



Energy Innovators Initiative Energy Innovators Case Study

■ June 2003

FAIRMONT HOTELS & RESORTS: HOSPITALITY, TRADITION, ENVIRONMENTAL STEWARDSHIP AND ENERGY SAVINGS GO HAND IN HAND

Corporate Overview

Fairmont Hotels & Resorts Inc. (FHR) is one of North America's leading owner/operators of luxury hotels and resorts. FHR's portfolio consists of 81 luxury and first-class properties with over 32 000 rooms in Canada, the United States, Mexico, Bermuda, Barbados and the United Arab Emirates. FHR holds a controlling interest in Fairmont Hotels & Resorts and Delta Hotels. In addition

to hotel management, FHR owns the FHR Real Estate Corporation and has an interest in Legacy Hotels Real Estate Investment Trust.

Background

Headquartered in Toronto, Ontario, FHR's Fairmont Hotels & Resorts is proud of its distinctive properties and its worldwide reputation for excellence. In October 1999,



Fairmont Château Laurier



The Fairmont Chateau Lake Louise



Natural Resources
Canada

Ressources naturelles
Canada





Samurai Restaurant at The Fairmont Banff Springs

Canadian Pacific Hotels & Resorts acquired Fairmont Hotels – bringing together two companies with over a century of rich history and exemplary hospitality. Many Fairmont properties are historic, world-class landmarks and include some of the most famous buildings in Canada. All Fairmont hotels and resorts offer a premium level of service and comfort and are important elements in Canada’s travel and tourism.

Long-Term Commitment

Fairmont Hotels has a long history of commitment to energy efficiency and environmental stewardship. Committed to becoming a world leader in establishing environmental practices for the hotel industry, the company started to develop a green program for all its Canadian hotels in 1990. The program aimed to set the highest possible standards of environmental responsibility for the hospitality industry.

More than 10 years later, the company released the second edition of its best-selling *The Green Partnership Guide* – a comprehensive guide for companies looking to “green” their operations. Moreover, Fairmont Hotels & Resorts has expanded internationally and continues to strengthen its commitment to the environment. Fairmont’s policies of energy efficiency, water conservation, purchasing and waste minimization continue to win international awards and benefit both the company and society. In addition to saving money, energy efficiency is a means to limit carbon dioxide emissions, which helps Canada meet its international obligations to reduce greenhouse gas (GHG) emissions that contribute to climate change.

As part of its commitment to environmental stewardship, Fairmont is a member of the Energy Innovators Initiative (EII) of Natural Resources Canada’s Office of Energy Efficiency (NRCan’s OEE), the “Green” Hotels Association® and the International Hotels Environment Initiative.

Energy Consumption

The people at Fairmont are always looking to increase the energy efficiency of their properties in order to decrease operating costs and reduce GHG emissions. With energy bills in excess of \$43 million every year, Fairmont decided to take a closer look at how it consumed energy. Electricity makes up the lion’s share of the hotel chain’s huge energy bill, costing more than \$29 million annually. Natural gas, water, propane, steam and kitchen fuel make up the remainder.

Energy Reduction Program

In 1996, Fairmont embarked upon an ambitious program to cut its energy consumption and GHG emissions and reduce its overall operating expenses. In that same year, with 37 properties across North America, Fairmont targeted the largest, oldest and most energy-inefficient hotels first for massive energy conservation improvements.

Early on, Fairmont realized that its exceptional historic properties would offer special challenges. Physical layout and equipment varied greatly from one facility to another, so retrofitting would be much more expensive than new

Preserving the mood with energy-efficient lights

“You don’t notice the differences in lighting because we still use the antique shades over them. But the savings are impressive. Pot lights were added to the corridors for extra lighting. It’s hard to tell the difference between these and the old spotlights, unless you look inside the fixtures.”

Silvano Cava

Director of Engineering

Fairmont Château Laurier, Ottawa, Ontario

construction. To maintain its reputation for service excellence, both client comfort and convenience were essential when retrofitting the hotel rooms. Common areas were also retrofitted so that alterations would not detract from period ambience.

Energy Retrofits

Since 1998, Fairmont has implemented a variety of measures in hotel facilities across Canada. Funded in part by the EII, retrofits at the Delta Toronto Airport West (formerly known as Four Points by Sheraton Toronto Airport) and the Delta Toronto East resulted in annual savings of \$200,000. Many of these savings stemmed from improvements in the lighting fixtures of the guest rooms, parking garages and boiler rooms.

Retrofits were also implemented at the Fairmont Château Laurier in Ontario, Fairmont The Queen Elizabeth in Quebec, The Fairmont Chateau Lake Louise and The Fairmont Banff Springs in Alberta. Table 1 illustrates highlights of the retrofit measures at each of these facilities.

Financing

In each of the retrofits projects, Fairmont entered into performance contracts that guaranteed savings. Energy performance contractors are paid from savings that are generated from reduced energy consumption. Fairmont realizes direct savings once the contractors have been paid for their work.

Washing up

Fairmont The Queen Elizabeth, in Montréal, Quebec, does 1.8 million kilograms (four million tons) of laundry each year. One of the less expensive measures implemented at the hotel was putting the steam valve for the laundry on a timer, so that there would be no steam leaks through the piping at night.



