

The Greening of the Lodging Asset Class

Commercial properties who cannot pass along their operating costs to their clients, as most office property owners can, have shown great creativity in finding ways to reduce their carbon footprint while involving their employees and attracting clients. Lodging, in particular, is making tremendous strides in many areas of sustainability best practices and energy use reduction.

If you are interested in patronizing truly “green” properties and “eco-resorts”, look for those that train and employ locals, buy locally, support community projects and show respect for local traditions, as well as work to minimize their effects on the environment by using renewable energy, conserving water, recycling resources and protecting the natural habitat around them.

Whether it’s a Fairmont property in the heart of a major metropolis or a remote eco-lodge in a natural paradise, a wide variety of hotel and resort properties are achieving results that many office owners would be hard-pressed to match.

The more remote eco-properties are proving that when respect for the environment is shown in every aspect of the operation; ecology becomes their most valuable amenity. The best-run protect and put a gentle frame around what is already there: nature, as unaltered as possible.

Here are some examples of best practices and technologies of the green leaders in the lodging industry. These are delivering shrinking carbon footprints and lower operating costs as well as two powerful ancillary benefits:

- Happier, more engaged and loyal employees
- And
- Happier, more engaged and loyal customers

It’s useful to look at ways that organization like [Marriott](#), [Fairmont](#) and [Kimpton](#) instill their top-line greening objectives into the behaviors of their front-line management and operations staff.

One common thread amongst the greenest of the hotel properties that I have studied: a top-down, deeply embedded commitment to sustainability that starts with the owner and operator CEOs. Another: creative programming that successfully engages staff at all pay grades and in all areas of the enterprise - and rewards and celebrates those who have performed “above and beyond”.

Another constant: tangible, substantive incentives and rewards for moving the green agenda forward. This recognition ranges for a mention in the corporate newsletter to days off with pay to branded “green team” wearables to luxury gifts with thank-you notes from the CEO.

These properties are worth a look. In my experience, the “greener” and more eco-sensitive the property is, the more enjoyable the stay.

Africa

The [Phantom Forest Eco-Lodge in South Africa](#) is set on a private nature reserve of 147 hectares that is managed by a trust devoted to principles like limited sympathetic development and hand-removal of alien vegetation. One example: water-wasting poplar trees were bought from locals, removed and used for roof shingles. The poplars no longer drink up precious water required for indigenous plants and the wood repels bugs; so that the use of the wood for shingles has been a win/win. The wood of other non-native trees was kiln-dried and used for floors, cupboards and furniture in the lodge. Owner Kit Stewart’s passionate goal is to “touch the earth as lightly as possible” with every aspect of the resort’s operations. The resort was honoured at the **World Travel Awards** as the **Best Eco-Tourism Resort in Africa** last year. **Derek Chittenden** of **blue green planning and design** was the architect.



Phantom Forest Eco-Lodge

Asia

Asia leads the world in a commitment to green lodging.

The tiny but growing firm, **Alila** owns and manages some of the most beautiful properties in Asia. One of their specialties is integrating an existing heritage property into the design/build of a new resort or hotel. The most recent example of this is their new property in Laos: the **Alila Luang Prabang Resort**, located in the **UNESCO World Heritage** town **Luang Prabang**, the former royal capital. Designed by architect **Bunnag Duangrit** of Bangkok, the property integrates the architecture of colonial Laos (built by the French between 1914 and 1930) with modern amenities. Laos is famous for its French colonial architecture, exemplified by this building, which was once a governor's mansion and later used as a political detention centre.



Alila Luang Prabang Resort

Their **Alila Villas Uluwatu** property in Bali - designed by Singapore-based **WOHA Design** - is the first resort in Indonesia to obtain the highest level of certification for Environmentally Sustainable Development (ESD) for their deliberate use of sustainable and recycled materials, protection of the natural environment and measured work practices throughout construction. Notable are the flat roofs, laid with batu chandi (a local volcanic rock). This porous Javanese rock (a product of Mnt. Merapi's eruptions) serves a threefold purpose: insulation, aesthetics and water absorption to support plant life. Alila plans to implement regular updates to environmental management systems and action plans in accordance with the requirements of the **Green Globe 21** standard



Alila Villas Uluwatu Bali

Alila is working to achieve **Green Globes** certification enterprise-wide. They have achieved this for two of their properties in Bali: the **Alila Ubud** and the **Alila Manggis**. Despite the fact that it might dilute their "bragging rights" as the greenest lodging operators in Bali; Alila has chose to be transparent about their best practices with a view to leading the Balinese, Indonesian and Asian hospitality industries in improving sustainability. They are committed to partnering with the communities where their hotels and resorts are located in real and substantive ways and are working on a program that will enable them to offer their guests carbon-neutral holidays. The world-renowned architect **Soo Chan**, principal of **SCDA Architects** and designer of some of the most amazing lodging in the world, has been responsible for the design of several Alila properties and owns **Alila Villas Soori** in Bali.



Alila Ubud



Alila Manggis

Six Senses Resorts, based in **Bangkok** and owned by husband and wife team **Sonu Shivdasani** and **Eva Malmstrom**, is one of the most important operators in Asia and passionately devoted to sustainability and achieving what they call “**decarbonizing**” for both new and existing properties. This is a much tougher target than what carbon neutrality means to most of us. With decarbonizing they consider not only their own direct/indirect emissions from energy (scope 1 & 2), but also indirect emissions such as air travel (including guests’), ground travel, freight of products, waste and water (scope 3). It’s a noble goal and they seem committed to achieving it. (Currently only 12% of the enterprise emissions are from energy and 84% are from air travel. To achieve decarbonizing they must achieve significant net negative carbon emissions, largely by producing more clean energy than they use to mitigate their guests’ air travel emissions).

