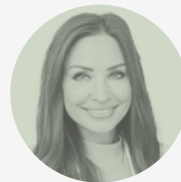
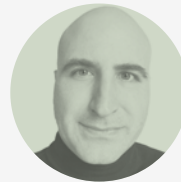


HYB25

Sustainability Tech Edition

Unlocking Smart & Sustainable Tech
Solutions for Hospitality



The Hotel Yearbook

Foresight and innovation in the global hotel industry

HYB



Foreword: Technology: a Catalyst and a Challenger for Sustainability

Sustainable Tech

Willy Legrand

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In the dynamic world of hospitality, technology acts as both a catalyst and a challenger in our pursuit of sustainability. What I mean by this is that beyond its utility in streamlining operations and enhancing guest experiences, technology forces us to rethink our relationship with the natural world, society, and economies. Is technology the silver bullet to the major planetary challenges? Or is it a set of tools to help with our incremental improvements on the sustainability path? Or rather, is technology blinding us to the needs of behavioural and managerial changes in sustainable hospitality?

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Today's hoteliers are faced not only with the promise of technological advancements but also with the profound responsibilities they entail. That is: the expectation of improved environmental performance but also making the right decisions which technologies to invest in for what purposes and for which return.

It seems as if the quest for sustainable development becomes increasingly complex. The geopolitical state of the world shows us the vulnerability of environmental and sustainability agendas to political whims. This is obviously a systemic weakness in the approach to managing global environmental challenges which requires a 'good ancestor'^[1] or 'cathedral thinking'^[2] approach.

As such, the hospitality industry is divided into: 1) those players increasingly geared towards short-sightedness and under the influence of political pressures and 2) those who understand the science, data and resulting consequences. Sustainability is equally about risk management as it is about resilience building and opportunity seeking.

So where do technological solutions fit into this? We can celebrate the strides made through technological interventions, from reducing energy consumption to minimizing waste. However, we must also confront the unintended consequences of these technologies: rising emissions, biodiversity loss, and societal disparities. These challenges are clearly interwoven into our political and economic framework and while there is no 'one technological fix for all' solution, readers will be interested and potentially impressed by the advances made on various operational and strategic fronts in our industry.

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The Hotel Yearbook 2025 Sustainability Tech Edition explores these multifaceted issues with a critical eye. It explores how technology provides us with tools to address some of the most pressing challenges of our time, it also poses questions about the very problems it seeks to solve.

Readers have access to a comprehensive and critical exploration of how technology interfaces with sustainable practices within the hospitality industry under seven key themes:

1. Data-Driven Sustainability
2. Operational Efficiency and Waste Management
3. Behavioural Change and Consumer Engagement
4. Green Technology and Building Innovations
5. Data, Standards and Certification
6. Biodiversity and Environmental Protection
7. Social Impact and Ethical Considerations
8. Strategic Leadership and Culture for Sustainability

Under those themes, the *Hotel Yearbook 2025 Sustainability Tech Edition* unpacks timely topics such as leveraging technology to address the challenge of fragmented sustainability data and integrating AI-powered tools for carbon calculations, food waste management, and optimization of circular supply chains. The edition investigates the role of tech solutions in promoting energy efficiency, progressive water management, and effective waste reduction strategies in hospitality settings. The practical applications of certification and Life Cycle Assessment (LCA) methodologies are discussed ahead of the EU Green Claims Directive^[3]. But not all is without resistance and friction. For some, technology serves as a tool for today's critical challenges while for others the lure of quick fixes is an obstacle to change. However, real progress in sustainability lies in using technology judiciously. Avid readers and industry professionals will find this Hotel Yearbook 2025 Sustainability Tech Edition not just informative but also essential in navigating the evolving landscape of sustainable technology in hospitality.

I invite all readers and industry leaders to explore practices of colleagues who have taken the time to share what works and what does not. By doing so, we can collectively adapt our perspective on technology's role in shaping a responsible and sustainable hospitality sector.

Enjoy and please share!

Willy Legrand, Chief Guest Editor
Henri Roelings, HYB Publisher

References & notes:

1. Krznaric, R. (2021). *The Good Ancestor: How to Think Long Term in a Short-Term World*. WH Allen.

2. "Cathedral thinking" is more of a borrowed historical analogy rather than a concept with a traceable origin to a particular author. In the current context, it is a metaphor used to inspire current generations to initiate projects that require long-term dedication and to think beyond their personal or immediate benefits.

3. European Commission. (22 March 2023). *Proposal for a Directive on Green Claims*. Directorate-General for Environment.

https://environment.ec.europa.eu/publications/proposal-directive-green-claims_en



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