



# GREEN AT WORK™

## OBJECTIVES

Cadillac Fairview takes pride in being an environmental industry leader by adopting progressive environmental standards and practices that demonstrate our commitment to corporate social responsibility. We are constantly evaluating how Pacific Centre is managed and look for innovative ways to reduce the centres' carbon footprint and minimize their environmental impact. With this commitment in mind, Pacific Centre is part of a comprehensive, measureable, and long-term green strategy called GREEN AT WORK™, which outlines our evolving sustainability goals. The program supports our ongoing commitment to environmental initiatives with the belief that by working with our retailers we are "building sustainability together™." This proprietary program is national in scope; implemented at all Cadillac Fairview properties and sets operational benchmarks that focus on five environmental pillars:

## ENERGY

A key focus will be on energy conservation and efficiency and the incorporation of renewable energy sources, with a long term goal of net-zero emissions from buildings.

## WASTE MANAGEMENT

The long-term goal is to generate zero waste by implementing a consistent and dedicated approach to waste diversion and waste minimization.

## ENVIRONMENTAL PROTECTION

The goal is to eliminate adverse impacts wherever Cadillac Fairview's activities, products, and services interact with the environment, while ensuring compliance with governmental regulations.

## SUSTAINABLE PROCUREMENT

Wherever possible, environmentally-friendly products, services, and best management practices will be utilized at all properties.

## COMMUNICATION

A green communication plan has been developed to inform, educate, and share information on the properties' ongoing green initiatives and successes with tenants.

On an annual basis, the properties will be expected to achieve operational standards in these five pillars, demonstrate improvements in energy and water consumption, waste diversion, and meet stringent targets.



GREEN AT WORK™  
Building sustainability together™



## INITIATIVES

Below are some of the major green initiatives that have been completed at the Pacific Centre office complex to date (or are currently in progress):

### RECOGNITION

- The Shopping Centre achieved Building Environmental Standards (BES<sup>t</sup>) certification for environmental excellence from the Building Owners and Managers Association of BC (BOMA) in 2008.

### EDUCATION

- Implemented a GREEN AT WORK™ staff committee that meets quarterly to provide education to Cadillac Fairview staff regarding various environmental issues.
- Developed a Building Operations/Maintenance Facility commissioning program to generate ideas to improve the efficiency of building systems.

### COMMUNICATION

- Developed a GREEN AT WORK™ tenant communications program including: An environmental awareness column in the CF Review newsletter, a web page on the properties' web sites (including resources and a "Greening Your Office" guide), and communication vehicles. Tenants can also send their environmental suggestions to [greenatwork@cadillacfairview.com](mailto:greenatwork@cadillacfairview.com).

### TRANSPORTATION

- Provide on-site bike racks/cages and change/shower facilities for cyclists.
- Partner with Zipcar to bring discounted car-sharing services to our tenants.

- Operate a tenant recycling program for paper, glass, metal, and plastic. In 2008, recycled 1013.96 metric tonnes of paper and cardboard and 1.91 metric tonnes of plastic/metal.
- Offer tenants an electronic equipment recycling service. In 2008, recycled a total of 6046 kg. of electronic equipment.
- Introduced a construction, renovation, and demolition waste management policy that aims to re-use as much material as possible.
- Implemented a policy to minimize water use and encourage water conservation. Regular monitoring is conducted with reduction targets. In late 2009, will be implementing water savings measures and remote metering at the properties.
- Currently piloting a Zero-Waste program in three office towers to remove compostable and recyclable materials from the garbage.