In addition, the firm contributes between half a million and a million dollars annually to their Social and Environmental Responsibility Fund. They are planning to achieve **Green Globe 21** standard in all properties and are working with Green Globes to establish sector benchmark indicators for the spa asset class. The company has also established its own internal system called **Hit List**, which is a set of green standards that are applied to every property and monitored monthly.

One of Six Senses partners in working toward decarbonizing is the British engineering firm **XCO2** who have been working with them on their property in the Maldives, **Soneva Fushi Maldives**. XCO2’S approach was to first develop low-cost, innovative energy efficiency solutions before utilizing a range of low-carbon energy systems applicable to the use and location of the resort.

(The Maldives is a country where climate change concerns are very unambiguous: It’s only 8 feet above sea level at its highest point). First efficiency at the resort was improved to the maximum possible. Then low-and-zero-carbon technologies were implemented. These include a deep seawater cooling system that brought in water at 12°C from 300 meters deep for building air-conditioning and a heating network to distribute heat from existing generators (converted into combined heat and power (CHP) plants).

(The deep seawater cooling system ultimately failed, partly because at only 300 meters deep the water was not cold enough but primarily because the intake pipe rose to the surface). But the firm has not given up: Between Soneva Fushi, **Soneva Gili** (also in the Maldives) and **Six Senses Zighy Bay** in Oman a fund has been established, supported by a two per-cent carbon tax that is automatically added to every bill, a first in the industry. \$1.7 million has been raised from this surcharge thus far and this money has been used transparently to build a 1.5 MW wind turbine in Southern India to replace coal-fired power stations, managed by **The Converging World**. This wind turbine will mitigate 70,000 ton CO2 directly and as well as mitigate another 30,000 ton through local community projects. With this contributing Soneva Fushi has mitigated all of its carbon emissions (including guest flights) by enabling a real carbon-reducing project rather than buying offsets

Six Senses currently manage 20 spas and 30 resorts worldwide including the spectacular **Evason Phuket** in Thailand, owned by **Indochina Capital**.



Soneva Fushi Maldives

Six Senses' future plans include large-scale systems that will further reduce their emissions and provide free energy to local populations along with local and reliable offsetting of guests' flight emissions. The predicted carbon reduction for the Maldives property alone is 3000 tones of CO2 per year. Their goal: enterprise-wide decarbonizing by 2020, Soneva Fushi decarbonizing by the end of next year.

(**Green Globes note:** Canada's own **Jiri Skopek** of **Jones Lang Lasalle** was the creator of **Green Globes**).

Green Globes: <http://www.thegbi.org/> and is the US licensee for this standard, as well as

BOMA BEST (based on Green Globes for **existing** buildings) and

Green Globes: <http://www.greenglobes.com> - primarily for new construction in Canada, although some existing buildings – lodging assets specifically - have worked with Jiri and the Green Globes Hotel module. Specifically: the **Palmer House** in Chicago, owned by **Thor Equities** (headed up by **Joe Stitt** of the **Coney Island** redevelopment fame) and operated by **Hilton**, and the **Sheraton** in Shanghai.

Green Globe started as **Green Globe Action 21**, an organization to green the tourism industry as a whole, but it has gotten into building greening standards now also, creating some confusion. <http://www.greenglobe.com/media.html>, <http://www.greenglobe.org/> Some of the confusion is addressed at: <http://www.greenglobeint.com>)

Europe

Lefay Resort and Spa, Lago di Garda is near Gargnano Italy, about halfway between Venice in the east and Milano in the west, on Lago di Garda. Spectacularly beautiful, the calm exterior belays the rigorous attention to sustainability in all aspects of the property's operation. The buildings were integrated deeply into the hillside to provide natural insulation. The power plant at the back of the house is comprised of 3 main works: biomass, micro-turbine co-generation and absorption cooling. (The absorption cooling plant uses heat exhausted from the other two energy sources). These 3 plants provide 90% the energy, heating and cooling requirements for the property with a methane-powered generator providing the other 10% (and back-up if required). The property estimates that they are saving over a ton of carbon emissions a year.

(**Wellness note:** Because of the operator's belief that to achieve total wellbeing, exposure to electromagnetic fields must be avoided, every possible effort has been made to dramatically reduce, if not eliminate, all sources of electromagnetic pollution).



Lefay Resort and Spa

Central America

Costa Rica's lodging owners and operators realized the economic potential of greening their assets early and the country has been at the forefront of best practices by working to educate the average Costa Rican about how important the sustainable tourism industry is to the nation's overall economic development. And, it's working: Tourism is now the largest grossing business in the country with "sustainable tourism" by far the largest segment of the industry: <http://www.turismo-sostenible.co.cr/en>.

One of the best-established and most sophisticated of the many Costa Rican eco-lodges choices is **Pacuare**, owned by **Roberto Fernandez** and **Daniel Peyer** of **Costa Rica Adventure Tours**. The property generates its own power via a water-driven turbine, using no fossil fuels. Fernandez and Peyer recently acquired an additional 260 hectares of land adjacent to the property because it was threatened by deforestation.

Every aspect of the operation of the lodge as well as the operation of the tour company is designed to minimally impact the natural flora and fauna around it. The wood for the lodge itself could have been cut from the rainforest wood on the property but instead was purchased from a sustainable reforestation project - **Centro de Diversificación Agrícola de Turrialba** - operated by and benefiting small local farmers.

The company's community support programs have gained international recognition. One such program, designed to teach the value of protecting the indigenous orchids of the area, is having a positive impact by decreasing the amount of illegal harvesting of the flower. The lodge has no electricity, with light being supplied for staff and guests by candles and torches. The lodge has a full-time naturalist who works with both guests and locals to raise awareness about the importance of protecting native plants and animals.

The best-known eco-lodge in the country is probably **Lapa Rios**, owned and managed by **Cayuga Hospitality**, the leading Costa Rican lodging owner/manager. Cayuga achieved recognition twice in 2010. **Condé Nast Traveler** called them "The World's Most Socially Responsible Small Hotel Chain". And **Travel and Leisure** honoured them with an Environmental Leadership award.