Deluxe Suite at Fairmont The Queen Elizabeth

Other Savings Coast-to-Coast

Other Fairmont properties across Canada have also been retrofitted, yielding significant savings. The Fairmont Royal York in Ontario saved more than \$1 million over two years, due to an upgraded heating, ventilating and air-conditioning (HVAC) system and other related measures. Fairmont Le Château Frontenac in Quebec is benefiting from annual savings of \$350,000 from a lighting retrofit, installed automation controls and other measures. And The Fairmont Hotel Vancouver in British Columbia implemented comprehensive lighting and other retrofits, upgraded an energy management and control system and carried out HVAC and central plant measures – resulting in annual savings of over \$1 million for this property alone.

“With the Chateau Lake Louise being such an ecologically friendly resort, energy efficiency was mandated from the start. The payback has been tremendous. I don’t see why larger corporations don’t have a closer look at energy efficiency measures.”

Marty Schenk

Director of Engineering

The Fairmont Chateau Lake Louise, Alberta

Table 1. Projects – Fairmont Hotels & Resorts

Facility	Overview	Measures implemented
Delta Toronto Airport West	<ul style="list-style-type: none"> • 296 rooms • almost \$700,000 in upgrades • savings of over \$80,000 per year • project managed by Direct Energy Business Services Technology and Solutions Group (formerly known as Enbridge Integrated Building Technologies Inc.) 	<ul style="list-style-type: none"> • 2700 lights upgraded • centralized energy management system • wireless control of lighting in parking area
Delta Toronto East	<ul style="list-style-type: none"> • 368 guest rooms with a 2000-m² indoor atrium • 18-year old facility • \$600,000 energy efficiency program • savings of over \$110,000 per year • project managed by Direct Energy Business Services Technology and Solutions Group 	<ul style="list-style-type: none"> • 8500 lights upgraded • 3.5-million-Btu boiler replaced with four commercial-sized units with a capacity of 4.0 million Btu • computerized energy management system installed for all measurable energy-consuming functions
Fairmont Château Laurier	<ul style="list-style-type: none"> • 429 guest rooms • over \$3 million in energy retrofits • savings of over \$575,000 per year • project managed by Direct Energy Business Services Technology and Solutions Group 	<ul style="list-style-type: none"> • installation of a high-efficiency boiler plant to replace the district steam heating system • installation of high-efficiency incremental units in all guest rooms • installation of an integrated building automation system • lighting retrofit in common areas and guest rooms
The Fairmont Chateau Lake Louise	<ul style="list-style-type: none"> • 487 guest rooms • \$460,000 in renovations • over \$250,000 in annual savings • project managed by Johnson Controls, Inc. 	<ul style="list-style-type: none"> • a complete lighting retrofit, from T-12 to T-8 electronic ballasts in the service areas and compact fluorescent lights for the guest rooms • glycol heat-recovery, recycling exhaust-fan heat to corridor make-up • Metasys[®] building automation system, with scheduled time control of lobby and administrative-area fans • installation of HVAC controls • installation of a heat-recovery system

(Table continued on page 5)

Table 1. Projects – Fairmont Hotels & Resorts (continued)

Facility	Overview	Measures implemented
The Fairmont Banff Springs	<ul style="list-style-type: none"> • over 770 guest rooms • over \$600,000 in retrofits • more than \$315,000 in annual savings • project managed by Honeywell Inc. 	<ul style="list-style-type: none"> • TransAlta Corporation meter consolidation saves about \$200,000 a year • comprehensive lighting retrofit of all guest rooms • temperature-control retrofits • optimization of control system • dishwasher booster conversion • changes to fluid drives in main boiler room
Fairmont The Queen Elizabeth	<ul style="list-style-type: none"> • over 1000 guest rooms • almost \$3 million in renovations • approximately \$500,000 per year in savings • project managed by Honeywell Inc. 	<ul style="list-style-type: none"> • lighting retrofit of common areas and guest suites • EXCEL 5000® direct digital control (DDC) energy management system • steam trap replacement • ventilation air control for guest suites • ventilation waste-heat recovery • installation of new 300- and 700-ton energy-efficient chillers • installation of two-speed motors for laundry ventilation system

Leadership by Example

Fairmont’s corporate commitment to energy efficiency enhances the overall performance of its properties, improves its bottom line and helps the environment. The enthusiasm and support of employees have helped lower energy costs and, in turn, have reduced GHG emissions. Thanks to a vigorous, “can-do” approach to reducing energy, Fairmont has emerged as a leader in the field of conser-

vation. Many advocacy groups and organizations have endorsed Fairmont’s commitment to the environment. They have also honoured it with awards, including the OEE’s Energy Innovators Achievement Award, presented in February 2002, in recognition of Fairmont’s outstanding energy-saving initiatives in the hospitality sector. Moreover, Fairmont Hotels & Resorts’ efforts are widely recognized as the most comprehensive in the North American hotel industry.

For More Information

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Leading Canadians to Energy Efficiency at Home, at Work and on the Road

The Office of Energy Efficiency of Natural Resources Canada
strengthens and expands Canada's commitment to energy efficiency
in order to help address the challenges of climate change.

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