

BMIH6001: Contemporary Themes in the Hotel and Hospitality Sector

Assignment Two Conference Presentation

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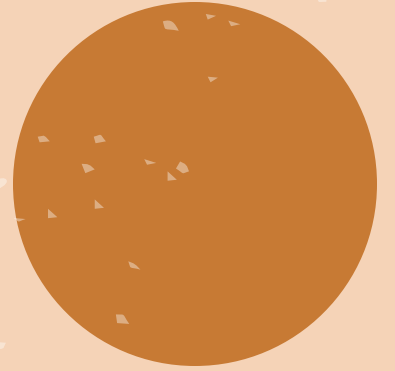
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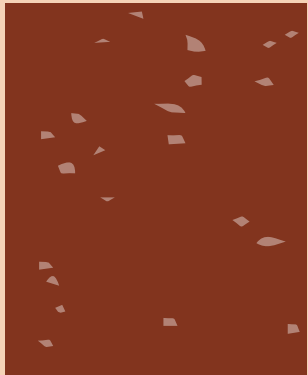




Hello! I'm Svetla



My topic is **Sustainability and Net-Zero** in the Hotel Industry



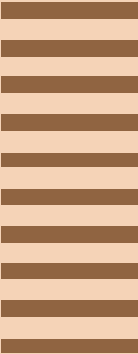


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Introduction to the Theme

Sustainability and Net-Zero in the Hotel Industry

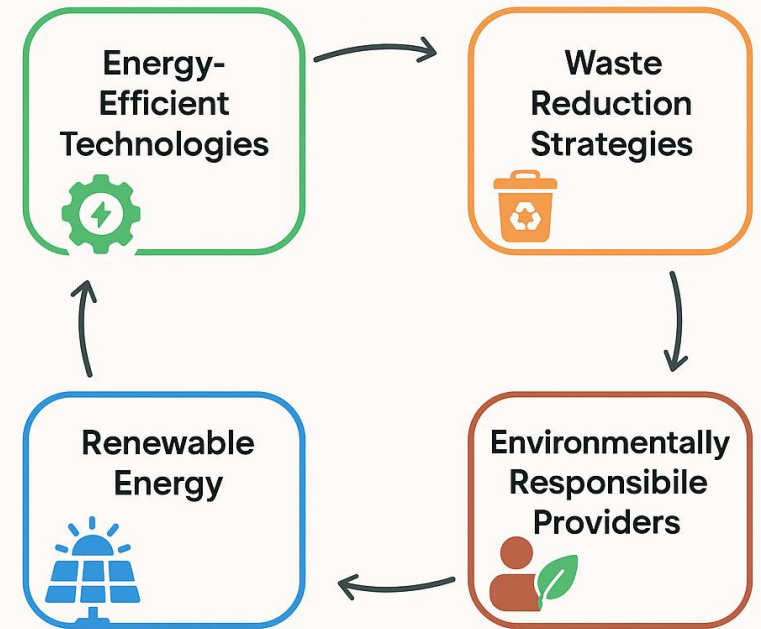
The hotel sector is one of the most resource-intensive in the service economy. As the effects of climate change intensify, the industry is under increasing pressure to reduce its environmental impact. Net-zero refers to balancing greenhouse gas emissions by removing or offsetting an equivalent amount.

Sustainability is no longer optional but a requirement for compliance and competitiveness.

Hotels are adopting energy-efficient technologies, renewable energy, and waste reduction strategies.

Consumers increasingly prefer environmentally responsible accommodation providers (Fife, 2023; Bentley et al., 2024; World Travel & Tourism Council, 2024).

Sustainability and Net-Zero in the Hotel Industry



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The Push Towards Net-Zero

Hotels are actively transitioning towards net-zero operations through energy retrofits and renewable energy systems such as solar and geothermal installations.

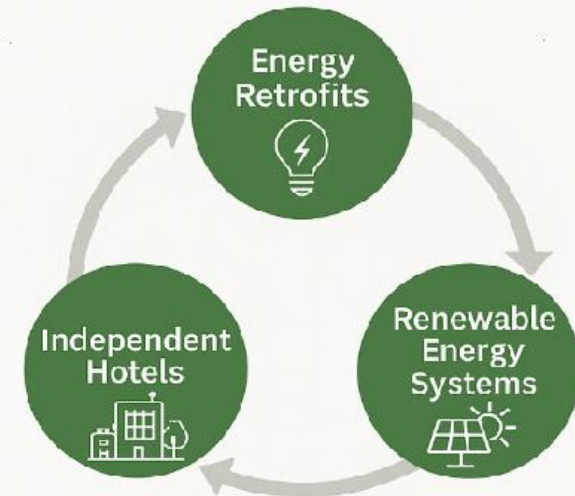
Green-certified hotels are increasingly investing in solar panels and geothermal heating (Ghimire et al., 2023).