By working with the community through education about protecting the rainforest-covered Osa Peninsula (where the lodge is located) and paying fair wages, they have created a new economic option for locals and an alternative to illegal hunting and logging. And the results are already beginning to be seen: The area's big cats, macaws and monkey are rebounding. (Guests can help researchers set cameras to track animals' behavior and population density).

Cayuga also manages several other great Costa Rican properties, all reflecting a deep commitment to green practices. They include **Finca Rosa Blanca Coffee Plantation & Inn**, chosen by **The Rainforest Alliance** as "Sustainable Standard-Setter 2010" and **Arenas del Mar**, winner of 5 leaves (the highest level) from **Turismo Sostenible** of Costa Rica. The property uses solar to heat their water, has buried all electrical cables so as not to interfere with wildlife, uses ionization to clean pool water, has energy-efficient lighting throughout, uses low-flow toilets, has roof tiles made of discarded banana bags and a hydroponic garden on the property and permits only electric cars onsite.



Arenas del Mar



Finca Rosa Blanca Coffee Plantation & Inn

The Caribbean

Jungle Bay Resort, Dominica: The 35 cottages, restaurant and main lodge have been built from local forest and use solar energy for power. Locals are trained and employed and food is obtained as much as possible from local farmers and fisherman. This has had a measurable effect on the local quality of life: one of Dominica's most disadvantaged areas is becoming one of the most prosperous.



Jungle Bay Resort

Tiamo, Bahamas:

This spectacularly beautiful 11-bungalow resort on South Andros Island uses less electricity per month property-wide than an average American home. One of the smallest tropical resorts in the world, it has room for only 22 guests in 11 hand-built beach cottages set on 12 acres of beach front surrounded by 125 acres of preserved wilderness. All energy is provided by solar power (more than 130,000 watts). The property boasts one of the largest solar-generating systems used by a private tourism facility anywhere in the region. **USA Today** called Tiamo one of the "10 great places to tread lightly on earth".



Tiamo

Bucuti & Tara Beach Resort, Aruba, owned by **Ewald Biemans**, is the first hotel to achieve **Green Globe 21** certification in Aruba (10 years ago) and the first resort in the Americas to be certified **ISO 14001**. The property has the lowest per-occupied-room electricity usage in the country. Solar water-heating is used, sink and shower water are used in the gardens and disposable cutlery is not used at all. Inline UV lights from **Berson** in the Netherlands have been installed on all incoming water supply lines. (Berson's closed-vessel UV disinfection systems are the first in the world to be validated for wastewater reuse by the **National Water Research Institute** in the USA. The medium-pressure systems have also been approved for wastewater reuse by the **California Department of Health Services**). The resort sponsors a sea-turtle protection program and a donkey sanctuary. They also offer a way for guests to offset the carbon generated by their flight to Aruba through **Native Energy**. The eco-thinking is top-down, deeply embedded and ongoing. The property has a truly impressive list of greening practices in every part of the operation and has won the prestigious **Caribbean Hotel Association Environmental Stewardship Award**.

Mexico

Enchanting Group who are in the spa and wellness industry, own and manage several properties where the focus is a connection to nature. The tagline for **Azulik**, their adults-only resort near Tulum on the Riviera Maya, is "unplug". And they mean it: there is no running water, no electricity, no telephone and no gas power. The tiny 15-room property features bathtub troughs carved out of rock faces and rooms crafted from local wood.



Azulik

The U.S.

Individual, one-of-a-kind properties and small operators continue to make big strides in greening their assets. From east to west:

Inn by the Sea near Portland Maine is the first hotel in Maine to heat with bio-fuel and the first hotel in Maine to be carbon-neutral thru offsets (since 2007), among many other "firsts". The gorgeous property, including spa, continues on its "Green Path" with innovations like CFL's and LED lighting, lights on timers, air to air heat exchangers, dual flush toilets, recycled sheetrock walls, recycled rubber floors in the cardio room and solar and biofuel heating.

It has 5 wild acres on the property designated by Maine's Department of Environmental Protection as an Official Wildlife Habitat and Butterfly Waystation. The Inn has maintained an indigenous landscape for over 9 years that is not only beautiful but saves water and is healthier for guests because indigenous species are hardier and require less water and no chemicals. The Inn's head gardener gives garden tours and classes on how to have "ever-blooming" gardens that also create habitat and food sources for wildlife as well as children's "Bug's Life" classes where children create bug costumes and learn about eco systems from a bug's viewpoint. They also learn a great deal about the fascinating endangered Monarch butterfly and are given milkweed seeds to plant at home. The publicist for the property advises that *these* are the "amenities" that are mentioned again and again in comment cards and on Trip Advisor.

She adds: "The garden classes are hugely popular, add great value to a guest stay and speak volumes about our sense of place and commitment to sustainability without talking about recycling, low VOC paint and LED bulbs – much more fun for guests on vacation. It all attracts publicity and media stories that help us put heads in beds".



Inn by the Sea

These green properties also enjoy meeting business from firms who have a stated mandate to green their enterprise. While providing water in pitchers and serving condiments in bulk help to “green” meetings (and save money), savvy meeting planners are digging a lot deeper when choosing a venue. Does the property use any renewable energy? What kind of lighting is in place? Are they partnered with an organization that will let us offset the carbon created by holding the meeting? Properties like Inn by the Sea and the **Proximity Hotel** (below) are offering a deeper green advantage.

