER CONSERVATION

To reduce potable water use, Prologis installed a high efficiency landscape irrigation system. The Town of Caledon often uses Prologis’ landscaping as an example of how sustainable landscape features can be developed for an industrial building. The irrigation system includes a weather monitoring system that provides real-time weather information and helps minimize the amount of water used for irrigation by more than 50 per cent.

In addition to these irrigation features, the building also includes dual-flush toilets and low-flow urinals, showerheads and taps, which reduce water consumption by up to 40 per cent compared to a conventional building.

ENERGY EFFICIENCY

In Prologis’ effort to maximize energy efficiency and address long-term operating costs, several energy efficient features were incorporated into Prologis Park Bolton, including:

- Energy efficiency and motion activated T-5 lighting
- Extra roof insulation
- High-efficiency air conditioning units that contain zero chlorofluorocarbon based refrigerants

Prologis also had an enhanced commissioning plan developed by an independent third party for energy consuming systems. This allowed the company to perform all the necessary adjustments, tests and inspections to ensure the building was in full working order to specified requirements.

Overall, the Prologis Park Bolton is 50 per cent more energy efficient than the requirements under ASHRAE Standard 90.1, which provides minimum requirements for the energy efficient design of buildings.

Prologis is also looking at the opportunity to include renewable energy by installing rooftop solar panels. Prologis began its renewable energy initiatives in 2007 and currently hosts over 60 megawatts of renewable energy generation capacity on its building rooftops globally.

MATERIALS AND RESOURCES

Construction activities traditionally create an enormous amount of solid waste that often ends up in landfill sites. Keeping this in mind, the construction of Prologis Park Bolton included several environmentally-friendly waste management initiatives. Construction waste materials were separated for recycling, and 82 per cent of construction waste was diverted from landfill.
In addition to diverting waste, about 35 per cent of the total building materials were manufactured using recycled materials, and over 77 per cent of the building materials were made within 800 kilometers of the job site. This attention to detail helped to support the re-use of materials and the use of indigenous resources, while reducing the environmental impacts resulting from the transportation of building materials.

**PROJECT CHALLENGES**

While the building currently houses two tenants, when the building was constructed it was built on a speculative basis, meaning Prologis didn't know who the tenant would be, or what sustainable features would best meet their needs. Given this issue, Prologis stuck to solutions around energy efficiency, sustainable materials and water management, which could benefit any end user.

Compounding this was the fact that the building was constructed and completed during the real estate market crash. However, building the facility to attain LEED certification made it easier to lease the facility and attract a high-quality tenant.

**GREEN DEVELOPMENT PROGRAM**

One of the interesting elements of Prologis’ project was the support it received from the Town of Caledon and its Green Development Program. This voluntary program was developed to help promote sustainable development and create a stronger partnership between the municipality and the development community. The program provides development charge discounts of 5 to 45 per cent on green buildings depending on the sustainable technologies included in the building, regardless of whether LEED certification is pursued. Prologis was the first company to utilize the program and found that it was a key factor in going beyond simple LEED certification to a Silver certification.

For more information visit the Town of Caledon’s website at www.town.caledon.on.ca.

* Town of Caledon’s Green Development program offers development charge discounts