



GREENSmart Handbook




Achieving Sustainability through Environmental Practices

OVERVIEW

In 2004, Exhibition Place adopted an official Environmental Plan, which later became the Exhibition Place **GREENSmart** program. The program lays the groundwork for Exhibition Place to serve as a model for other organizations to operate successfully while being environmentally friendly.

Exhibition Place, located on Toronto's waterfront, hosts over 5.3 million visitors each year and through its 126-year history has been the showcase for innovation and leading edge green technologies and practices.

Exhibition Place facilities include:

-  Enercare Centre
-  Beanfield Centre
-  Better Living Centre
-  Queen Elizabeth Exhibit Hall
-  Bandshell Park
-  Various tenants

Exhibition Place is an award winning entertainment venue and has produced two of the industry's most environmentally responsible buildings. Beanfield Centre has achieved LEED Silver certification and sits just south of Enercare Centre which is a LEED® Platinum certified building. These facilities showcase multiple Initiatives such as, lighting retrofits, co-generation plant, a compostable food packaging program and a 4-stream waste diversion program. Green Seal, GreenGuard and EcoLogo products are also used throughout the facilities.

CORPORATE RESPONSIBILITY

Exhibition Place is committed to educating employees, clients and the general public:

- 🌱 The GREENSmart Team is an employee based committee comprising of members from every department across Exhibition Place.
- 🌱 Proud participants in Earth Hour and Earth Day global Initiatives.
- 🌱 SMART Movement program encourages employees to cycle, use transit, walk or carpool to work
- 🌱 Use of FSC (Forestry Stewardship Council) paper products.
- 🌱 Exhibition Place earmarked \$7.5M of Venue Naming Rights fees for the 10-year sponsorship of Enercare Centre for environmental initiatives.

LEED CERTIFIED FACILITIES

The Leadership in Energy and Environmental Design (LEED) is an internationally recognized rating system for evaluating the sustainability of building design, construction and operations. LEED certified buildings incorporate leading-edge features that protect the environment and promote healthy working and living conditions.

Beanfield Centre achieved LEED[®] Silver certification and is one of Canada's greenest conference centres. It became the first building at Exhibition Place to be fully powered by renewable energy.

Enercare Centre achieved LEED[®] Platinum EB:O&M certification by the CaGBC and was one of the first convention centres in Canada to achieve this designation.



CARBON EMISSIONS REDUCTION






On January 25, 2022 - Exhibition Place officially signed the **Net Zero Carbon Events Pledge**, a global initiative to address climate change across the events and meetings industry, per the targets laid out in the Paris Climate Accord, to commit to achieving net zero by 2050.

Our renewable energy production initiatives, as well as the 3,045 trees we have planted on the grounds, all contribute to the carbon reduction efforts at Exhibition Place.

Exhibition Place had a carbon impact of 5,758 metric tons in 2021, which has put us in-line with our annual reduction target.

ENERGY CONSERVATION

Exhibition Place offers initiatives on all levels to encourage environmental responsibility through the conservation of energy.

-  Exhibition Place offers designated parking spots for electric vehicles, and carpool groups across the grounds as well as offers free level 2 charging stations for electric vehicles
-  Exhibition Place created an **urban forestry program**, which preserves and renews the urban forest.
-  In Enercare Centre and Beanfield Centre classroom set-ups feature **linen-free table sets** as a standard set, helping to eliminate toxic dry-cleaning solvents from entering our ecosystem.
-  Beanfield Centre has its own **Cistern**, which allows rainwater harvesting from the roof to flush all of the water closets in the conference centre.
-  Enercare Centre has low flush water closets. Washroom's feature, 100% PCW hand towels, and touchless taps and soap dispensers

BUILDING TEMPERATURE

From mid-October to mid-May heated spaces are kept as close to 68°F/20°C as possible during normal operating hours. From May to October air-conditioned spaces are kept as close to 25°C. To help save energy, the building temperatures may be changed from normal operating set points during expected unoccupied hours and may also change during smog days. Automatic roll up doors are installed for Enercare Centre to prevent conditioned air leaving the building.

