

Constructing a Context-Specific Sustainability Index for Hotels

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Sustainability in the Hotel Industry

- ❑ A **sustainable hotel** is one that **maximises the benefits** it brings to the environment, local people, culture, and the economy—while **reducing any negative impacts** it might cause. At the same time, it still **gives guests a great experience** and **runs a successful business for the long term**.
- ❑ This is particularly important as the hotel industry often gets called out for three big reasons:
 1. **High Energy Use** – Hotels consume a lot of electricity for lighting, heating, cooling, and appliances, leading to **high carbon emissions**.
 2. **Water Waste** – Hotels use huge amounts of water for guest rooms, laundry, pools, and gardens. This is a major issue in **island destinations**, where water is scarce.
 3. **Excessive Waste** – Hotels generate tons of **food waste, single-use plastics, and non-recyclable materials** every day.



Minimize waste



Energy conservation









Avoid plastic

Need for Sustainability Performance Assessment

Why Do We Need to **Measure Sustainability**?

Tourism industry is transitioning from dialogue to measurable action. This is where **sustainability performance assessment** becomes essential.

That's where a **Sustainability Index** comes in. Think of it as a **tracker for hotels**—it measures key performance indicators (KPIs) like:

-  Energy efficiency
-  Water conservation
-  Waste management
-  Carbon footprint
-  Social responsibility
-  Economic impact



With **clear indicators**, hotels can **see what's working, fix what's not, and make real progress toward sustainability**. **Because if we can measure it, we can improve it!**

Research Design Overview

- **Approach:** Qualitative research using *semi-structured interviews* to capture expert insights
- **Focus:** Exploring *sustainability practices, dimensions, and indicators* in the hotel sector across Western Australia
- **Participants:** Hotel managers and sustainability representatives selected through *purposive sampling*
- **Sample:** ~50 contacted, aiming for 20–25 interviews (10 completed so far)
- **Why Western Australia?:** Offers a *regional lens* to understand local challenges, regulations, and sustainability priorities
- **Analysis Method:** Thematic analysis to identify feasible and measurable sustainability indicators aligned with *global standards and local needs*



Interview Analysis – Categorised Dimensions & Indicators for a Hotel Sustainability Index

1. Environmental Sustainability:

❑ Energy Management

"We've invested quite heavily three years ago into solar. Solar is a big part for us."

"We use the Green Engage system to measure and track energy and waste consumption, with specific reduction targets."

❑ Water Conservation

"We converted a lot of water features into rock gardens and put native plants in."

❑ **Waste Management:** Recycling of cardboard, glass, and green waste; plans for industrial composting.

❑ **Food Waste Reduction:** Efficient stock management

"We use off-cuts of meat to make hamburgers instead of discarding them."

❑ **Reduction of Single-Use Plastics:** Communication and initiatives to minimise plastic usage.

"We have eliminated plastic straws, plastic water bottles, and now receive unpacked vegetable deliveries."



Interview Analysis – Categorised Dimensions & Indicators for a Hotel Sustainability Index

2. Social Sustainability:

❑ **Employee Training & Awareness:** Regular training on sustainability policies.

❑ **Community Support:** Foundation projects for health, mental health, food security, and environmental initiatives.

"We provide office space at zero charge for conservation organisations."

"Our foundation funds projects in health, mental health, food security, and environmental conservation."

❑ **Local Employment & Inclusivity:** Indigenous employment programs.

"Inclusivity training is mandatory for managers, covering gender diversity and pronoun use."

❑ **Diversity & Accessibility:** Inclusivity training, gender diversity awareness, accessibility audits.

"We are working on accreditation for accessible accommodation, including modifying room features."



Interview Analysis – Categorised Dimensions & Indicators for a Hotel Sustainability Index

3. Economic Sustainability:

❑ **Local Sourcing & Supplier Engagement:** Efforts to increase local supplier relationships.

❑ **Financial Considerations:** Budgeting and forecasting for sustainability initiatives.

"Our hotel, being 40 years old, faces challenges in upgrading infrastructure and relies on owner investment for capital improvements."

"Newer properties have more advanced systems, such as sensors connected to building management systems."



Interview Analysis – Categorised Dimensions & Indicators for a Hotel Sustainability Index

4. Resilience:

Resilience ensures hotels can **sustain operations during crises** like pandemics, climate change, or supply chain disruptions. Resilience is a crucial dimension for sustainability in hotel operations, especially in adapting to challenges and ensuring structured sustainability management.

"Supply chain disruptions make local sourcing difficult, but we continue working on solutions."

"There's a lack of clear policies on how to balance economic and environmental interests in tourism." this shows resilience-sustainability in tourism sector.



Interview Analysis – Categorised Dimensions & Indicators for a Hotel Sustainability Index

5. Governance

Governance ensures that sustainability efforts are **transparent, structured, and accountable**, leading to continuous improvement.

❑ Structured Reporting & Accountability

"We use a triple bottom line approach, reporting sustainability performance quarterly to the board."

"We don't yet have external sustainability audits, but we aim to adopt benchmarking standards."

❑ Industry Collaboration & Benchmarking

"There's no unified benchmark in the hotel industry for sustainability KPIs—this is something we need."

"There should be more collaboration between the government, private sector, and local communities in tourism planning."



Interview Analysis – Categorised Dimensions & Indicators for a Hotel Sustainability Index

6. Cultural & Heritage Sustainability

- ❑ **Cultural Tourism Support:** Partnering with local artists, offering cultural experiences for guests.
- ❑ **Heritage Conservation:** Preserving historical buildings and sites within or near the property.
- ❑ **Indigenous Engagement:** Hiring Indigenous staff and supporting cultural training.

"Western Australia has a diverse cultural heritage, including a significant Aboriginal presence."

"Tourism can help showcase Aboriginal heritage and cultural identity to visitors."



Two Takeaways

♦ **Key Takeaway #1 – Localised Indicators Matter**

To apply sustainability effectively on the ground, we must **go beyond general GSTC-accredited certification** by developing **context-specific indicators** that reflect **regional realities and operational conditions**.

🤝 **Key Takeaway #2 – Engage Stakeholders meaningfully**

Sustainability is more than a checklist. It needs **real engagement with staff, guests, and communities** through a **place-based, collaborative approach**.



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Thank you

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