

# ICHRIE Research Report

**Sponsored by Penn State School of Hospitality Management**  
*Translating Research Implications to applications: Industry's commentary*

## Environmentally and Financially Sustainable Tourism

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## **Environmentally and Financially Sustainable Tourism**

### **Engaging for the environment**

Clear blue sky, clean water and unpolluted air are natural resources no longer accessible to everyone. Due to high levels of carbon emissions, resource depletion has become a matter of deep concern. This calls for initiatives to mitigate impacts and protect our ecosystem and societies. LUX\* Resorts & Hotels, a hotel group in the island of Mauritius, situated on the East Coast of Africa, introduced the “Tread Lightly” initiative, a key sustainability instrument to help reduce carbon emissions, while maintaining its global positioning with a five-star rating. It’s widely studied how warming temperatures are causing significant impacts. Our study shows adaptation strategies adopted to reduce negative environmental impacts. This report shows an example of stakeholder engagement as a driving force for environmental and financial sustainability in resorts.

### **Tread Lightly by LUX\***

The island of Mauritius is one of the 175 countries to have ratified the Paris Climate Change Agreement. Tourism is an important pillar of the Mauritian economy. LUX\* Resorts & Hotels is a Mauritian hotel group which operates in the Indian Ocean islands, Mauritius, the Maldives, Reunion Island, and in Turkey and China. LUX\* has committed to include carbon reduction as part of its sustainability strategy through its Tread Lightly initiative to reduce the hotel’s group emissions through carbon reduction and carbon offsetting.

LUX\* success is through multi-stakeholder participation and engagement. The hotels’ guests are encouraged to offset their carbon footprint through voluntary contribution of an offsetting fee of one euro per night stay. Our study shows that most guests take this initiative positively and the average participation rate is 70-80 percent depending on the resort. 67.5% of this one euro is used to fund emission reduction projects. 32.5% is used to offset emissions by buying carbon credits in accredited offsetting projects. Energy management system on HVAC (Heating, Ventilation & Air-Conditioning), the renewable energy solar project, low energy lighting are examples of implemented carbon reduction projects. The carbon offsets include projects which are Verified Carbon Standard (VCS), Gold Standard. Examples include solar projects, wind turbines, reforestation and other renewable energy projects with clean technologies, and with local community benefits.

In financial year 2013-2014 (the baseline), the hotel group had set a target to reduce its carbon emissions by 10% by year 2020. The results for financial year 2016-2017 showed a reduction of emissions by 53%. The energy consumption has decreased by 22%<sup>3</sup>. LUX\* is now investing 100% in energy reduction projects through savings sharing schemes, contributing towards a better environment for the present and future generations. This has led to financial benefits and better business performance at LUX\*.

### **Call for Environmental Action**

A report by NASA shows the average surface temperature of the planet rose by 1.1 degrees Celsius since late 19th century due to greenhouse gas effect. The global sea level rose by about 8 inches in the last century. The level of carbon dioxide in the atmosphere is further increased

through the burning of fossil fuels for energy and significant emissions from forest fires. Researchers report the thickness and extent of the arctic sea ice has declined. There is increasing concern that global temperatures may reach dangerous levels impacting severely on our environment and communities.

The Paris Climate Change Agreement was adopted in 2015. Recognizing the benefits of limiting global warming, 175 countries have ratified the agreement. Emmanuel Macron, President of France, launched the international climate summit “One Planet” in Paris in December 2017 inviting several countries to respond to climate change. Since the Paris Climate Change Agreement, there is also a call for more research on tourism and climate change to strive towards greater carbon emission reduction.

### **How can Tourism help?**

International tourism is a trillion-dollar industry with 1.235 billion international arrivals in 2016. There’s increasing concern on continuing increase in tourist demand and global greenhouse gas emissions. Associate Professor Ramkissoon argues that Sustainable Tourism needs to be at the core of organizations’ strategies for behavioral change. Through its engagement with various stakeholders, the LUX\* Group of Hotels & Resorts looked closely at stakeholder inclusiveness and participation in achieving positive environmental change.

Tourism has potential to contribute to carbon reduction and environmental and socio-cultural sustainability. The hospitality industry is one the major consumers of our environmental resources. Informed travelers tend to make sustainable choices to reduce their carbon footprint. Tourism operators are increasingly working with hotels with accredited sustainability certification recognized by the Global Sustainable Tourism Council (GSTC), including Green Globe, Travelife and EarthCheck and ISO 14001 to satisfy travelers’ environmental awareness. They also encourage travelers to offset their emissions by making voluntary contributions.

### **Benefits**

This report shows the exponential impact achieved through multi-stakeholder involvement and participation in Tread Lightly, a robust environmental initiative at LUX\* Hotels & Resorts, aligning with the Paris Climate Change Agreement for a carbon clean present and future. This type of collaboration between industry and academia is very useful bridging the gaps between theory and practice and provides further insights to practitioners and policy-makers.

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