## WASTE MANAGEMENT AND RECYCLING

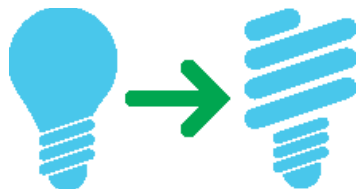
## ENERGY



# RECYCLE IT

Last year we recycled  
1013.96 metric tonnes of paper and cardboard  
1.91 mt of plastic/metal and  
6046 kg of electronic equipment

- Entered into a Power Smart Partners Agreement with BC Hydro to fund an Energy Manager to implement an Energy Management Program.
- Implemented numerous energy management measures such as: Lighting system and control upgrades, Carbon Monoxide (CO) control of garage ventilation systems, modifications to HVAC equipment and lighting schedules, installation of variable speed drive controls for fans and pumps, and upgrades to chillers and the building automation control systems.
- Upgraded all buildings' exit lighting to more efficient LED technology.
- Contracted Sylvania Osram and Litemor to conduct audits of all facilities and these companies will be providing recommendations for energy savings in late 2009. This partnership has given Cadillac Fairview access to the "Ideally Green Lamp Recycling Program" which ensures all used lamps/fixtures are recycled.



- Changed all buildings' lighting systems to the lowest wattage lamps available.
- Include energy management features into building renewal projects. Past examples include high efficiency chillers, variable chiller flow controls, installation of heat exchangers, etc.
- Operate an energy monitoring program for tracking energy use and savings.
- Conduct lighting control system sweeps at 7:00 p.m. daily to ensure all lighting is

off during unoccupied hours.

- Currently installing floor-by-floor interval metering in all office buildings.
- Will conduct a Continuing Optimization Program in late 2009 whereby all buildings will undergo recommissioning process to ensure that all systems are operating at design levels.
- Will install occupancy sensors in washrooms/storage rooms in late 2009.
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**Completed the following energy saving retrofits in the past 5 years:**

TD Tower	- New Lighting Control System	558,000 kWh
	- Recommissioned Heat Exchanger	400,000 kWh
	- Relamping project	160,000 kWh
701 W. Georgia	- Optimized Chiller Controls	240,000 kWh
Pacific Centre	- Modified pump/fan schedules	900,000 kWh
	- Installed VSD on various pumps	140,810 kWh
	- Loading dock lighting project	192,000 kWh
	- Parkade Lighting upgrade	123,000 kWh
777 Dunsmuir	- Various VSD projects	550,190 kWh



## ENVIRONMENTAL PROTECTION

- Commissioned a hazardous materials survey to audit the handling, storage, and shipping of dangerous goods/hazardous waste; and the location, storage, and inventory of spill kits, and acted on the results of the survey.
- Replaced and appropriately disposed of all PCB lighting ballasts and transformers.
- Catalogued all equipment that contains ozone depleting substances and ensure that all major equipment is in compliance with ozone and halo carbons regulations.
- Completed upgrades/replacements to all of the buildings' chilled water systems and refrigeration monitoring systems.
- Upgraded chiller plant equipment with more environmentally friendly refrigerants and variable volume technologies to improve efficiency.
- Pro-actively supervise an Asbestos Management Program for any existing asbestos at the buildings and operate an ongoing Asbestos Abatement Program to remove high-risk asbestos.
- Work with contract cleaning companies to implement environmental controls on cleaning products and solvents.
- Commissioned Cobalt Engineering Ltd. to research alternative building energy options (such as solar, photo voltaic, and wind power) to offset energy requirements and are currently reviewing this research.
- Completed a water audit of the centre

and are currently reviewing the recommendations which include: Low-flow fixtures in washrooms, diverting rainwater to be used in mechanical and plumbing processes, and taking tenant server rooms off of once-through water condensing systems.

## PROCUREMENT

- Replaced all retail washroom paper towels and toilet tissue with 96+% recycled content paper.
- Those tenant communication pieces that are produced are printed on 50+% recycled content/Forest Stewardship Council paper and vegetable dyes in the printing process.
- Purchase green office supplies (when possible) for the Cadillac Fairview Administration Office.

## SUMMARY

Cadillac Fairview's GREEN AT WORK™ program is a large undertaking and an ongoing journey that will require determination and innovation. The staff and management of the Pacific Centre complex are confident that the program will be a success and take pride in knowing that retailers are eager to participate in the program. For more information on GREEN AT WORK™, visit [www.pacificcentre.com](http://www.pacificcentre.com).

*"As people alive today, we must consider future generations; a clean environment is a human right like any other. It is therefore part of our responsibility towards others to ensure that the world we pass on is as healthy, if not healthier, than we found it."*

- Dalai Lama