The **Proximity Hotel** and the **Printworks Restaurant** in Greensboro North Carolina are the first LEED Platinum-certified hotel and restaurant in the US and use 40% less energy than the industry average. The hotel/restaurant has a list of green features and practices far too numerous to mention, notably: solar power, reclaimed building materials, high-efficiency **Kohler** plumbing, operable windows and low VOC materials. Geothermal energy is used for the restaurant’s refrigeration equipment, saving significant amounts of water. Eighty-seven percent of construction materials were recycled, diverting 1500+ tons of debris from landfill. The hotel boasts North America’s first **Regenerative Drive** model of the **Otis Gen2** elevator, which reduces net energy use by capturing its own energy and feeding it back into the building’s internal electrical grid.

Here’s info on the Otis product:

http://www.otis.com/site/au/OT_DL_Documents/OT_DL_DocumentLibrary/GeN2Premier2%20Product%20Information/Regenerative%20Drive%20-%20Sep2010.pdf

Here’s a new link showing real time energy-saving numbers at the hotel: <http://www.proximityhotel.com/energy/one.htm>

Sandpearl Resort in Clearwater Beach was the first hotel or resort in the U.S. to achieve LEED certification and the work to make the property more environmentally friendly never stops. Developed by **JMC Communities** and operated by **Coral Hospitality**, it has an encyclopedic list of green design features including chilled water AC, heat recovery exhaust, in-room temperature management, common areas thermal comfort, ozone-assisted laundry, geothermal heating for the pool and low VOC materials throughout.

El Capitan Canyon Cabin Hotel near Santa Barbara offers deluxe simple cedar cabin or safari tents grouped in small “villages” on their car-free property. (Cars must be parked outside the perimeter of the property with electric vehicles and bikes available on site).



El Capitan Canyon Cabin Hotel

The watershed-specific, “Native Vegetation Enhancement Project” creates or reestablishes the riparian buffer zone with native plant biodiversity. At their onsite nursery, plants are grown from hand-collected seeds, cuttings and transplanted propagates of local canyon stock. Trees uprooted by winter storms are made into furniture onsite and the large pool is heated with solar energy. There is an onsite naturalist who conducts nature walks and courses are taught about the indigenous peoples who once lived in the canyon.

An interesting collaboration between two developers (**Lowe** and PacTrust) and one manufacturer (**Jeld-Wen** windows and doors) has resulted in the LEED-certified **Suncadia Resort** in Washington State. The property was designed by **HKS Architects** - one of the world’s leading “green” design firms according to **Building Design and Construction** magazine. HKS is also responsible for the design of the award-winning **Cliff_Hanger Hotel** in response to a call-for-entries for 2010’s **Radical Innovation in Hospitality awards**. (See below)

One of the responses to the **John Hardy Group** and the **Hospitality Design Group** call for entries for 2010’s **Radical Innovation in Hospitality awards** is the amazing **Cliff_Hanger Hotel** by **Edward Abeyta**, AIA, LEED AP of **HKS Inc.** Dallas. The design for the hotel is based on the concepts of suspension in space using vertical, structural truss suspended with tension rods that can be easily secured (or removed, removing all traces of the hotel and human impact on its environs when it is gone) immersion in environment, a sufficient solar array to power the entire property and a modular design that can be replicated in many locations.



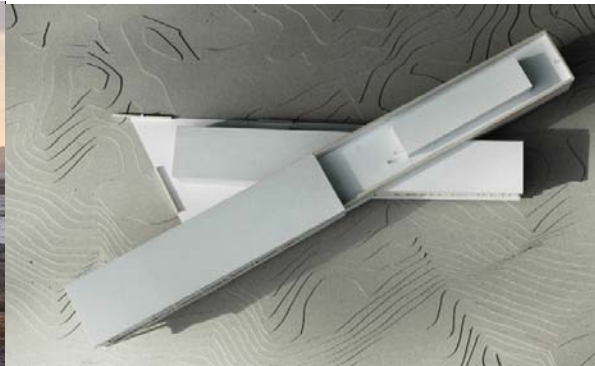
Cliff_Hanger Hotel

Canada

Fogo Island Inn is part of an exciting new series of structures being designed by **Sauders Architecture** and built by the **Shorefast Foundation**. The nearest airport to Fogo Island is in Gander Newfoundland. You drive about an hour to Fairwell where the ferry to Fogo Island and Change Islands leaves the mainland. It's rugged, beautiful country. The Inn will be a 5-star, 29-room wooden structure in complete harmony with its environment and include a sauna and spa, library, movie theatre and independent art gallery. All profits from the hotel, studio and other entities will go back into the Foundation. Rock-turning was this past September and the Inn is scheduled to open in 2012.



Fogo Island



Model of Fogo Island Inn

The Fogo Island Arts Corporation is a sister entity that is making an investment in what is literally one of the four corners of the world. The hope is that, when completed, this project will deliver much more than economic payback; but will ensure the very survival of the Fogo Island community. The first of six studios opened this summer, four more are scheduled to open next spring and the sixth one in the fall of 2011. The studios are placed on pillars at the end towards the sea, while the entrance area has a small concrete foundation for anchoring the construction to the landscape. With this type of construction, the studios can be placed in almost any place on the island. In addition, this allows for the studios to be pre-fabricated in a local workshop during the winter months, and then placed in the landscape in the spring. Artists, curators and film-makers invited to take part in the Residency Program.



Renderings: Long Studio, Fogo Island

The **Clayoquot Wilderness Resort** is about as far away from Fogo Island as you can get and still be in Canada. Comprised of just 20 luxe guest tents in the Clayoquot Sound Biosphere Reserve Area North of Tofino on Vancouver Island, it's one of the best intact examples of temperate rainforest left on Earth. All aspects of Resort operations are low-impact. The Resort works closely with the **Nuu-Chah-Nulth First Nation** people, as well as local, regional and federal governments in developing sustainable, environmentally responsible development and environmental enhancement programs that benefit all and its Environmental Legacy Programs include Salmon Stream Restoration, Bear Habitat mapping, wildlife studies and First Nations Programs.