The feasibility of achieving net-zero depends on the hotel's location, size, and design (Vourdoubas, 2024).

Independent hotels face greater financial and logistical barriers compared to large hotel chains.

Expert consultancy is often required for planning and implementation (Naqvi et al., 2023).

The Push Towards Net-Zero



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Smart Systems and Energy Efficiency

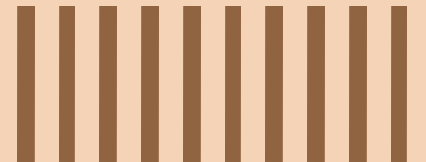
Technology is playing a pivotal role in improving energy efficiency in the hotel industry.

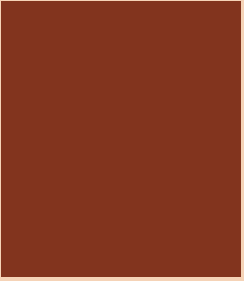
Smart buildings use cyber-physical systems for autonomous regulation of lighting, HVAC, and occupancy (Schmidt and Åhlund, 2018).

AI-driven HVAC controls reduce energy waste significantly (Merabet et al., 2021).

IoT systems enable real-time monitoring and predictive adjustments to optimise consumption (Pan et al., 2016; Nweye and Nagy, 2021).

Retrofitting older hotels with insulation and LED systems can reduce energy usage by over 30 per cent (Kılıç and Altun, 2018; Mayer et al., 2022).





Guest Behaviour and Stakeholder Engagement

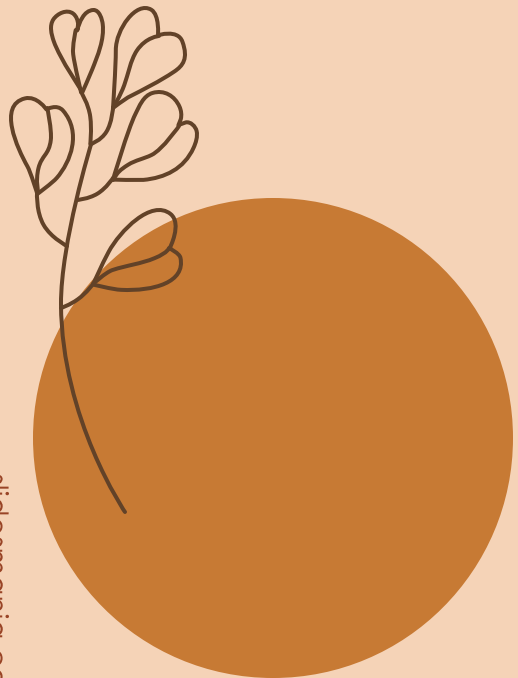
Long-term sustainability relies on both technological innovation and stakeholder participation.

Balanced scorecards measure environmental, financial, and guest experience outcomes (Antonova et al., 2024).

Visual prompts, such as towel reuse signage, increase guest cooperation (Park et al., 2021).

Hotels that incorporate guest feedback and behavioural insights see improved satisfaction and efficiency.

Engaging staff through sustainability training strengthens implementation and consistency (Nosratabadi et al., 2019; Sharma et al., 2024).



PESTLE Analysis (Part 1: Political, Economic, Legal)

Political Factors

Governments are aligning with international agreements such as the Paris Accord to push industries towards carbon neutrality (Sustainable Hospitality Alliance, 2023).

Environmental policies now include carbon reporting, energy labelling, and mandatory efficiency standards for appliances and insulation.

Policy inconsistency between regions creates uncertainty and complicates planning for hotel operators (World Travel & Tourism Council, 2024).

Economic Factors

The initial capital required for smart systems and retrofitting is substantial, particularly for smaller or independent hotels (de Bortoli et al., 2025).

Long-term financial benefits include lower utility bills, enhanced brand image, and increased guest willingness to pay for sustainability.