LIGHTING

Lighting constitutes one of the major energy consumption factors and therefore building lighting systems levels are optimized. Indoor lighting will be reduced wherever is possible, to provide for the minimum but adequate lighting levels consistent with the efficient and effective use of the space. Exhibition Place's Integrated Lighting Control System ensures conservation across the grounds.

🌱 Enercare Centre retrofit fixtures and lamps in the main exhibit halls with energy efficient, 159 watt, high light output energy efficient LED lights. The luminous intensity of these LED lights can be adjusted using Encelium lighting control system. This retrofit reduced energy consumption by 530 megawatt-hour annually and is estimated to provide an annual savings of 60.25% in the overall lighting costs at Enercare Centre exhibit halls. Enercare Centre installed new tower LED lights that have different color schemes and are programmable.

🌱 An Energy Control System (ECS) by Encilium Technologies Inc. was installed to help offset the energy costs of the 600 fixtures in the Enercare Centre underground parking lot. Over 130 motion sensors controlling the lighting zones power required zones only when necessary and detected through motion.

🌱 Beanfield Centre uses natural light and lighting levels are independently controlled in each room. Dimmable energy efficient lighting with motion sensors are used throughout.

🌱 Better Living Centre along with Enercare Centre has received lighting upgrades by installing energy efficient ballasts and lamps in main Exhibit Halls and public spaces. This will result in an annual reduction of over 2.3 million kilowatt hours of energy use.

🌱 LED-technology was utilized in exterior building naming signage for Enercare Centre and Beanfield Centre offering superior energy efficiency. Princes` Gates Arch chandelier was replaced with energy efficient LED lights that can be programmed to periodically change colors.

ENERGY CREATION




Through the GREENSmart program Exhibition Place positions itself as a leader in green technology and innovative thinking. Exhibition Place is targeting energy self-sufficiency and proudly presents various methods of energy creation.

Power

🌱 The first permanent **wind turbine** in the City of Toronto. The turbine is capable of generating 1 million kilowatt hours of power per year. The turbine also helps to displace some of the harmful chemicals that are responsible for smog and acid rain.

🌱 The "**Keeping it Green**" program was launched at Exhibition Place to assist our clients in organizing more environmentally friendly shows and events. Clients can purchase

Renewable Energy Attributes from Enercare Business to offset their energy use. The power is sourced from EcoLogo certified generation facilities. The clean, renewable energy sources include wind, solar, low impact hydro, biomass, biodiesel or geothermal power.

-  The Horse Palace located on the north end of Exhibition Place uses its 130,000-square-foot flat roof to collect solar energy through a **photovoltaic plant**. When first installed, this 100 kilowatt plant was the largest urban PV array in Canada. Followed by this pilot project, Horse Palace West Side, East Annex, and Better Living Centre installed solar panels with 100 kW, 150 kW and 250 kW capacity respectively. Together, these solar PV plants reduce CO2 emissions annually by 200 tonnes.
-  The Press Building is powered using a **Geothermal Plant** and is expected to save 110,000 kilowatts-hours per year of electricity and over 15,000 cubic meters of natural gas. The Geothermal Plant will reduce the annual carbon dioxide (CO2) emissions of the Press Building by approximately 125 tonnes per year and is expected to be 100% efficient.
-  The Back Pressure Steam Turbine located in Mid Arch is capable of generating 275 kW of electricity using waste steam from boilers.








WASTE MANAGEMENT PROGRAM

Exhibition Place is a part of the City of Toronto Waste Diversion Task Force and has set aggressive waste diversion targets. Exhibition Place is committed to initiatives that focus on diversion, recycling and reduction of waste and has met its goal to be 80% waste free by 2010.

In 2014, Exhibition Place was awarded 3R Certified Platinum from the Recycling Council of Ontario. Exhibition Place is Silver 3RCertified, which is a points-based certification program of Recycling Council of Ontario that reviews how organizations manage solid waste reduction and diversion operations. It assesses all aspects of a building's waste management program, with emphasis on material reduction and diversion focusing on the commitment to 3R's (Reduce, Reuse, Recycle).

The 3R Platinum level certification was the first time it was ever awarded to a company in Ontario.