The resort is owned by the **Genovese Family Trust** and developed from the vision of **Richard Genovese**, a Toronto native and Western University graduate. Richard did stints at Scotia McLeod (then McLeod Young Weir Ltd), Merrill Lynch in Calgary and Cannacord in Vancouver (then Canarim). In 1998 he created his own VC firm, **Connect Capital**, and bought 160 acres of shoreline, putting it into a family trust.

This led to the establishment of Clayoquot Wilderness Resort and the Clayoquot Wilderness Resort's Environmental Legacy Program – which every guest of the Resort supports through a donation added to their lodging fee.

The property is managed by **John Caton**, an ex-manager of bands like Prairie Oyster and Blue Rodeo and one-time realtor from Brampton. His life changed permanently when he had a massive coronary at age 39 and subsequently took over the helm of Clayoquot.



Clayoquot Wilderness Resort

International

Canada's own **Fairmont Hotels** are leaders in every aspect of lodging management – including environmental initiatives. Their **Green Partnership** program, continually updated and renewed, is the universally-acknowledged standard in lodging sustainability programs. Fairmont has been deeply committed to enterprise-wide greening since 1990. The Green Partnership Program has grown to become one of the foundations of the firm's operational strategies and extends to almost every sector of the enterprise; from waste management and water conservation measures to lighting retrofits, endangered species protection and partnerships to develop responsible travel practices internationally.

They have dared to tackle issues where most lodging organizations have feared to tread. One example: the golf course. Their **"Greening our Greens"** program is one of the first and best in the industry. They have partnered with **Audubon International** and are working to take a sensitive approach to the stewardship of all of their recreational land, including their world-class golf courses. This includes reducing pesticide use, conserving and testing water and optimizing the use of golf course green space as a refuge and habitat for wildlife. All Fairmont-managed golf courses are enrolled in integrated environmental management programs with Audubon International and to-date seven Fairmont-managed courses have achieved full certification in the **Audubon Cooperative Sanctuary System**.

Fairmont has been transparent about many of their best practices and thus deserve additional credit and our support for helping to move the entire industry in a greener direction. One example: A typical occupied hotel room use 218 gallons (825 liters) of water daily. Fairmont's program to replace all fixtures with higher-efficiency models is delivering an average decrease of 31% in water use by those properties that have been retrofitted.



Fairmont Royal Pavilion Barbados



Pittsburgh Fairmont

The spectacularly beautiful **Fairmont Royal Pavilion Barbados** was recently honoured by the prestigious **World Travel Awards** as the Caribbean's greenest hotel for 2010 and the **Pittsburgh Fairmont** has achieved LEED certification.

National Geographic Traveler called Fairmont's Green Partnerships program: "The most comprehensive environmental program in the North American hotel industry."

Starwood's new **element** brand is providing an option for longer-term stays. It has mandated in minimum of LEED Silver certification for every property and of the nine hotels in the US opened thus far, the properties in Denver and Houston have succeeded in achieving the LEED Silver rating.

The **Riverfront Resort & Spa at Beaver Creek Mountain**, a **Westin**-operated property near Vail and part of the Starwood organization, was recently awarded LEED certification. Surprisingly, it's the only Silver LEED-certified resort in Colorado.

Hilton made a public a 5-year greening plan beginning in '09 for the following reductions from direct operations: Energy consumption, CO2 emissions and waste output: 20%; Water consumption: 10%. In April, Hilton Worldwide unveiled **LightStay**, a proprietary system developed to calculate and analyze environmental impact. LightStay helped the properties using the system reduce energy use by 5 percent, carbon output by 6 percent, waste output by 10 percent and water use by 2.4 percent in 2009 versus 2008. These results have been independently audited and are adjusted for any differences in occupancy levels and major weather events year over year. I've contacted their international director of sustainability for details and some metrics and will report back with these in the next column.



Intercontinental Hotels has updated "**Innovation Hotel**" which I have referenced before in this column. Check it out: <http://www.ihgplc.com/innovation>. Their **Intercontinental Times Square**, designed by **Gensler** and featuring floor-to-ceiling windows, is the largest hotel in NYC to have received LEED certification.



Innovation Hotel

San Francisco-based **Kimpton Hotels** has been aggressively pursuing a greener operations platform enterprise-wide. According to their mission statement, their goal, through their comprehensive **EarthCare** program is: "To support a sustainable world, and reflect the values of our employees, guests, and investors, by using non-intrusive, high quality, eco-friendly products and services at all Kimpton hotels and restaurants." They operate about 50 properties North America and more than half have received **Green Seal** certification.

Perhaps the greenest thing about Kimpton is that their corporate history reflects the truism that: "**The greenest property is the one that already exists**".

They have restored and revitalized a great number of architecturally important properties in North America – office buildings, department stores, switching station and other commercial properties – bringing them back to modern green operational standards. If, like me, you are passionate about adaptive reuse, it's a good idea to look for a Kimpton property if you are travelling to a major American city. Just a few examples:

Hotel Palomar, Philadelphia: The city's historic **Architects Building**, a striking example of Art Deco architecture, was painstakingly renovated to incorporate its original decorative elements including the penthouse ballroom and its original crown molding, the exquisite AIA Library, the ornate etched elevator doors, and the original chandeliers. This elegant example of adaptive reuse is also Kimpton's first LEED Gold Certified hotel.

Hotel Monaco, Washington DC: This hotel occupies what was once Washington D.C.'s General Post Office - one of the first Federal buildings in the United States, constructed in 1839 by **Robert Mills**, the same architect who designed the Washington Monument. The **Pony Express** was conceived and launched here, and the building was turned into a hospital during the Civil War. It was the first marble structure in Washington, a tour de force of neo-classical design. Kimpton preserved the architectural beauty, quality and grace of this landmark building.

Hotel Monaco, Baltimore: This grand structure was once the **B&O Railroad** headquarters. Designed by **Parker & Thomas**, this fabulous building opened its doors in 1906. Kimpton preserved the Belle Epoque exterior and interior; restoring the original Tiffany stained-glass windows, marble floors, and gorgeous staircases.

