

GreenHost

Sustainability and eco-friendly habits in the lodging sector – it's time to start the game

Consolidated report for WP2 Task A1 - Analysing the existing sustainable practices in the SME lodging industry

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Table of Contents

| | |
|--|----------|
| Table of Contents | 0 |
| Introduction | 3 |
| Methodology | 3 |
| Results - Part 1: Desk research | 3 |
| 1. Overview of sustainability in the lodging industry..... | 3 |
| Germany..... | 3 |
| Poland..... | 5 |
| Bulgaria..... | 8 |
| Italy..... | 10 |
| Austria..... | 11 |
| 2. Knowledge gaps among SMEs..... | 14 |
| Germany..... | 14 |
| Poland..... | 16 |
| Bulgaria..... | 17 |
| Italy..... | 19 |
| Austria..... | 19 |
| 3. Support for SMEs..... | 22 |
| Germany..... | 22 |
| Poland..... | 22 |
| Bulgaria..... | 23 |
| Italy..... | 24 |
| Austria..... | 24 |
| 4. Barriers for SMEs..... | 29 |
| Germany..... | 29 |
| Poland..... | 29 |
| Bulgaria..... | 32 |
| Italy..... | 34 |
| Austria..... | 35 |
| 5. What VET does well..... | 36 |
| Germany..... | 36 |
| Poland..... | 37 |
| Bulgaria..... | 38 |
| Italy..... | 39 |
| Austria..... | 40 |
| 6. Gaps in VET..... | 40 |
| Germany..... | 40 |
| Poland..... | 41 |
| Bulgaria..... | 42 |
| Italy..... | 44 |
| Austria..... | 44 |
| 7. Discussion and conclusion..... | 44 |

| | |
|--|-----------|
| Germany..... | 44 |
| Poland..... | 46 |
| Bulgaria..... | 47 |
| Italy..... | 48 |
| Austria..... | 49 |
| Literature..... | 52 |
| Germany..... | 52 |
| Poland..... | 53 |
| Bulgaria..... | 55 |
| Italy..... | 56 |
| Austria..... | 58 |
| Results - Part 2: Survey and interviews with lodging industry SMEs..... | 61 |
| Results - Part 3: Interviews with SMEs in the lodging industry..... | 77 |
| Germany - Interview 1..... | 77 |
| Germany - interview 2..... | 79 |
| Poland - interview 1..... | 81 |
| Poland - interview 2..... | 83 |
| Bulgaria - interview 1..... | 85 |
| Bulgaria - interview 2..... | 88 |
| Italy - interview 1..... | 89 |
| Italy - interview 2..... | 91 |
| Italy - interview 3..... | 93 |
| Austria - interview 1..... | 95 |

Introduction

This report is the result of Task 1 of WP2. Its goal is to gain a state-of-the-art understanding of the challenges, needs for support as well as best practices in lodging industry SMEs, as well as current practices and gaps in relevant VET programs.

Methodology

In order to achieve these goals, three different methods were used. The first method was a desk research based on the following predefined research questions:

- Which sustainability knowledge gaps among SMEs in the lodging industry are described in relevant literature?
- What can help SME lodging industry staff and leaders to change their behavior towards sustainability according to literature?
- What is currently preventing SME lodging industry staff and leaders to change their behavior regarding sustainable practices in their work/business?
- Which areas do VET programs already cover well in terms of sustainability, according to the literature?
- Where are there still gaps, according to the literature?

Sources include academic publications, as well as publications by industry associations and relevant magazine and newspaper articles. For the most part, literature was found with Google Scholar.

The second method was a survey to be sent out to SMEs in the lodging industry in order to get direct feedback from the target group. Thirdly, guided interviews were conducted with selected good practice SMEs. All results will be relevant for completing all following work packages, especially for the design of the game content (WP3) and for the toolkit (WP4).

Results - Part 1: Desk research

This section includes an overview of sustainability in the lodging industry with special focus on SMEs in the project partner countries. It analyses relevant literature discussing knowledge gaps among SMEs regarding sustainability, potential support for SMEs, barriers for SMEs as well as an overview over the offerings of VET programs regarding sustainability in the lodging industry.