Initiatives:

-  4-stream recycling to separate and recycle waste materials (including glass, paper, wood, plastic and organic compost) at Enercare Centre, Beanfield Centre and Better Living Centre.
-  In 2019, 50 new 4-streamer bins equipped with intuitive signage arrived to be placed in every meeting room and common areas in Beanfield.
-  Our Food & Beverage department works with local farmers to donate food waste.
-  Exhibition Place created signage to match City of Toronto's waste program. This informs the public through pictorial signage on all waste diversion receptacles to mix all plastic food related utensils in with the co-mingled waste stream. This stream of co-mingled is separated and plastic containers and utensils are sent together for recycling by the City contractor.
-  In 2020, Exhibition Place implemented the use of Emist 360 electrostatic sprayers to disinfect surfaces and rooms. The mist created by the electrostatic sprayer has an air-drying time of 6 minutes and provides more consistent coverage with less waste, reducing the use of paper towel and rags or cloths typically used to wipe down surfaces.
-  Enercare Centre and Beanfield Centre uses and recycles 100% PCW hand towels for all public washrooms. Used hand towels are composted.
-  Enercare Centre uses recycling and safe disposal programs for special items such as batteries, fluorescent lamps, paint and toner cartridges. To date, the facility is already diverting over 77% of its overall waste.

NEW GREEN TECHNOLOGIES

Exhibition Place is positioned to be a world leader in emerging technologies through the introduction of green energy projects.

- Exterior streetlamps, flanking Beanfield Centre, and exterior building signage to energy efficient LED lighting. Along the south side of the Exhibition Place campus, pedestrian pathway LED fixtures are equipped with occupancy sensors to dynamically adjust the light levels based on user needs.
- Creating Canada's first 100-kilowatt Photovoltaic Power Generation plant, and a smaller combination solar PV/thermal plant
- Installation of a geothermal HVAC system within the century-old Press Building
- Introduction of an intelligent lighting program for our underground parking facility.
- Installation of high efficiency chiller for Queen Elizabeth building.
- Implementation of a Green Roof pilot project atop the Horse Palace building.
- Construction of the first urban Wind Turbine in Canada
- Creation of an urban reforestation project including a naturalized garden, and lake-water irrigation
- Implementation of rainwater harvesting program through the construction of a Cistern at Beanfield Centre.
- Application of the District Energy System which is a thermal energy distribution system for multiple buildings and consists of a heating and cooling central plant within Enercare Centre.
- Installation of a variable-speed, magnetic bearing - high efficiency chiller for Enercare Centre
- LED lighting retrofit for the Enercare Centre allowing for each fixture to be illuminated individually.
- Installation of beehives on the green roof of the Industry Building of the Enercare Centre, which impacts the urban environment by contributing to the pollination of our neighbourhood in a 5 kilometre radius around our buildings.

BIKE PATH NETWORK

Exhibition Place has a bike network that runs through the grounds connecting cyclist from the east entrances to the west entrances, and from the north to the south (over onto the waterfront bike lane that goes all the way down to Etobicoke). Exhibition Place also has a bike share on the grounds next to Hotel X that connects Exhibition Place bike path to the Lakeshore bike path.

EXHIBITION PLACE AWARDS

Energcare Centre and Exhibition Place have been honoured with industry and environmental awards for our contribution to energy conservation and sustainability.

Name of Award	Presenting Organization	Year Awarded
Smart Commute Gold Workplace	Smart Commute	2015
Environmental Achievement Award	Ontario Strategic Energy Management Co-Hort Program	2016
Energcare Centre LEED® Platinum Certification Existing Buildings: Operations & Maintenance	Canada Green Building Council	2019
3R Certified Platinum	Recycling Council of Ontario	2014
Beanfield Centre LEED Silver New Construction	Canada Green Building Council	2012
2011 BOMA Certificate of Building & Management Excellence	The Building Owners and Managers Association (BOMA)	2011
2011 Office Building of the Year (TOBY) Award, Public Assembly Facility category		
Platinum Facility Management	Recycling Council of Ontario	2010
UFI Operations Award	UFI The Global Association of the Exhibition Industry	2010
Pollution Prevention Award Greenhouse Gas category	Canadian Council of Ministers of the Environment	2009

Questions?

If you have questions about GREENSmart or want to learn how you can make your meeting or event environmentally friendly, please email us at greensmart@explace.on.ca