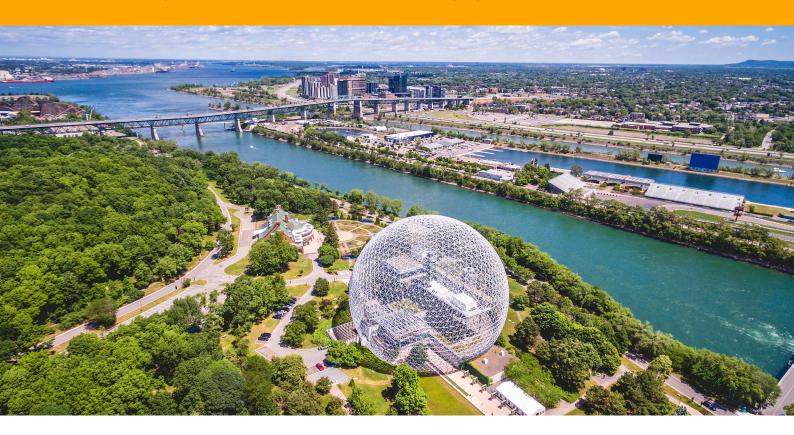




INDUSTRY REPORT

Canada: Sustainability in Hotels - from Expense to Profit

MARCH 2020



Introduction

The global environmental concerns relating to climate change, rising carbon emissions, global warming, rising sea levels, and increased sea surface temperatures, among others, are more and more at the forefront of today's concerns. Natural disasters stemming from the changing climatic conditions are increasing annually, if not daily, on a global basis.

These environmental issues cannot, and must not, be ignored and they remain one of the primary concerns within the tourism and hotel industries. Measures towards a more sustainable future are not just important, but critical. Sustainable development and operations within hotels thus form a large part of this equation.

This special market report aims to provide an overview of the sustainable practices in hotel operations and development, and their impacts on the profitability of real estate assets.

Please Note: This Industry Report was prepared prior to the current and on-going COVID-19 Pandemic.





Rising sea levels in Maldives

Impact of Climate Change on Tourism

Climate change has an immense impact on tourism and, in turn, affects hotel operations and development. Several climatic disruptions are having an adverse effect on tourism:

• Warmer Temperatures

Higher temperatures can lead to heat stress for tourists in warmer regions such as Asia, while also altering known seasonality patterns, thus affecting future demand patterns.

Rising Sea Levels

Prominent beach destinations, such as Miami, Waikiki, Florida, Maldives, and Bora Bora, for example, have all recently experienced rising sea levels which encroach the shorelines and beaches. Miami recorded an 8-centimeter sea-level rise between 1992 and 2015, potentially altering the landscape of Miami in the coming decade.

Floods

High precipitation in some areas has led to intense flooding, thus making normal tourist activities unmanageable. One of the key examples remains the flooding of Venice in 2019 that not only flooded chapels, museums and places of interest, but also flooded historical luxury hotels.



Great Barrier Reef

Damage to wildlife and marine life

Warmer temperatures have had an immense impact on the wildlife and marine life of several countries, with marine life disappearing in some regions. The most prominent example being the Great Barrier Reef in Australia, where increased sea temperatures have resulted the death of numerous reefs.

Water Shortages

Reduced precipitation in some areas over several years has reduced the availability of quality drinking and potable water, thereby directly certain hotel operations. A key example of this was Cape Town in 2018, and Los Angeles in 2012/2013, whereby only portioned water resources were provided for hotel guests.

Reduced Snowfall & Shorter Winter Seasons

Warmer temperatures and uncommon weather patterns (polar vortexes) have led to difficult snow conditions in some very prominent ski destinations. Such changes have resulted in shorter ski seasons at some of the world's most renowned ski destinations. Vail Resorts in Colorado recorded a 40% decrease in snowfall in 2019 as compared to the 1980's, effectively resulting in a shorter season, while a number of ski resorts in Europe have had to resort to making artificial snow in order to maintain their ski seasons.

Increasing temperatures and unstable to wavering weather patterns worldwide have had, and are continuing, to have an impact on tourism. Hotel operations and real estate are thus impacted, sometimes with serious consequences. Hotels are also suffering due to their sometimes heightened exposure to climate change.





Source: Rocport, TX, Sept 2017 after Hurricane Harvey made landfall.