1. Overview of sustainability in the lodging industry

Germany

The lodging industry in Germany is a cornerstone of the nation's tourism sector, significantly contributing to both the economy and cultural landscape. In 2025, the German Federal Statistical Office (Destatis) reported that the accommodation sector generated a total revenue of approximately 33.7 billion euros (Statista, 2024) with 32.3 million overnight stays

(Destatis, 2025a). This includes not only hotels and guesthouses but also a growing number of alternative accommodations like vacation rentals and eco-lodges. Economically, the lodging industry supports around 300,000 jobs in Germany, encompassing roles in management, operations, culinary arts, and customer service (Statista, 2024, p. 41).

Small and medium-sized enterprises (SMEs) form the backbone of Germany's lodging industry. The significance of SMEs varies by sector, and they play a particularly dominant role in the construction and hospitality industries. In 2022, SMEs accounted for approximately 77% of total revenue in the hospitality sector and employed around 87% of the workforce (Destatis, 2025b). These figures underscore the critical role SMEs play in regional economies, offering employment opportunities and driving local economic activity. Family-run guesthouses, boutique hotels, and regional holiday rentals exemplify the entrepreneurial spirit and cultural authenticity that SMEs bring to the sector. They also often focus on niche markets, including ecotourism and heritage tourism.

According to a study by Rochnowski (2023), sustainability is playing an increasingly central role in the German hotel sector. Approximately 67% of the surveyed businesses already align their operations with sustainable principles, focusing on energy-saving measures, waste reduction, and the procurement of regional and organic products. However, the low adoption rate of sustainability certifications remains a challenge, with only 26% of companies utilizing such labels. Key reasons for this hesitation include the high administrative burden and limited resources. Nevertheless, many businesses view sustainability as an opportunity to enhance their image and foster customer loyalty, particularly through targeted measures such as reducing energy and water consumption, eliminating daily room cleaning, and offering regional products. Sustainability is thus perceived not only as an ecological priority but also as an economic opportunity.

In Germany, there are various sustainability certifications for hospitality properties. The following are the most important:

- **EarthCheck:** A certification specifically designed for the travel industry, promoting continuous improvements in sustainability.
- **Biosphere Responsible Tourism:** A certification that promotes sustainable tourism and ensures compliance with ecological and social standards.
- **TourCert:** A trusted and transparent certification for sustainable hotels and travel, offering clear criteria.
- **NEPCon Rainforest Alliance:** A certification focused on protecting biodiversity and promoting sustainable livelihoods.
- **Green Globe:** A certification specifically developed for the tourism industry, emphasizing ecological, social, and economic sustainability.
- **EU Ecolabel:** Also known as the EU Environmental Label, it certifies ecologically sustainable hotels across Europe.
- **GreenSign:** A certification that evaluates and recognizes hotels for sustainability across various criteria.
- **Bio Hotels:** A certification for hotels that offer organic food and implement sustainable practices.
- **Green Key:** A globally recognized certification for sustainable tourism businesses, considering ecological, social, and economic sustainability.

- **Viabono:** A certification focusing primarily on ecological sustainability, exclusively awarded to hotels in Germany.
- **Travelife:** An international certification program for sustainable practices in the tourism industry.
- **Green Pearls:** A certification recognizing sustainable hotels and restaurants worldwide.
- **EMAS:** The Eco-Management and Audit Scheme is a voluntary environmental management tool by the European Union.
- **Certified Green Hotels:** A certification from the German Business Travel Association (VDR) for sustainably operating hotels.

Germany has implemented several national policies and strategies to promote sustainability within its lodging industry. The Federal Ministry for Economic Affairs and Climate Action (BMWK, n.d.) is responsible for organizing tourism policy, aiming to create favorable conditions for the tourism sector's development. This includes supporting SMEs that dominate the lodging industry (BMWK, n.d.).

The German National Tourist Board (GNTB), operating on behalf of the federal government, has integrated sustainability into its long-term strategy. The GNTB's tasks and targets for 2023, set by the Federal Ministry for Economic Affairs and Climate Action, emphasize marketing Germany as a sustainable and green travel destination. This involves promoting eco-friendly accommodations and encouraging sustainable practices among lodging providers (German National Tourist Board, 2023).

Additionally, the Federal Government's 'Future of Tourism' platform serves as a central tool for setting the direction of the national tourism strategy, with a clear focus on sustainable development. This platform aims to preserve natural habitats and cultures while promoting inclusive design within the tourism value chain (Germany - The Travel Destination, n.d.).

Poland

From January to August 2024, 20 million people stayed in accommodation facilities in Poland, marking a 4% increase compared to the previous year. Of this number, 15.45 million were domestic tourists, and 4.56 million were international tourists (eTravel, 2024).

