



## Sustainable hospitality

### A roadmap for sustainable hospitality

#### Customers are demanding sustainable travel options

Like many other consumers, travelers are increasingly concerned about climate change and the environment. Sixty-eight percent of respondents to the Deloitte's [Global State of the Consumer Survey](#) described climate change as an emergency, and [Booking.com](#) reports that 53% of global travelers say they're more determined to travel sustainably than they were a year ago. And for a large and growing segment of travelers, it's become more and more important to choose travel brands that embody their values.

Today, sustainable practices can be essential to the health of your business—not to mention the communities you operate in. Whether you've already made significant changes or are just starting to move from intention to action, sustainable hospitality can take many forms. To help you get the most from your efforts, Deloitte looks at

some of the sustainability factors specific to the hospitality industry and the type of impact each activity can have.

#### Perspectives, priorities, and considerations

But first, how is "sustainable hospitality" defined? It depends whether you ask customers, employees, or management. Large hotel chains, local operators, and small ownerships groups will likely also have varied environmental, social, and governance (ESG) priorities, as will the corporate and client-facing divisions of a business. Despite these differences, sustainable hospitality enables the future of travel for years to come by minimizing the impacts of hospitality while maximizing positive influence of hospitality on consumers, communities, and the planet. The good news is that the hospitality industry has multiple proven, scalable opportunities to help minimize environmental impact—and innovative

programs and technologies are emerging across the industry, including:

- **Energy efficiency:** Hotel operators are moving beyond room occupancy sensors, weatherstripping, and LED lighting replacements, and making the leap to automated energy management systems, including real-time monitoring and dashboarding solutions. The next horizon is sensorization and automation to maximize efficiency of the existing infrastructure while evaluating replacement options for equipment like chillers and boilers at end of life. Energy efficiency initiatives also significantly reduce operating costs for hotels. By upgrading lighting systems, HVAC equipment, and appliances to more energy-efficient models, hotels can lower their utility bills. Additionally, implementing smart technologies and occupancy sensors helps optimize energy usage, reducing wastage when

rooms are unoccupied. One Italian resort operator, for example, adopted an energy management system to provide real-time visibility into usage and help reduce energy consumption across 11 sectors from HVAC to lighting.

- **Renewable energy:** In addition to onsite solar and wind generation, some hotels are exploring geothermal, biofuel, and hydrogen fuel cell technology. One Japan-based hotel group uses plastic waste to power a hydrogen fuel cell generator that creates 450,000 kWh of power while reducing CO2 emissions by 200,000 kg annually, which is equivalent to the energy required to power 25 homes for one year.<sup>1</sup> Many brands are exploring large scale renewable energy agreements that will power multiple hotels and advance the regional greening of the energy grid; this effort is going to be a large part of the sustainability and decarbonization solution for the hospitality industry.
- **Biodiversity:** Hotel companies are increasingly recognizing the importance of supporting biodiversity and protecting coral reefs. Many are implementing eco-friendly practices and promoting responsible tourism, even engaging in coral restoration efforts. Some hotels establish marine protected areas around their properties, collaborate with local conservation organizations, and educate guests about the fragile ecosystems. By adopting sustainable initiatives and raising awareness, hotels are playing a vital role in preserving biodiversity and ensuring the health of coral reefs for future generations to enjoy.

- **Water usage:** Hotel companies are continuing efforts to help conserve and reuse water throughout their operations using a combination of low-flow faucets, toilets, and showerheads; smart irrigation controllers; and continuous-batch washing machines. Rainwater collection and desalination can also be viable options in some regions. For high-water-use properties, one global hotel group uses an automated meter system that transmits water consumption data every 15 minutes to an online diagnostic platform, which sends out leak alerts and other real-time reports.
- **Waste management:** Many hotels are eliminating single-use plastics, using biodigesters to help process food waste, donating excess edible food, using waste data to inform right-sized portions and menus, recycling, and using on- or offsite composting. One innovative example: A five-star hotel in the US collaborated with a food waste management provider to implement a waterless distributed digester, which processes all of the property's food waste and turns it into compost, diverting it from landfills.
- **Chemical usage:** Many hotel operators have made the switch to nontoxic, environmentally friendly, and biodegradable chemicals in housekeeping and other areas. For example, 50% of cleaning products used in one hotel group's guestrooms are Green Seal certified. The chain also follows EU Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and US Environmental Protection Agency (EPA)

Chemicals of Concern program guidelines for reducing use of toxic supplies.