Flooding, warmer temperatures, and lack of proper infrastructure, among others, all can have dramatic consequences directly affecting hotel operations. The following are some key examples of the strain such climate events place on the hotel industry:

Increased Room Demand

In March 2019, STR, in association with Hotel News Now, produced a research document highlighting the increased room night demand, where room night demand increased between 5% and 18% following a "billion-dollar climate disaster". Key examples include Texas (17.1% increase in room night demand following Hurricane Harvey - September 2017), North Carolina with 10.1% (Hurricane Florence in September 2018) and Alabama with 12% (in October 2018 with Hurricane Michael). These increases are often the result of hotels acting as first responders and shelters throughout many such events. On the flip side, many hotels in potentially impacted zones need to consider a number of factors, including whether they can operate off-grid for several days, provide adequate drinking water, and access the necessary staff and supplies, among others.

• Insurance Premiums

Larger and more frequent large-scale climate events are likely to cause insurance premiums within the hotel industry, among others, to increase. As such, while insurance premiums within certain region currently remain marginally affected, as they are typically based on historical performance, they could rise in regions that are more at risk.



Flooding in Venice

Higher Property Taxes

Several municipalities in Florida and Miami have already begun charging higher property taxes, in turn further straining the hotel's profitability. The higher taxes allow municipalities to increase infrastructure spending on such preventive measures as floodwalls, seawalls, and raised sidewalks, among others.

Strain on the Physical Real Estate

Wear and tear on the overall hotel building is typically higher following a major climate event. Hotels typically spend a lot on capital during the renovation of the property subsequent to a major climate event, while ongoing maintenance would potentially increase during and following such events.

Loss in real estate value

Climate risk and major events could lead to loss of real estate value over time for certain hotel assets. Increasing flood risks, hurricanes and increased sea levels could encroach on the actual available real estate of a hotel. As such, hotels in Miami, Hawaii and Florida, for example, could lose substantial value while hotels in the Maldives may cease to exist in 50 years' time. Based on research provided by STR and Hotel News, it is estimated that 100% of the hotels in Hawaii would be impacted should a 6 foot storm surge occur in Hawaii.

Change in Buying and Selling Attitudes

Hotel real estate, much like any other asset class, will be prone to loss in value over time, in typically higher climate risk neighbourhoods. REITs, institutional investors, and other investors, are currently analysing the perceived risk in such assets.





Holiday Inn and Holiday Inn Express bath amenities rolled out by IHG

Research suggests that within the medium term, assets that were once much sought after might become more affordable with a shorter holding period.

• Strain on Hotel Operations

Higher operational expenditures following a climate event are likely to put a strain on the overall profitability of a hotel. Hotels also suffer from a lack of supporting infrastructure, such as access to clean and fresh water, access to food and supplies, which are further are hindered during such events.

The aforementioned analysis presents a somewhat grim picture on the hotel industry during such trying times. However, there remains a glimmer of hope in that sustainable hotel operations and development would not only reduce the climate associated risk to the environment, but also increase profitability for the hotel owner.

Sustainability in Hotel Operations

Several hotel companies and individual hotel owners have embraced sustainable solutions within the day to day operations of their hotels. While almost every hotel company and brand have now stopped the use of single-use plastic bath amenities, we must ask ourselves what else can hotel operators do to positively impact current environment concerns? The following highlights sustainable operations trends within the hotel industry:

Energy Conservation and Reduction

Several hotels are reducing energy consumption by upgrading equipment with more energy efficient technologies. Key examples include using LED light fixtures that consume less energy, installing door key card systems that turn off electricity when key cards are



removed, installation of green roofs and solar heaters, turning down heating and ventilation in unoccupied rooms, and utilizing automated energy management systems in hotels, just to name a few.

Marriott International's team in Canada, with guidance from their sustainability platform – Serve 360, has now converted all their managed properties to LED lighting in all areas, reducing energy consumption from a standard 15-watt bulb to a 3-watt bulb.

Water Conservation

Every major hotel company has already implemented the line and towel reuse program; however, hotels are also using cleaner chemicals in cleaning products, allowing for reduced water consumption, and installation of low-flow faucets and showerheads that enhance water conservation, among others. A research paper by Dr. Sonya Graci** suggests that water conservation techniques, if properly implemented could reduce water related utility charges by 20% to 40%, potentially increasing a hotel's profitability. Many hotel properties now utilize a low flush mechanism in guestroom toilets, reducing water consumption from a 4 litre to a 1.3 litre per flush. For Marriott Canada, such water initiatives have allowed their managed properties to reduce their water usage by 9% between 2016 and 2019.

• Bath Amenities and Other Supplies

Several hotel companies, including Marriott, InterContinental Hotels Group, Hyatt and Hilton, have now pledged to stop the use of single-use bath amenities and reduce the use of plastic containers within all of their hotels in the next 2-3 years.





Popular Farm-to-Table restaurants and dining settings

Meanwhile, Hilton has committed to using only brown paper bags to deliver food and other supplies within the guest rooms. The move is likely to generate less plastic waste while increasing cost effectiveness in the long term.

