



SUSTAINABLE STRATEGIES *for*
A GREENER TOMORROW

Canadian Commercial Properties

Brookfield

As a leader in the commercial real estate industry, Brookfield Properties is committed to owning, developing and managing premier office properties that are sustainable, environmentally friendly, and among the most technologically advanced in North America. Our properties contain building features, systems and programs that foster environmental responsibility, cost and energy savings for our Tenants, and the health and safety of all those who work at and visit our properties.

ENVIRONMENTAL POLICY STATEMENT

Brookfield Properties is committed to minimizing potential adverse effects on the environment and promoting the use of efficient management systems and Tenant practices in its buildings. Compliance with this environmental commitment is the responsibility of all parties employed by Brookfield Properties.

Through the integration and management of prudent reusing and recycling programs, as well as other environmental protection policies, Brookfield Properties, together with its Tenants and contractors, will strive to minimize potential negative environmental impacts such as excess waste generation.

BROOKFIELD PROPERTIES' size and scope in Canada - a portfolio of 17.5 million square feet of office space, accommodating over 57,000 Tenants - means that its green initiatives can have a significant impact across the country. Every year, the greening of our buildings translates into 96,000 trees and 52 million kilowatt hours of electricity saved. That's enough to power almost 6,000 Canadian households.

These efforts not only benefit the environment, but our Tenants as well. Strategic use of low-energy lighting and occupancy lighting sensors for example, have significantly reduced electricity consumption in our buildings. Increased operation and maintenance efficiencies such as these cut straight to the bottom line, resulting in cost savings that get passed on to our Tenants.



Working green means adopting strategies that yield sustainable results. That principle is at the root of these recent initiatives at our Toronto and Calgary properties:

- Lake water cooling at Queen's Quay Terminal, Toronto*
- Food recovery and redistribution program at Brookfield Place, Toronto*
- Thermal storage of chilled water at Exchange Tower, Toronto*
- Introduction of LED lighting at First Canadian Place, Toronto*
- Installation of occupancy lighting sensors at Bankers Hall, Calgary*

Brookfield Properties will continue to identify solutions and seek practices that reduce the carbon footprint of its business operations. By integrating the company's business needs with environmental values and concerns, we can reap long term benefits for our properties, Tenants and those who live in the broader communities we serve.

PROJECT BLUE, launched in 2002, is Brookfield Properties' national waste management program. Designed to make recycling "second nature" among our Tenants, it has become the road map for smarter, greener practices across our portfolio, encompassing everything from recycling paper, bottles, and cans, to the safe disposal of batteries, cell phones, and computers.



Annually, Brookfield Properties diverts 11,000 tonnes of material from landfill, and recycles enough paper to save 96,000 trees.

Over the years, Project Blue has yielded impressive results through its system of standardized waste audits, innovative Tenant education and compliance programs, and one-on-one Tenant reporting. By driving sustainability deep into the core of our operations, we have reduced the generation of excess waste at our buildings and, consequently, the volume of waste material sent to landfill. Project Blue will help us reach our national five year target - diverting 75% of waste from landfill, well above industry standards.

Project Blue has also been the impetus for other resourceful recycling programs at Brookfield Properties. "Think Green," our organics composting initiative, allows Tenants to sort and dispose of organic food waste in the convenience of their office kitchen. And as a tangible reminder of our commitment, all of Brookfield Properties' printed material are FSC Certified and/or produced on environmentally friendly paper.

OPERATING BUILDINGS IN ENERGY-EFFICIENT WAYS is at the core of Brookfield Properties' BEST program. From retrofitting base building lighting, to upgrading HVAC automation systems, our properties have made significant strides in energy conservation. In fact, annually we reduce our national energy consumption by 52 Million kilowatt hours. That's comparable to the amount of energy used by 6,000 households in one year.



The future looks bright where energy conservation is concerned. Our buildings collectively cut carbon emissions by 17,000 tonnes annually – the equivalent of taking 5,200 vehicles off the road. BEST efforts have also resulted in an enlightened attitude among our Tenants. Reports show a significant reduction in overall hydro consumption among building occupants.

The BEST initiative not only provides the strategic framework to help curtail energy expenditures in common areas, but in Tenant premises as well. To achieve conservation goals, Brookfield Properties has installed individual Tenant metering and conducts energy audits on Tenant floors to determine individual electrical load profiles. Based on these findings, we provide building occupants with data to help them understand their energy consumption habits, and effective strategies for lowering energy usage. Empowering Tenants in this way not only reduces our impact on the environment, it reduces Tenants' operating costs. And that creates a win-win for all of us.