Forecasts for 2025 indicate further growth in tourism revenue in Poland. According to Statista projections, tourism revenue in Poland is expected to reach 9.7 billion USD in 2025, with continued growth to 11.52 billion USD by 2029 (Cunningham, 2025).

The increase in the number of tourists and tourism revenue in Poland between 2023 and 2025 reflects the dynamic development of the hospitality industry and the growing interest in Poland as a tourist destination. The tourism sector contributed around 6.3% to Poland's GDP, a slight decline due to the global pandemic's aftereffects but still a key contributor to the economy. The lodging industry, which includes hotels, guesthouses, and hostels, is integral to this contribution, providing accommodations for business, leisure, and cultural tourists alike. A detailed report on the accommodation industry in Poland was published by Statistics Poland (2022). With an increasing number of travelers, Poland has also seen a growing demand for diverse accommodations across the country, from high-end hotels to eco-friendly options (Ministry of Sport and Tourism, 2024).

Culturally, the lodging industry is intertwined with Poland's heritage, as many hotels are located in historic buildings that have been restored to reflect Poland's rich history and architecture. The cities of Kraków, Warsaw, and Gdańsk, which feature UNESCO World Heritage Sites and a blend of medieval and modern influences, benefit greatly from the influx of tourists staying in historic hotels and accommodations. Additionally, Poland's lodging sector supports local communities by providing jobs in hospitality, food services, and maintenance, particularly in rural and smaller towns where tourism is a vital economic activity.

National Policies or Strategies to Promote Sustainability in the Lodging Industry

Poland has strengthened its commitment to sustainability in the lodging industry through various national policies and strategies. The National Strategy for Responsible Development (Strategia na rzecz odpowiedzialnego rozwoju) continues to be a guiding framework for sustainable economic growth, with a focus on green tourism and responsible hospitality. This strategy outlines several initiatives aimed at fostering eco-friendly practices, such as the reduction of carbon emissions, waste management, and resource efficiency in the lodging sector (Ministry of Development Funds and Regional Policy, n.d.).

Poland's tourism policies are increasingly aligning with the European Green Deal and the EU Tourism Strategy 2023 (European Commission, 2024), which emphasize sustainability and eco-tourism. In 2023, the Polish government, under its Polish Tourism Development Program, highlighted the importance of promoting sustainable infrastructure in the tourism and lodging sectors. The focus is on energy-efficient buildings, environmentally friendly materials, and the development of eco-tourism routes and infrastructure.

Moreover, Poland's Ministry of Climate and Environment and the Polish Tourism Organisation have been working on promoting sustainable travel and eco-friendly accommodations to attract environmentally conscious travelers. This includes initiatives to help hotels, especially small and medium-sized enterprises (SMEs), adopt green certifications such as Green Key and Ecolabel, which recognize establishments for their efforts in sustainability.

Sustainability Initiatives and Certifications in the Lodging Industry

In 2023, the number of sustainable and green-certified hotels in Poland continues to rise. Certifications like Green Key, Ecolabel, and the EU Ecolabel have become standard in many Polish hotels, with increasing participation from both large chains and independent accommodations. These certifications focus on energy and water efficiency, waste reduction, use of renewable resources, and promoting eco-friendly guest behaviors. Poland's major cities, including Warsaw, Kraków, and Wrocław, are home to a growing number of environmentally friendly hotels that actively engage in reducing their carbon footprint through practices like solar panel installation, water conservation, and energy-efficient lighting. Poland is also seeing more local and regional governments incentivizing green practices within the tourism sector, offering support to hotels and lodging businesses that take steps toward sustainability. These initiatives have gained traction with the increasing awareness among consumers about the environmental impact of tourism. Many hotels now offer guests

options for reducing energy usage during their stays, and some are moving toward zero-waste practices, promoting local, organic products, and minimizing plastic waste. Through these efforts, Poland is enhancing its appeal as a green travel destination.

Forms of Support for SME Lodging Businesses

Small and medium-sized enterprises (SMEs) in the Polish lodging sector have access to a variety of financial, technical, and advisory support designed to promote sustainability and competitiveness. One of the most important initiatives is the Operational Program for Smart Growth 2021-2027 (Program Operacyjny Inteligentny Rozwój 2021-2027) which provides funding for SMEs to invest in innovative, energy-efficient technologies, and sustainable tourism practices. This program offers grants and low-interest loans for projects focused on improving the energy performance of accommodations, digitizing services, and adopting eco-friendly practices. In 2024, this program continues to be one of the most significant funding mechanisms for the lodging industry.

