HY825

Sustainability Tech Edition Unlocking Smart & Sustainable Tech Solutions for Hospitality



The Hotel Yearbook Foresight and innovation in the global hotel industry

H_A8



Sustainability **Management** in the **ESG and Net-Zero** Era



Sustainability Metrics

Muna Alnahdi Director- Sustainability at Farnek Services



Research suggests that more than 75% of travellers prefer to stay in a sustainable hotel. While many hotels have implemented various sustainability measures, an important question remains: How sustainable is the hotel in reality? The depth and effectiveness of sustainability initiatives must be assessed beyond surface-level claims, and this is where datadriven approaches and benchmarking become crucial.

THE ROLE OF DATA-DRIVEN APPROACHES IN HOTEL SUSTAINABILITY

A structured approach to sustainability management requires accurate measurement, performance tracking, and a clear roadmap for achieving sustainability goals. Whether the focus is on ESG (Environmental, Social, and Governance) compliance, carbon reduction targets, or corporate social responsibility, the ability to manage sustainability effectively depends on reliable data and performance indicators.

The principle of "you can't manage what you can't measure" is particularly relevant in sustainability. To achieve meaningful progress, hotels must track real data and key performance indicators (KPIs) that reflect their actual sustainability performance. A fragmented approach that focuses only on isolated measures will not drive long-term improvements. Instead, a comprehensive and strategic framework is needed.

BENCHMARKING AND PERFORMANCE TRACKING: KEY ELEMENTS IN SUSTAINABILITY SUCCESS

Benchmarking is an essential tool for evaluating a hotel's sustainability performance in comparison to industry standards and competitors. It helps identify strengths, weaknesses, and opportunities for improvement. Hotels can leverage benchmarking to:

- Understand their environmental footprint in comparison to industry peers.
- Identify areas for efficiency gains in energy, water, and waste management.
- Improve ESG reporting and compliance with regulatory requirements.
- Enhance sustainability-related guest experiences and brand reputation.

Benchmarking also serves as a powerful change management tool for hotel chains and corporate-level sustainability initiatives. By comparing performance against industry standards, benchmarking enables hotels to:

- Set clear policies and sustainability targets
- Develop incentive programs for improved performance
- Foster knowledge-sharing and best practices across properties
- Recognize sustainability leadership
- Establish corrective actions, such as fines or disciplinary measures, for properties that fall behind

KEY SUSTAINABILITY KPIS FOR BENCHMARKING

Hotels can use specific key performance indicators (KPIs) to evaluate their sustainability efforts effectively. Some of the key environmental KPIs include:

- Energy consumption per square meter
- Energy consumption per guest night
- Water usage per guest night
- Waste diversion rates and Waste per Capita

Through my advisory work and experience with performance tracking tools, below are some of the key challenges in measuring and reporting sustainability KPIs in the hospitality sector:

Relevance and Standardization:

Not all KPIs apply uniformly across hotels; some may require normalization or contextual adjustments. Hotels of different sizes or locations may need to tailor KPIs based on specific operational needs. For example, smaller hotels may not prioritize large-scale energy-efficiency measures, while large resorts may need to adjust KPIs based on their extensive services. Certifications like **Green Globe**, and **LEED** help standardize performance metrics for hotels globally, offering adaptable frameworks suited to various types of properties. **LEED O+M**, for example, offers a comprehensive set of environmental performance standards that can be customized based on hotel size and operational complexity.

Technology Integration:

Inconsistent or inaccurate data can undermine performance assessments. Lack of proper digital systems can lead to inefficiencies and inaccuracy in data collection and reporting. Technology plays a pivotal role in sustainability management. Hotels should invest in smart energy management systems, automated water conservation solutions, waste-tracking tools, and digital dashboards for real-time data monitoring. These innovations enable hotels to identify inefficiencies, reduce costs, and enhance overall sustainability performance. Programs like **ISO 50001** (Energy Management System) and **LEED O+M** encourage the integration of such technologies, guiding hotels in adopting systems that improve energy efficiency and reduce costs.

Reporting Frameworks:

Multiple reporting structures and inconsistent frameworks can result in unreliable tracking. Hotels often struggle with balancing various reporting standards from different organizations. To streamline sustainability reporting, programs like **Global Reporting Initiative (GRI)** provide a global framework for sustainability reporting, helping hotels align with international best practices. GRI standards allow hotels to create consistent, reliable reports for stakeholders, regardless of location or certification.