Argonaut Hotel, San Francisco: This property is in the historic **Haslett Warehouse**, part of the old **Cannery** complex. The original building was constructed in 1907 as a fruit and vegetable canning plant, which the **Del Monte Company** eventually made into the largest peach canning facility in the world.

Hotel Monaco, Portland: The 1912 building was once the home of the **Lipman Wolfe Department Store** and the design team has preserved and restored many of the original Edwardian elements of the property – such as the ceilings and picture windows in the lobby.

Alexis Hotel, Seattle: Built in 1901, the property is listed in the National Register of Historic Places. It was once known as the **Globe Building** and was the first building *not* to be consumed by the Great Seattle Fire of 1889. (The fire destroyed 33 city blocks and came to a smoldering end right across the street). You can see some of Seattle's early storefronts, now part of "Underground Seattle," in the hotel's underground parking structure.

Hotel Monaco, Denver: This hotel was recreated from two historic buildings: the 1917 **Railway Exchange Building** and the Art Moderne **Title Building**, described as the "first fully modernistic building in Denver" when it was completed in 1937. Both of the original buildings were designed by the Canadian-born **Fischer brothers**, who arrived in Denver as adolescents and went on to establish one of the oldest and most prestigious architecture firms in the Rocky Mountain region.

Hotel Monaco, Salt Lake City: The **Continental Bank Building** was completed in 1924. It was 13 stories tall, but only three bays wide and housed the first drive-through bank in America. The original bank teller windows now enclose the corridor and lobby of the hotel restaurant.

Hotel Burnham, Chicago: The steel and glass **Reliance Building**, considered radical when it was built, was designed by architect **Daniel Burnham** and set the precedent for the modern skyscraper. (Burnham is famously quoted as having said: "**Make no little plans. They have no magic to stir men's blood and probably will not themselves be realized**").

Built in 1895, it was considered highly futuristic and was one of the first buildings in the United States to have hydraulic elevators. It fell into disrepair until 1999, when the City of Chicago created a unique public-private partnership between developer **Michael Reschke** of the **Prime Group** and Kimpton.

(**Retail note: BLOCK 37**, the much-touted mixed-used property that was to feature number of flagship retailers, was to open directly across the street, but has been plagued with legal problems – most particularly the legal battle between developer **Joseph Freed & Associates LLC** and **Bank of America Corp**).



Hotel Burnham

Another great example of adaptive reuse is the new **Marriott** property in Chicago – the first Marriott-branded hotel in the windy city. Chicago boasts a number of **Daniel Burnham**-designed buildings (see **Hotel Burnham** above) and this Marriott has been established in a revitalized Chicago treasure: the Continental & Commercial National Bank Building in the Financial District (also called The Loop). The \$396 million restoration was financed by Denver-based Sage Hospitality. Sage employed Chicago-based architectural firm **Lucien Lagrange & Associates**, masters of adaptive reuse.

Two other notable Lucien Lagrange & Associates transformations in Chicago:

-The Classical Revival Beaux Arts **Marshall & Fox**-designed masterpiece **The Blackstone Hotel** - also a Marriott-managed property And

-The landmark 1920's Art Deco masterpiece the **Carbide and Carbon Building** re-imagined into full-service modern **Hard Rock Hotel**.

Lucien Lagrange & Associates also transformed Burnham's office building at **155 West Jackson** and are working on a third Marriott property in Chicago: The Burnham-designed **208 South LaSalle** banking tower, built in 1908. They will maintain the 3-story glass curtain and the 155' x 54' central open light court above a barrel-vaulted skylight.

(Architecture note: Master architect **Lucien Legrange** was educated in Canada at **Sherbrook University** and studied architecture at **McGill**. There is a great interview with him on the McGill Alumni website:

<http://www.mcgill.ca/architecture/aluminterviews/lagrange/>.

Lucien Legrange filed Chapter 11 documents this past summer and has retired from practice).

(Water heating note: Marriott's Florence Alabama **Residence Inn** property was recently renovated. The original reno specs called for a pair of 750-gallon, 750,000 BTU/hour boilers, each measuring 5' x 12'. The problem was that, although the mechanical room could hold the equipment, it left just inches of clearance between the units and the surrounding walls. This meant that if there was ever a servicing issue, both units would have to be pulled out – leaving the property without hot water until maintenance was finished. The new contractor suggested that the owner of the property consider **tankless water heaters** instead. (Tankless water heaters – particularly the Noritz brand - have gained a great deal of exposure during the post-hurricane rebuilding efforts in Greensburg Kansas). Unlike a boiler, a tankless heater does not heat and reheat water all day. Instead of using 1.5 million BTUs to keep 1500 gallons of water heated 24/7/365, tankless units work in sequence, firing one by one as required. When requirements are met the units turn off or down, minimizing energy use.

The water heaters were re-specified and 17 wall-hung Noritz gas-fired tankless heaters were installed, 12 for the rooms and 5 for the common areas. The aggregate output is nearly 3.4 million BTUs with a turndown ration of over 300 to 1, meaning peak demand can be met and light-demand times cost less).

Marriott recently launched a new brand for upscale properties called **The Autograph Collection**. Of these, 3 newly-branded properties are great examples of older hotels that have been restored and rejuvenated while the original building has been left intact. These are the **Casa Monica** in St. Augustine Florida (built in 1888), the Romanesque **Mansion on Forsythe Park** (also built in 1888) and the iconic **Algonquin** in New York, built in 1902 and home to the famous "round table" that included Dorothy Parker, Robert Benchley and George S. Kaufman.