Additionally, the Polish Tourism Organisation (POT - Polska Organizacja Turystyczna) offers technical support to help SMEs navigate regulatory requirements, improve service quality, and implement sustainable practices. POT provides training and guidance on obtaining green certifications and supports SMEs in adopting industry best practices. Local chambers of commerce and regional tourism offices also offer resources for SMEs, including mentoring, workshops, and networking opportunities that enable businesses to share knowledge and collaborate on sustainability projects.

VET Programs for the Lodging Sector in Poland

Vocational Education and Training (VET) programs in Poland are critical to ensuring a skilled workforce for the lodging industry.

In Poland, there is a wide network of vocational schools and technical schools offering educational programs in the fields of tourism, hospitality, gastronomy, and accommodation management. Example types of schools include:

- Tourism Technical Schools – training specialists in tourism management and the organization of tourism services.
- Hospitality Technical Schools – focused on training individuals for work in the hospitality and tourism industries, including hotel and accommodation management.
- Vocational Schools offering courses in gastronomy, the organization of tourism services, and customer service in the tourism industry.

As of 2024, several specialized institutions, such as the School of Tourism and Recreation (Szkoła Główna Turystyki i Rekreacji) in Warsaw and other vocational schools like Higher school of tourism and hotel management in Gdańsk offer comprehensive programs focused on hospitality management, customer service, hotel operations, and sustainable tourism. These programs include both theoretical coursework and practical experience in real-world settings, preparing students for careers in the lodging industry and promoting awareness of sustainable tourism practices.

In response to growing demands for sustainability in the hospitality industry, VET programs are increasingly incorporating training on sustainable hospitality management, energy efficiency, and waste reduction.

As the demand for sustainable tourism grows, Polish VET programs are placing more emphasis on green practices, offering courses in eco-tourism and sustainable business models. This ensures that the next generation of hospitality professionals is prepared to contribute to Poland's goal of becoming a leading sustainable tourism destination.

In conclusion, the lodging industry in Poland is essential for the country's economic growth and cultural heritage. With robust national policies, sustainability initiatives, and support for SMEs, Poland is on a path toward a greener and more sustainable tourism industry. Vocational education and training programs continue to play a key role in preparing the workforce for the demands of the modern, eco-conscious travel market, positioning Poland to thrive in the evolving global tourism landscape.

Bulgaria

The lodging industry in Bulgaria plays a pivotal role in both the nation's economy and cultural preservation. Tourism, encompassing a wide range of accommodations from luxury resorts to boutique guesthouses, significantly contributes to Bulgaria's GDP. In 2021, the tourism sector generated approximately 2.54 billion EUR, accounting for 2.7% of the country's GDP and about 8% of all international tourism receipts in Eastern Europe. In 2023, the industry experienced substantial growth, with over 27 million nights spent at tourist accommodation establishments, marking an 11.9% increase compared to 2022 (Bulgarian National News Agency 2024). This economic impact is complemented by the industry's efforts to showcase Bulgaria's rich cultural heritage, with numerous establishments promoting local traditions, cuisine and history, thereby enhancing the cultural experience for visitors. The World Travel & Tourism Council (WTTC) forecasts that by 2033, the travel and tourism sector will contribute 10% to Bulgaria's real economy, reflecting the industry's ongoing expansion and its increasing economic significance.

To promote sustainability within the lodging industry, Bulgaria has implemented several national policies and strategies. The "National Strategy for Sustainable Development of Tourism in Bulgaria 2014-2030," approved on February 2, 2018, outlines the country's commitment to sustainable tourism development. This strategy emphasizes the balanced utilization of natural and cultural resources, aiming to enhance competitiveness while preserving the environment. Key objectives include improving infrastructure, promoting Bulgaria as a sustainable tourism destination and fostering partnerships between governmental bodies, businesses and local communities. One of the key actions supported in the Strategy is the implementation of energy efficiency measures, encouraging hotels and other lodging establishments to adopt technologies that reduce energy consumption and minimize environmental impact. Additionally, the strategy promotes the use of renewable energy sources, such as solar and wind energy, to help decrease reliance on non-renewable resources. Water conservation is another priority, with measures advocating for the installation of water-saving technologies and responsible usage practices. The strategy also supports robust waste management systems, encouraging recycling and minimizing waste generation in lodging facilities. For new constructions and renovations, the strategy