Waste Disposal

Increased measures are now in place in order to improve waste recycling while reducing overall waste generated at hotels. Measures such as classification of different types of waste, proper disposal and recycling measures are seen both in the guestrooms as well as within the back of house areas in hotels. Pat Maher, the environmental consultant with American Hotel & Lodging Association, recently suggested that proper waste disposal techniques could trim waste disposal fees and charges by almost 50%.

Cleaning Products

For decades, Eco-lab has been supplying cleaning detergents that are low in harmful chemicals and safer for employees and the environment. This trend is likely to continue, with several other prominent companies supplying such products in the future.

Food Preparation

Local produce, farm-to-table approaches, hormone-free meat products, and the use of sustainable farmed produce has been "the focus" for several years now. What started off as a trend is now a key go-to sustainability practice within several hotel and restaurant establishments. Additionally, the farm-to-table approach also drastically reduces transportation costs of food & beverage, effectively reducing the overall food costs within hotel and restaurant establishments.



Source: Eco-lab

Bottled Water Alternatives

Some hotels are now providing glass water decanters in guestrooms that can be filled with sparkling or still water from water dispensers available on all guest floors. An easy, cost-effective, and plastic free solution to one of the largest free amenities provided in almost every class of hotel. The Canopy by Hilton brand has adopted this trend as a design feature in all its existing and new hotels.

It is estimated that hotels that embrace more sustainable operations do in fact witness substantial cost savings, directly impacting the profitability of the hotel.

Sustainability in Hotel Development

Green building initiatives are more important than ever before given that real estate and buildings consumes 40% of the global energy in general and contributes up to 20% of the green house emissions worldwide. Green building initiatives have always been an emphasis, and are now propagated by several top real estate organisations, such as Urban Land Institute (ULI), World Green Council, European Public Real Estate, Building Owners and Managers Association (BOMA), and the Royal Institution of Chartered Surveyors (RICS), just to name a few.

So how do hotel developers, either in a greenfield or a brownfield development become "green" and help the environment? Some key green initiative techniques are highlighted on the following page.



^{**}How to increase your bottom line by going green – by Dr. Sonya Graci (Assistant Professor at Ted Rogers School of Hospitality and Tourism Management at Ryerson University, and Jaqueline Kuehnel, CSR, Managing Director of JK Consulting Enterprises.



Source: Parkside Hotel, British Columbia. Leed Certified Hotel & Spa.



Whether it is a new-build or a conversion, utilization of renewable energy applications, such as solar, wind, geothermal or biomass energy resources, are mechanisms to help conserve traditional energy. Switching to alternative energy applications (solar water & electric systems, geothermal heat pumps, or biomass systems) allows buildings to not only conserve energy, but also reduce electricity and heating charges on a yearly basis.

Building Locally

Sourcing materials that are indigenous to the location has been known to reduce the overall cost of development, while also benefiting the local economy. Materials that are locally sourced have also been known to be adaptable to the location of the hotel, while being able to withstand the weather conditions of the said location.

Building with Eco-Friendly Material

Hotel developments can incorporate materials that are long-lasting, while also being environmentally conscious. Materials such as recycled steel and wood, pre-cast concrete, plant-based polyurethane rigid foam, locally sourced earth, sheep's wool insulation, and recycled glass, are proven, durable and strong building green materials that can be used in hotel construction.

Low VOC Materials

Building or designing with low or zero Volatile Organic Compounds (VOC) is known to encourage the health of employees and guests. Materials, including paint, carpets, stains, furniture, and insulation, that have low or zero VOC also reduce the emission of smog-forming compounds, thus maintaining and enhancing air quality.



Indoor lights made out of upcycled glass decanters

Eco-Friendly Interior Design

Sourcing furniture that is made of renewable or recycled materials, using materials within interiors that are not made of plastic, tableware that is made of vinyl fabric instead of regular fabric (reduces laundry costs), are some great examples of incorporating materials into interior design that are both aesthetically appealing and cost effective in purchasing.

Locally Inspired Design

Creating designs and architectural elements that are locally sourced and are reminiscent of traditional methods assists in lowered transportation and development costs, while increasing guest satisfaction through authenticity.

Sustainable hotel development practises in construction and design allow hotels to also gain recognition and, in some cases, tax credits. A LEED (Leadership in Energy and Environmental Design) or BOMA (Building Owners and Managers Association) certified hotel oft times provides an additional perception of prestige. In addition to this, global hotel brands are also supporting such certifications. For instance, Marriott International has over 225 LEED certified hotels operational worldwide.

Such certifications are also proven to be profitable. In 2014, Cornell University performed a study on LEED certified hotels and its impact on overall hotel revenues. As such, the study found that LEED certified hotels were able to generate higher average daily rate in comparison to hotels that are non LEED.