Mansion on Forsythe Park

Delaware North is a hospitality and lodging management company responsible for properties as diverse as **Meadowlands Stadium** (home of the **New York Giants** and the **Mets**), the **Queen Mary** and **Yosemite National Park**. They have an enterprise-wide commitment to sustainability that they make transparent every year in their outstanding Corporate Social Responsibility Report.

We are extremely fortunate in Toronto because we share the city with owners and managers like **Allied Properties REIT**, **401 Richmond**, **Context Development**, **Queen Street Partners**, **Cadan**, **Woodcliffe Landmark Properties** and **Cityscape** and architects like **Quadrangle**, **Linda Chapman**, **E.R.A.** and **Joe Lobko Architect Inc./Du Toit Architects Limited** who are breathing new life into our heritage buildings in creative and viable ways.

For a reminder of what can happen when we don't preserve our built environment, take a look at the new book by **Yves Marchand** and **Romaine Meffre** called "**The Ruins of Detroit**". It's visual record of what has been called "Detroit's beautiful, horrible decline". Look at it and be grateful for those working so hard to preserve our architectural heritage.



David Whitney Building, Detroit



United Artists Theatre, Detroit

Whether you are planning a fast business trip to New York or Montreal or an extended family getaway, consider the impact on the environment that your trip will make and give consideration to properties that give consideration to the planet. You won't regret it.

Some references:

National Geographic Traveler's Stay List: <http://www.sustainablebc.ca/>

National Geographic Sustainable Tourism Site: http://travel.nationalgeographic.com/travel/sustainable/about_geotourism.html

The International Eco-tourism Society www.ecotourism.org

Eco-hotels of the world: www.ecohotelsoftheworld.com

EarthCheck: <http://www.earthcheck.org/>

Global Reporting Initiative: <http://www.globalreporting.org/Home>

Renewable Energy and Energy Efficiency Partnership: <http://www.reeep.org/>

EC3 Global: <http://www.ec3global.com>

UN Foundation for Sustainable Tourism: <http://www.unfoundation.org/global-issues/sustainable-development/promoting-sustainable-tourism.html>

World Heritage Alliance:

http://www.wha.coursehost.com/groups/config/portalpage.asp?pgpk=29846&LID=1&ky=d_BPDiQVRgHzDiPRUmf_DgHzP8bOR7Pz

Global Reporting Initiative: <http://www.globalreporting.org/AboutGRI/>

Green Key Eco-rating Program: http://www.greenkeyglobal.com/site/about/gk_ratings.htm

Eco-Tourism Kenya: <http://www.ecotourismkenya.org/facility.php>

World Tourism Organization: <http://unwto.org/en>

World Travel Awards: <http://www.worldtravelawards.com/winners>

Green Seal: <http://www.greenseal.org/FindGreenSealProductsAndServices.aspx>

(U.S.) National Water Research Institute: www.nwri-usa.org

Native Energy Carbon Offsets: www.nativeenergy.com

The Converging World: <http://www.theconvergingworld.org>

Four ideas for your consideration:

Hydration and Charging Stations and the value of Coat Hooks and Bigger Sinks

Pandemic Prevention and Health Promotion through Increased Hydration

It's being predicted that the **H2N3 virus** will be more virulent, more dangerous and longer-lasting than last year's H1N1 disease. Anything that we can do to support the health of our colleagues, employees and tenants and reduce the spread of germs should be a top priority. Here are a few ideas:

In the Nov/Dec 2010 issue of **Commercial Building Products** magazine there is an article on **infection control** that mentions a study done in Toronto that examined why - in an unnamed hospital - 36 patients became infected with a highly opportunistic, multi-drug-resistant pathogen. Of 36 patients infected, 17 died within 3 months.

The article details the many infection-control measures that were taken before the cause of the infection was identified. While these measures halted the infection for a short time, the outbreaks continued and continuous surface disinfection protocols had no lasting effect on the eradication of the bacterial colonies.

Hand-hygiene sinks were found to be the most contaminated areas. It was eventually determined that **splashing** from the sinks was the source of the patient contamination. Water from the sinks splashed as far away as 3 feet. The article concludes that both **sink placement** and **sink design** are crucial in the design of hospital rooms.

What can we in the entire commercial property industry take from this? If one is responsible for the design of new washrooms or the redesign of existing facilities, it might make sense to consider **deeper, wider sinks**.

Just as we should be thinking of **raising and extending all faucets** and installing **hydration stations** wherever possible; perhaps we should be thinking of all sinks, not simply as basins, but as **Bacterial Containment Units**.

While thinking about improving and upgrading washrooms and preventing infection, may I add a personal plea for **hooks** – lots of them – in our commercial building washrooms?

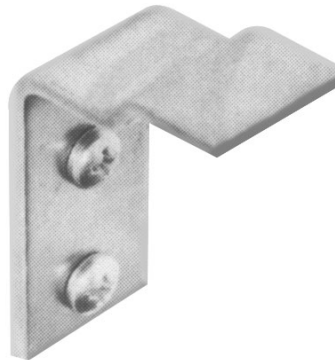
People - especially female people - carry **stuff**. That's a fact. Another fact: it's cold in Toronto 6 months of the year. People wear coats and scarves and carry bags and purses. It's unpleasant and unsanitary to place any of these on the floor or on the sink counter. For those of you making washroom decisions: Please – Consider adding additional hooks outside of the cubicles.

My guess is that a lot more - and a lot more *thorough* – hand-washing would go on if people were not trying to keep coat sleeves away from soap dispensers, attachés off of floors and purses off of wet counters.

You will be doing a great service to us all and will definitely be helping to prevent the spread of infection and disease.



Dolphin Stainless Steel Hook and Doorstop



Bradley Stainless Steel Clothes Hook



Allgood Powder-coated Clothes Hook

A Hydration Station that is changing the world

While some of us are blessed with an unlimited supply of drinking water, more than 1 billion people worldwide lack access to clean water. **Daniel H. Whitman**, a Chicago architect and social entrepreneur formed **GlobalTap** in 2008, a for-profit social enterprise with a dual mission: to sell and install **tap-water-refilling stations** in public places in North America and Europe, and to use the revenue from this business to fund badly needed water projects in developing countries. It's a sustainable model for doing a lot of good in a smart way and the delivery mechanism is beautiful.

