

## **Sustainability standards and their impact on the interior design of green hotels**

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### **Abstract:**

Sustainable buildings are defined as those that have minimum harmful impacts on the built and natural environment. The most effective, sustainable designs should promote health and well-being, harvest their own water and energy needs, be adaptable to cite climate and be able to evolve as weather conditions change, and they should operate without polluting the environment and generate no waste. It's also a plus when these buildings appear beautiful and inspire innovation and creativity.

Environmental sustainability in the hospitality industry refers to the balance that must exist between an activity and the environment in which it is developed, where the two interact without being detrimental to each other, it is argued that environmental issues in the hospitality industry should include water and energy efficiency and conservation, climate change and greenhouse gas emissions, waste management and recycling, bio-diversity and the protection of natural resources, the reduction of environmental impacts, environmentally responsible sourcing and the creation of green construction standards for new hotel construction.

The research dealt with the definitions and importance of green hotels, as well as some sustainability criteria in hotels, Popular and reputable operational certifications, Popular and reputable building certifications, Benefits of certification, Types of certification and also it dealt with a study and details about the LEED criterion as What is LEED? Why LEED? LEED Points Scale, Fulfillment, LEED v4.1 is the next generation standard for green building design, construction, operations and performance.

At the end of the research, the Alma Verde Hotel, Luz Lagos, (Portugal) has been analyzed, with the environmental sustainability criteria that was used in the design and construction of the hotel.

### **Keywords:**

Hotels, Green hotels, Sustainable, Energy Efficiency, LEED, BREEAM, Renewable Energy