

# GREENSmart Program



An Exhibition and Convention Centre



From a distance, it's easy to pick out Direct Energy Centre at Exhibition Place. Just look for the 30-storey wind turbine producing 1 million kilowatt hours of energy per year. It's the first of its kind in North America and the first permanent turbine in the City of Toronto. It also stands as one of the more visible examples of Direct Energy Centre and Exhibition Place's commitment to reduce emissions and waste. Our environmental commitment has been formalized in the 2004 Development Concept Plan and the 2009 Strategy.

If you look a little closer though, you'll find that the turbine is just the tip of the iceberg when it comes to the Centre's environmental stewardship. With the goal of environmental responsibility, in terms of energy production and waste reduction, by 2010, Direct Energy Centre has adopted a number of innovative green projects.

- **TREC's Wind Turbine, the first permanent turbine in the City of Toronto.**  
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, moving up to 1,800 tonnes of carbon dioxide annually.
- **A Waste Diversion Project rendering Direct Energy Centre 80% waste-free by 2010.** The program has seen the introduction of 4-stream recycling initiatives to separate and recycle waste materials (including glass, paper, wood, plastic and food waste). Direct Energy Centre uses and recycles 100% PC hand towels for all of our public washrooms, and has 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 79% of its overall waste.
- **Venue Naming Rights** fees of \$7M for the 10-year sponsorship of Direct Energy Centre are earmarked for environmental initiatives.



- **Direct Energy Innovation Centre.** A permanent educational exhibit located in the east Galleria of Direct Energy Centre, which explores energy use and the environment. Interactive displays showcase sources of energy and methods of energy conservation.
- **Linen-free meeting rooms.** Classroom set-ups feature linen-free tables as a standard set at Direct Energy Centre. New T-leg classroom tables with an attractive melamine finish will serve to conserve water, and reduce environmentally harmful dry-cleaning of table linens.
- **Lighting retrofits to decrease energy consumption and improve exhibit halls' overall light levels.** The installation of energy efficient ballasts and lamps in Direct Energy Centre's main Exhibit Halls and public spaces will result in an annual reduction of 2.3 million kilowatt hours of energy use. LED-technology was utilized in our exterior building naming signage for its superior energy efficiency. These projects were completed in June 2006.
- **A major Trigenation project that will use a natural gas fired generator to satisfy approximately 30% of Direct Energy Centre Complex's electricity, heating and cooling needs.** The project will also provide an energy reduction of 7,400 tonnes of equivalent CO<sub>2</sub> emissions. The highly efficient space conditioning and electrical system will also lower energy costs and provide greater energy security.
- **Use of (Forestry Stewardship Council) FSC paper products.** The office staff of Direct Energy Centre utilizes 100% Post consumer recycled paper printed with soy vegetable inks for letterhead, business cards, printed materials and envelopes. Printing of these materials was handled through a FSC certified printing company. Photocopy paper is also recycled.
- **Two Green Roof pilot projects atop the adjacent Horse Palace building.** Green roofs reduce HVAC costs in underlying structures, improve site storm water management and on a larger scale, help to reduce the urban heat island effect and ultimately cut down on greenhouse gas emissions.
- **An urban forestry program,** which preserves and renews the urban forest. There are over 2,750 trees across the site and with an annual plan to increase native spaces. The site is watered using lake-water irrigation piped from nearby Lake Ontario.
- **S-M-A-R-T Movement** employee trip reduction program that was implemented to limit single occupancy vehicle trips. The program challenges employees to cycle, use transit, walk or carpool in an effort to reduce emissions.
- **Perishable food donations and organic recycling.** Direct Energy Centre's Food & Beverage department works with local agencies to donate perishable foods to shelters and food banks in the City of Toronto. Food waste is donated to local farmers.



- A **Photovoltaic plant** initiative that would use the adjacent Horse Palace's 130,000-square-foot flat roof to collect solar energy. Once completed, this 100 kw plant when constructed was the largest in Canada and our future plans to expand the plant to 1 to 2 megawatts will reduce CO2 emissions annually by 1,906 tonnes.
- **Compostable Disposable dishware** has been incorporated into Direct Energy Centre's retail concession stands. Corn-based disposable plates, cups, bowls and even utensils are able to be placed in the organic waste recycling stream, and are fully compostable. Direct Energy Centre is the first convention centre in North America to offer this environmentally friendly service.
- A **Geothermal Plant** installed in the Press Building replaced the conventional heating/cooling system with a ground source heat pump system at a cost of \$700,000. Significant energy efficiencies have been achieved by using the natural temperatures of the ground both as a heat source in the winter and a heat "sink" in the summer. The Press Building Geothermal Plant saves 110,000 kilowatt-hours per year of electricity and over 15,000 cubic meters of natural gas. The efficiency of the project is 100%.
- **Allstream Centre will be a LEED Silver Conference Centre**, and connects to Direct Energy Centre via an underground pathway.
- **"Keeping it Green" program** allows meeting planners and event organizers to purchase Renewable Energy Certificates (RECs) equivalent to the amount of electricity used by their event. These RECs, which come from EcoLogo certified generation facilities, represent proof that one megawatt hour (MWh) of electricity was generated from a renewable source – such as wind, solar, low impact hydro, biomass, biodiesel or geothermal power – and delivered into a power grid.
- **Industry Awards.** Direct Energy Centre and Exhibition Place have been honoured with industry and environmental awards for our contribution to energy conservation and sustainability including:
  - **Operations Award**, 2010 UFI International Awards
  - **Platinum Facility Management Award**, 2008 Recycling Council of Ontario
  - **Ontario's Environmental Leaders 2008**, Ministry of the Environment
  - **Gold Award for Facility Management**, 2007 Recycling Council of Ontario
  - **Outstanding Achievement: Innovation in Business Solutions 2006**, International Association for Exhibition Management (IAEE)
  - **Winner, 2006 Innovation Award: Trade Show Executive Magazine**
  - **Solar Photovoltaic Project of the Year**, 2006 Solar Awards: Canadian Solar Industries Association
  - **Gold Award for Facility Management**, 2006 Recycling Council of Ontario
  - **Environmental Achievement Award: 2006 Green Toronto Awards**
  - **Silver Award for Sustainable Technology**, 2006 Recycling Council of Ontario
  - **Bronze Award for Facility Management**, 2006 Recycling Council of Ontario