The unit itself, designed by world-renowned designco **IDEO**, is a slim 5-foot-high steel stem with an bent-elbow-shaped arm holding a nozzle that directs a stream of water into the bottle when a button is pushed. About \$3700 each, the first installations were in **Yerba Buena Gardens** in San Francisco, with the blessing of the mayor, the environmental department, and the public utilities commission.



GlobalTap Hydration Station designed by IDEO

Many green updates at the newly renovated **Terminal 2** (now called **T2**) at San Francisco airport were driven by **Virgin Airlines**, who is using the terminal as its hub and sharing the space with **American Airlines**. The terminal, designed **Gensler** and built by **Turner** is expected to achieve LEED Gold when it opens in a couple of months with a plan to subsequently go for LEED Platinum certification. It offers a variety of sustainable features. Most importantly it will connect to the Bay Area Regional Transportation System (BART) directly, so that both employees and travelers can easily travel from airport to city on mass transit.

The 14 custom-designed **hydration stations** at the airport consist of a hands-free water faucet and a low pan set into a millwork counter. They were created out of the following component parts:

Houzer Zero-radius under-mount trough CTB4285

Zurn AquaSense Sensor Fawcett Z6920-ACA

Everpure H-1200 filtration system

And

Haws HCR8 Chiller

Virgin's CEO **David Cush** said that the plan is for T2 to "...serve as a model for sustainable airport design around the world." Virgin has won both Conde Nast Traveler and Travel and Leisure magazine's "world's best airline" and "world's greenest airline" awards for 3 consecutive years. Here are the links: www.globaltap.org <http://www.ideo.com/work/water-bottle-refilling-station>

BRITA Hydration Stations by **Haws** are available in surface mount and recessed mount models. The Model **2000SM** surface-mount units are easily installed in existing buildings: all that is required is a 120-volt outlet and an existing 3/8" water line and they will fit between 16" studs so that installation is easy with no cutting into walls. Its push-to-connect fittings make it completely solder-less. Connect to the water-source, 4 screws and it's installed.



Haws BRITA Hydration Station



Georgian College Hydration Station

They are a beautiful addition to any lobby or common area. Data continues to mount proving that that proper hydration does everything from increasing concentration to alleviating joint pain to helping the body resist infection.

Georgian College received international press as the first Canadian facility to install hydration stations at their Barrie, Ontario campus. Seven units have been installed thus far. (They elected to forgo the chillers, which many agree are unnecessary, thus saving about \$300 per unit). **Dianne Corrigan**, Environmental Sustainability Coordinator of the College, says that: "They have been very well received by students and staff..." and "There have been no problems with respect to their operation or maintenance".

The **University of Nevada** received similar coverage for their installation of the units.

What a smart idea for facilities, schools, offices and public buildings and what a beautiful way to show that you care about your tenants or employees. Here are the links: <http://www.britahydrationstation.com/docs/brita-hydration-station-8x11.pdf>
<http://www.britahydrationstation.com/docs/brita-hydration-station-spec-sheets.pdf>

One resource for information on these products: LEED-certified rep for **Dobbins Sales, Jason Boyd** jboyd@dobbinsales.com

Carbon Reduction by providing Charging Stations

Toronto's **Sheraton Centre Hotel** and **Le Centre Sheraton Montreal**, both part of the **Starwood** organization, have just introduced **ChargePoint®** networked electric vehicle (EV) **charging stations** from **Coulomb Technologies**.

They are the first hotels in Canada to offer the service. Guests of the hotels can take advantage of the properties' electric vehicles and the charging stations are being made available to the public also.

The charging stations are equipped with industry-standard SAE J1772™ Level II connectors and an industry-standard Level I outlet compatible with all kinds of electric vehicles including cars, buses, Segway scooters and bikes. They are managed by the ChargePoint® Network and provide EV drivers the ability to locate and navigate to charging stations and detect charging station availability from any smart phone or web browser. The system also facilitates EV trip mapping, driver billing, 24/7 driver assistance and greenhouse gas and energy savings (kWh) measurement.

Both properties have recently received a "**4 Green Key**" rating from the **Hotel Association of Canada**.

Starwood is installing similar systems in its **element** properties.



ChargePoint Charging Station

ChargePoint Network allows a station owner to set fees for use of their stations (including free charging) and allows drivers to access stations without a subscription via contactless credit cards. It also provides 24/7/365 telephone driver support via a toll free number on all charging stations. It is Smart Grid-ready with built in utility-grade-capable metering, time of use (TOU) pricing and demand-response (DR) control and offers multiple smart phone apps for finding charging stations. To download their iPhone app click here: <http://itunes.apple.com/us/app/chargepoint/id356866743>

We are so fortunate to live in this country. Every day as I have been writing this column it seems that another tragedy has stuck our neighbours south of the border. Unlike our U.S. colleagues, who have to think about a much higher level of security risk when developing and managing their buildings, our citizens are not *armed*. We enjoy the incredible triple luxury of a robust banking system, rigorous gun laws and universal healthcare; the lack of which are clearly three of the drivers of many of the crisis facing our U.S. colleagues. Let's take the energy and consideration that we do NOT have to bring to these trying issues to focus on making, managing and marketing better, cleaner, healthier buildings. There's no excuse not to do so.

Please note: The above information is based upon the results of research done for my own edification which I am happy to share with my CREW colleagues. It should in no way be construed as an endorsement by Toronto CREW, its members, or its sponsors.

Please keep me apprised of activities, developments, best practices and products that might be of interest to your fellow members. Contact me at karensisco@ksebiz.com 416-473-4711.

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