- **Sustainable sourcing:** Efforts focused on seasonal ingredients, onsite gardens, and local supplier partnerships can help reduce supply chain complexity and cut emissions. A German hospitality group set minimum sustainability standards and corporate social responsibility (CSR) criteria for its products and services. The group also sources cage-free eggs and sustainably certified and fair-trade coffee at its hotels.

In sustainability as in life, however, one size doesn't fit all. A successful environmental initiative should be tailored to the particular property, considering factors such as:

- **Age.** Is the hotel a new build? If not, does it need major upgrades?
- **Location.** Urban or rural? Hot and sunny, or colder climate?
- **Size.** How big is the building? How many rooms?
- **Configuration.** What's the ratio of guestrooms to public space? Indoor to outdoor space? Overall footprint and roof space? Orientation of the available spaces?
- **Unique features.** What services and amenities does the hotel offer?
- **Incentives.** Does the local, regional, or national government offer environmental tax credits, subsidies, or other incentives? How could those influence return on investment?



### Three opportunities for implementation

Some sustainability changes can be implemented immediately and may require little investment. Others may require a coordinated multiyear effort. Deloitte sees three major areas of opportunity:

- **Assessing operational updates.**

Operational changes are crucial for improving hotel sustainability. To start, hotels can conduct comprehensive energy audits to identify areas where energy consumption can be reduced. This may result in small fixes like changing out a filter or replacing lighting that provide quick reductions in energy usage while driving down the hotel's carbon footprint. They may also inform capital plans for larger infrastructure changes like replacing the HVAC system at end of life. Water conservation measures, such as installing low-flow fixtures and implementing laundry and irrigation efficiency, also play a vital role in sustainability efforts. Furthermore, waste management programs, including recycling and composting, can significantly decrease the volume of waste sent to landfills. Operational efficiencies can be found throughout a hotel and often can be implemented with little to no impact on the guest experience.

- **Involving guests.** Hotels can make sustainability initiatives an interactive experience for guests by providing information about their green initiatives in guest rooms and public spaces, encouraging guests to participate in conservation efforts like reusing towels and linens. Offering eco-friendly amenities, such as toiletries in refillable containers, can reduce single-use plastic waste.

Some hotels even incentivize guests for sustainable behavior, like offering discounts for opting out of daily room cleaning. Hotels should also consider seeking feedback on their sustainability efforts to prioritize actions that guests are motivated by. By involving guests in sustainability initiatives, hotels not only reduce their environmental impact but also raise awareness and foster a sense of ownership among their clientele.

- **Workforce engagement.** Training and educating staff about eco-friendly practices, waste reduction, and energy conservation can lead to more efficient operations and can cause a ripple effect where staff bring these practices to their homes and their communities. Staff can also serve as ambassadors, promoting sustainable practices to guests and encouraging their participation. Moreover, recognizing and rewarding employees for their contributions to sustainability efforts can boost morale and motivation. Ultimately, a committed and informed workforce is an invaluable asset in achieving and maintaining a sustainable future for hotels. Learn more about Deloitte's perspective on [acquiring, retaining, and rewarding frontline employees in the hospitality industry](#).

Whatever improvements you make, take the opportunity to share them transparently and honestly with your customers, celebrating and reinforcing your commitment to sustainability. And as your sustainability journey continues, be sure to track, quantify, and disclose your improvements in environmental and financial impact reports.

### How Deloitte can help

If you're ready to move the sustainability needle, Deloitte can help. Our extensive global network can help deliver sustainability knowledge in hospitality, tax, energy, transportation, food systems, waste management, utilities, and other critical areas. Deloitte's strategic and operational specialists are ready to help you tackle your highest priority sustainability initiatives and help drive transformation in areas from tax advisory, data analytics, and change management to renewable energy, energy efficiency, and sustainable sourcing. Contact us today.

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