Third-Party Validation:

Independent evaluations are often necessary to ensure credibility but may not always be available or feasible. Certification programs like **Green Globe**, **EarthCheck**, and **LEED O+M** offer third-party validation, ensuring hotels meet global sustainability standards. However, independent audits also provide another layer of validation.

Compliance and Transparency:

Adhering to sustainability regulations and maintaining transparency in reporting can be challenging. For international hotel chains, this can be especially difficult, as regulations may differ by region. Public Disclosures that are accepted globally such as the Carbon Disclosure Project (CDP) can help in streamlining compliance while ensuring transparency

CARBON INTENSITY IN BENCHMARKING

Carbon is a common denominator across various environmental metrics, including energy, fuel, waste, and purchased products. In many cases, it serves as an effective measure of operational efficiency.

Thus, incorporating **carbon intensity** metrics in benchmarking is essential to account for fluctuations in occupancy and operational scale. By normalizing carbon emissions based on guest nights, hotels can ensure fair and accurate sustainability comparisons across properties of different sizes and levels of occupancy. Tracking carbon intensity—allows hotels to measure their environmental footprint more accurately, regardless of fluctuations in occupancy rates or property size. This approach helps to establish more consistent sustainability benchmarks across diverse hotel portfolios.

Aligning sustainability efforts with international frameworks is also essential for driving long-term impact. Frameworks such as the **Science Based Targets initiative (SBTi)** offer scientifically validated pathways for reducing carbon emissions. By participating in these initiatives, hotels can ensure they are contributing to global sustainability goals, striving toward net-zero emissions, and being part of a global movement committed to reducing environmental impact.

THE FIVE-STEP FRAMEWORK FOR SUSTAINABILITY MANAGEMENT

In order to establish a proper sustainability management system, a systematic approach needs to be adopted following five key steps:

1. Measure and Establish a Baseline:

Hotels must first assess their current sustainability and ESG performance by collecting accurate data on energy usage, carbon emissions, water consumption, waste management, and social impact metrics. Without a clear baseline, it is impossible to track progress or identify areas for improvement.

2. Set Short-, Medium-, and Long-Term Targets:

To drive meaningful progress, sustainability goals should adhere to the SMART criteria—specific, measurable, achievable, relevant, and time-bound. A hotel might aim to cut carbon emissions by 30% within five years, boost renewable energy use by 50%, or eliminate landfill waste. Additionally, goal setting must align with global frameworks such as the Science Based Targets initiative (SBTi) ensuring commitments meet scientifically backed net-zero pathways and industry best practices.

3. Develop a Roadmap and Actionable Plans:

A clear roadmap should outline the necessary initiatives, investments, and technologies needed to achieve sustainability targets. This plan should include milestones, budget allocations, and responsibilities for different departments within the hotel.

4. Implement Sustainability Initiatives:

Execution is critical. Hotels must adopt best practices such as energy-efficient systems, waste reduction programs, responsible sourcing, and employee training. Sustainable guest engagement programs can also enhance the impact of initiatives.

5. Measure Performance and Continuously Improve: Ongoing monitoring and evaluation help ensure that sustainability initiatives remain effective. Regular audits, performance reviews, and transparent reporting contribute to continuous improvement and accountability.

In the ESG and net-zero era, sustainability in the hospitality sector is no longer optional—it is a business imperative. Hotels must transition from fragmented sustainability efforts to a structured, data-driven approach that ensures measurable impact. By leveraging benchmarking, performance tracking, and advanced technology, hotels can enhance their sustainability performance, meet global compliance requirements, and contribute meaningfully to a more sustainable future.



Looking to find out more?

Visit the Hospitality Net World Panel

In the **Sustainability in Hospitality** World Panel, over 90 industry experts share their insights, solutions, and strategies to help the industry navigate growing environmental and societal challenges.

Sustainability Gives Hotels An Edge In The War For Talent. Or Does It?

How can sustainability be communicated beyond clichés and greenwashing?

Hotel Sustainability: Top 3 Technologies to Implement in 2020

Who makes hospitality sustainability happen: Governments, Industry, Consumers?

Climate Emergency And The Hospitality Industry: Are We On Track?



www.hospitalitynet.org/panel