Offsetting our eco-footprint through the conservation of energy and other natural resources is consistent with Brookfield Properties' environmental priorities. Here are a few more ways in which we have refined energy-saving measures at buildings throughout Canada:

- **THERMAL STORAGE:** *Storage of cooled water ensures that the electrical supply in buildings is not adversely affected during peak hours*
- **AUTOMATED HVAC SYSTEMS:** *High-efficiency chillers, equipped with variable speed drives, adjust pump speeds based on load requirements to reduce hydro consumption*
- **LOW-ENERGY LIGHTING:** *Installation of high-efficiency lighting systems, fixtures, occupancy sensors and controls, allowing us to take advantage of daylight harvesting*
- **UV COATING & TINTED GLASS:** *Windows are treated with a coating that welcomes sunlight but rejects heat load. Tinted glass also helps reduce heat gain and loss*
- **VARIABLE FREQUENCY DRIVE:** *VFD systems control motor speeds on fans & pumps to match motor load output resulting in lower energy requirements*
- **HIGH EFFICIENCY BOILERS:** *Installed in the building's central plant, these boilers work to reduce emissions and natural gas consumption*
- **DAYLIGHT HARVESTING:** *Photo sensors detect exterior daylight levels to automatically turn off interior perimeter lighting within tenant and/or common areas, resulting in lowered electrical consumption*
- **LAKE WATER COOLING:** *Naturally cooled lake water is used to supplement the building's cooling system, reducing electricity usage*
- **ELECTRICITY METERS:** *Installation of meters to monitor tenant's electricity consumption allows tenants to benefit directly from any energy savings projects implemented*



As Brookfield Properties seeks to uphold the outstanding reputation afforded its name, it has bolstered its commitment to environmental stewardship through its BOMA BEST certification.

From energy, water and resource efficiency to reduced emissions impact, BOMA BEST is the next evolution of the Go Green recognition program, developed by the Building Owners and Managers Association (BOMA) of Canada. It looks at a series of environmental "best practice" areas to determine eligibility and certification. To date, all Brookfield Properties' buildings, representing over 17.5 million square feet of office space, bear the distinguished BOMA BEST trademark.

TOWARDS A GREENER TOMORROW



Brookfield Properties has long been an advocate for sustainable building performance and is proud of the exemplary role it plays in stimulating green building practices in Canada. Testimony to this is the company's involvement in the LEED Canada Existing Building Pilot Project created in collaboration with the Canada Green Building Council (CaGBC). This undertaking helped shape the LEED rating system and accreditation criteria for the commercial office sector. Moreover, taking part has contributed to Brookfield Properties' ongoing efforts to evaluate and plan improvements to the environmental practices within our buildings.

As a member of the Canadian Green Building Council we are pleased to support its goals, and to have the opportunity to influence solutions that achieve significant and measurable environmental benefits. To underscore this commitment, Brookfield Properties will seek to obtain the following LEED accreditations across our portfolio:

LEED EB:OM - (Existing Buildings: Operation & Maintenance) certification is being pursued at several Canadian properties. The screening process is complete and the certification strategy is underway, with actual certification expected at select properties in 2011/2014.

LEED CI - (Commercial Interior) screening has also been conducted at all Canadian properties, resulting in detailed reports which outline how the base building of each property can contribute - in whole and in part - to applicable LEED CI credits, as well as providing recommended actions each property can take to provide further credits to Tenants.

New Developments - All future developments will be built to a LEED Gold standard. For example, Bay Adelaide Centre in Toronto and Bankers Court in Calgary were recently built to a LEED Gold standard using state-of-the-art innovation and design technologies and conservation strategies.



Brookfield Properties sets specific goals to reduce the use of water, energy, waste by - products and ensures the most efficient use of resources. We are committed to conducting operations in accordance with all applicable environmental laws, and where no law exists, to voluntarily adopt our own standards, where appropriate.

Brookfield Properties has established a cross disciplinary environmental committee dedicated to evaluating current environmental performance at all of our properties, with a view to setting new standards in environmental sensitivity and practice. Our National Environmental Program, *Sustainable Strategies for a Greener Tomorrow*, also encompasses annual environmental performance reviews and industry environmental certification.