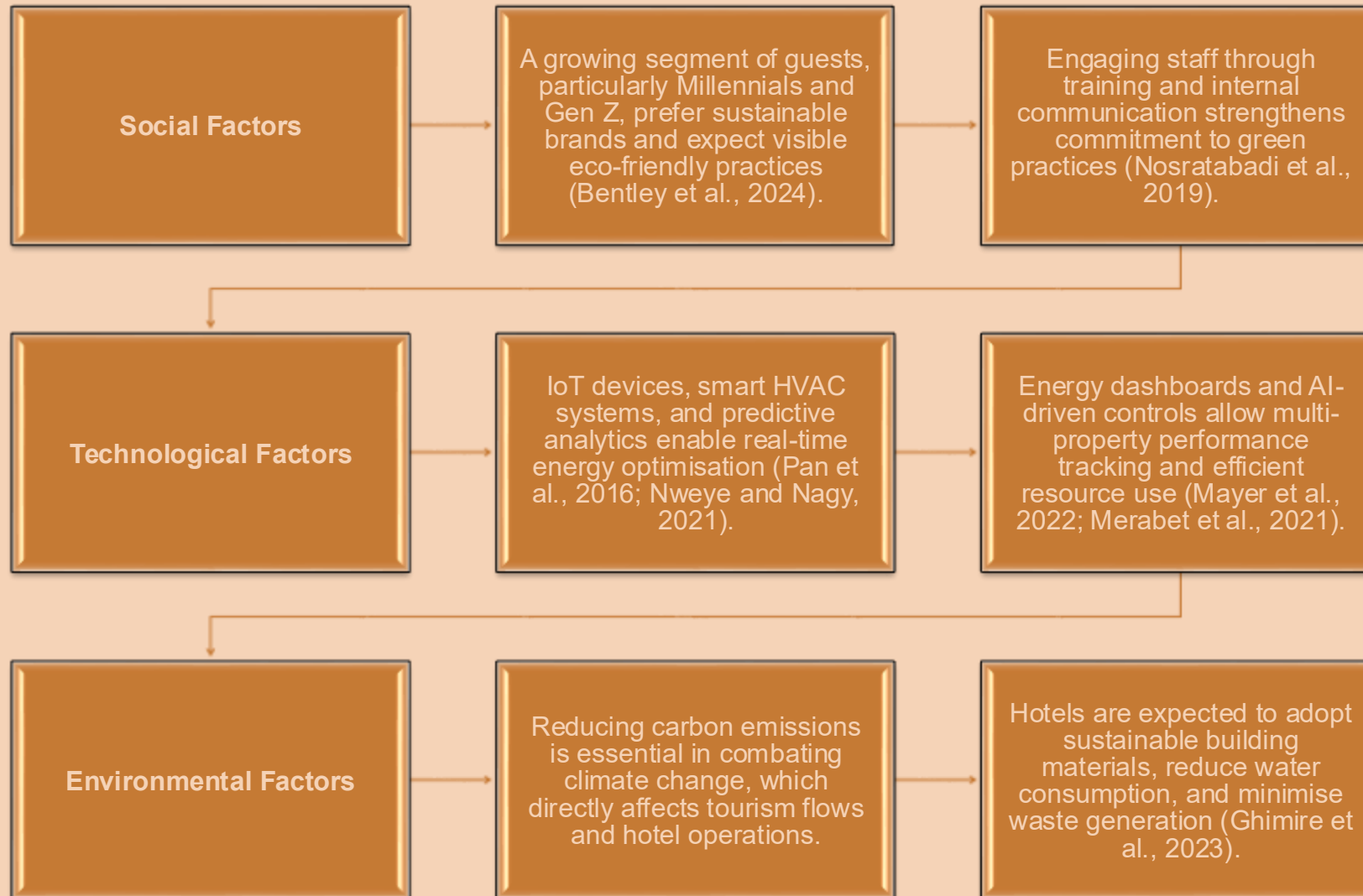
Incentives like tax rebates and green finance schemes can mitigate implementation costs.

Legal Factors

Compliance with environmental regulations is becoming mandatory, especially regarding waste management, energy use, and carbon disclosures.

Legal obligations may also include reporting Scope 1, 2, and 3 emissions in jurisdictions adopting more rigorous climate legislation (Naqvi et al., 2023).

PESTLE Analysis (Part 2: Social, Technological, Environmental)



Conclusion

The pathway to sustainability in the hotel industry is multifaceted and requires coordinated effort.

Regulatory, economic, and social pressures are pushing the industry towards environmental responsibility.

Technology offers substantial gains, but staff engagement and guest cooperation are essential for lasting impact.

Progress is being made, but high costs, limited expertise, and inconsistent policy remain barriers.

A combined focus on smart systems, behavioural change, and strategic investment offers the most viable route to achieving net-zero (Park et al., 2021; Vourdoubas, 2024).



Strategic Recommendations

To accelerate the transition towards net-zero, the following strategies are recommended:

Invest in retrofitting existing buildings with insulation, energy-saving windows, and modern HVAC systems (Kılıç and Altun, 2018; Ghimire et al., 2023).

Implement smart building technologies to automate and optimise energy use (Merabet et al., 2021; Nweye and Nagy, 2021).

Use energy dashboards and digital tools to track emissions and efficiency improvements (Mayer et al., 2022; Pan et al., 2016).

Train staff and engage guests through visible sustainability initiatives and behavioural prompts (Nosratabadi et al., 2019; Park et al., 2021).

Adopt formal carbon accounting frameworks for standardised reporting (de Bortoli et al., 2025; Sustainable Hospitality Alliance, 2023).

Apply for government grants or green finance schemes to offset implementation costs.

These recommendations aim to improve environmental performance and maintain competitiveness across the global hospitality sector.



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