Additionally, certified buildings can also positively impact the market value of the asset. According to Dodge Data & Analytics' World Green Building Trends Smart Market Report, real estate assets saw an increase of asset value of 4%, in 2016. Certified buildings are also known to reduce operational costs overtime, impacting asset value in the long term.

Sustainability's Impact on Hotel Consumers

"Going Green" is all good as it sustains the environment and supports real estate value while increasing profitability in the long run. But does it spark satisfaction in the minds of the average hotel consumer? The simple answer is yes!

The United Nations World Tourism Organisation predicts that more than 1.6 billion "eco-trips" will have been taken worldwide by the end of 2020. Meanwhile, a global survey conducted by TUI suggests that two thirds of their respondents were willing to "make a lifestyle trade-off in order to benefit the environment".

Consumers are positively affected by the overall message as delivered through various mediums, including:

Brand Image

Improving a hotel's brand image through sustainable practices has been proven. According to Forbes, millennials choose hotel brands that are eco-conscious. Successful global brands, such as Six Senses, COMO and other luxury brands, lead in this category by not only being popular, but also successful.

Increasing Guest Loyalty

Recently, Marriott International and IHG launched programs whereby guests earn reward points should they decline cleaning services, turn down or change of sheets during their 3-4 day stay at the hotel. For each stay, guests earn 500 additional reward points, allowing the hotels to save on laundry costs while increasing guest loyalty.



Pouring maple syrup onto snow to make maple sugar taffy

Authentic Guest Experiences

Engaging guests in location-specific experiences that celebrate local culture are not only sustainable, but also allow for repeat customers. Several initiatives by various hotels, including the farm-to-table cuisine, focus on local ingredients, organic gardens in resorts, locally produced maple syrup delicacies in chic sugar shacks, are not only eco-friendly but also create authentic guest experiences.

Employee Retention

Hotel employees, much like hotel guests, prefer to work in safer, cleaner and less hazardous work environments. Working in a certified green building while ensuring day to day operations has a positive impact on the environment and often leads to employee retention according to Dr. Sonya Graci. Given that employee turnover is one of the major concerns within the hotel industry, higher retention inevitably results in lower training costs in the long term.

Positive Advertising

Communicating sustainable initiatives by the hotel or the hotel brand has always led to providing brand endorsement, that in turn increases guest retention, increasing occupancy and average daily rate levels. Brands such as Westin (in room advertisement) and IHG (Social media and website) have allowed consumers to know that they care about the environment, while further encouraging guest loyalty within a clientele conscious of environmental issues.





Source: Westin's In-Room Sustainability Advertisement



Source: IHG's Green Points Program

Conclusion

Climate change, and its associated risk to the environment, is not only known but in the last decade has been proven with many instances at a global level. Hotel companies, hotel developers and hotel operators are now making environmental and sustainable decisions that are both short term and long term in nature.

Smart long-term solutions to combat change while being sustainable have also proven to increase profitability in the longer term.

As such, important fixed costs within a hotel's operations, such as water consumption, energy, waste disposal and other items, are known to have a cost reduction of between 20% to 50%, depending on the sustainable solution implemented.

Sustainable practices also increase guest satisfaction and loyalty while increasing employee retention. These initiatives can therefore increase top line revenues while having a direct impact on the bottom line. Green development initiatives and certified real estate development is also known to increase the market values of certain real estate assets despite being marginally more expensive to build. It remains that the lifetime fixed costs savings that are gained by a "green" building can be immense, negating the marginal increase in construction costs over the lifetime of the asset.

In concluding, we note that sustainable development and practices, when well done, can lead to improved client perceptions, potentially increased revenues, reduced expenses, improved bottom lines, and hopefully, a healthier global climate in time.



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A Cornell Hotel School post-graduate, Ambika has over 12 years of hospitality development, operations and consulting experience. Ambika has significant experience in conducting market studies in real estate sectors, including hotels, tourism, retail, residential and commercial projects. Ambika has completed projects, spanning over USD 12 billion in asset value, in numerous locations including Singapore, Malaysia, Vietnam, Indonesia, UAE, Qatar, Morocco, Maldives, Micronesia, Mauritius and Canada.



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Since 1990, Peter has participated and supervised the financial aspects of the Toronto and Montréal offices' hotel division. He has completed numerous market studies, operational reviews, valuations and appraisals for hotel and tourism related developments across Québec, Ontario, Atlantic Canada and such international destinations as Mexico, Costa Rica, the Dominican Republic and French Polynesia. He is also responsible for such annual publications as the Industrie Hôtelière au Québec – Rapport Sectoriel and the Canadian and Québec Hotel Industry – Special Market Reports.

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