advocates for the use of eco-friendly materials and sustainable building practices. The document also stresses the importance of lodging establishments participating in sustainability certifications and labeling schemes, such as the Green Key certification, to recognize their efforts. Furthermore, the strategy supports training programs aimed at building the capacity of hotel operators and staff in sustainable practices, ensuring that sustainability becomes embedded in the industry's operations. Lastly, community engagement is encouraged, with an emphasis on cultural preservation and supporting local heritage, ensuring that tourism contributes to both the economy and the safeguarding of Bulgaria's rich cultural assets. Through these actions, the strategy envisions a tourism sector that thrives economically while prioritizing environmental conservation and social responsibility.

In terms of certifications, the Green Key program has been a prominent initiative. This international eco-label recognizes lodging establishments that adhere to strict environmental standards. In 2022, InterContinental Sofia became the first hotel in Bulgaria to receive the Green Key certification, highlighting its commitment to sustainable practices. Subsequently, in 2023, ten additional Bulgarian hotels obtained the Green Key certificate, reflecting a growing trend among accommodations to embrace sustainability. As of July 2024, six hotels in Bulgaria hold the prestigious Green Key eco-label. This marks a slight decrease from the ten hotels certified in 2023. The slight decrease in the number of certified hotels may be attributed to various factors, including the expiration of certifications and the need for establishments to meet ongoing sustainability criteria to maintain their status.

Additionally, the development of the Charter for Sustainable Tourism in Bulgaria, signed in April 2024, further underscores the collective efforts of governmental bodies, tourism organizations, and NGOs to promote sustainable tourism practices across the country. Small and medium-sized enterprises (SMEs) in Bulgaria's lodging sector receive various forms of support to enhance sustainability and competitiveness. They could benefit from a variety of financial, technical and advisory support through both EU programs and national initiatives. The European Union offers grants via the European Structural and Investment Funds (ESIF), which support investments in modernization, innovation, and workforce development for tourism-related businesses. The National Guarantee Fund, managed by the Bulgarian Development Bank, supports SMEs with financial guarantees for loans. On the national level, there are many companies and NGOs that offer advisory services, training and help in accessing both national and EU funding opportunities.

In Bulgaria, vocational education and training (VET) programs for the lodging industry are designed to equip individuals with the skills and knowledge necessary for various roles within the hospitality sector. These programs are offered at different levels, ranging from basic qualifications to advanced diplomas and are available through secondary vocational schools, specialized colleges and training centers. The curriculum typically includes both theoretical instruction and practical experience, covering areas such as hotel management, front office operations, housekeeping, food and beverage services and customer relations. This dual approach ensures that students gain hands-on experience alongside their academic studies, enhancing their readiness for the workforce.

In recent years, there has been a growing emphasis on integrating sustainability into these VET programs. This integration reflects a broader recognition of the importance of

environmental responsibility and sustainable practices within the hospitality industry. As a result, curricula are being updated to include modules on sustainable tourism, eco-friendly operations, waste management, and energy efficiency.

Italy

The lodging industry in Italy plays a vital role in the country's economy and cultural identity. Contributing approximately 13% to Italy's GDP, the tourism sector, which includes lodging, is a cornerstone of economic activity, generating around €200 billion annually. Italy is renowned for its rich cultural heritage, stunning landscapes, and historical landmarks, attracting 64 million international visitors in 2023 alone. This influx has stimulated significant growth in the hospitality sector, with a notable rise in hotels, resorts, and alternative accommodations like agritourism and vacation rentals (Mordor Intelligence Research & Advisory, 2024).

Italy has implemented several national strategies to enhance sustainability within the lodging industry. The Sustainable Tourism Fund, established by the Italian government, allocates €25 million over three years to support eco-friendly initiatives. This fund aims to promote sustainable tourism practices, enhance lesser-known destinations, and assist businesses in obtaining sustainability certifications (Ministero del Turismo, n.d.). The government encourages projects that minimize environmental impacts and promote ecotourism, particularly in areas suffering from overtourism.

The Italian lodging sector has embraced various sustainability certifications (EU Ecolabel, Travel Life, EarthCheck, GreenKey, Biosphere, ISO 14001, LEED) to demonstrate commitment to eco-friendly practices. These certifications reflect adherence to strict environmental standards and help attract environmentally conscious travelers. They serve as important tools for green marketing and environmental quality assurance in the hospitality sector. The study "Impact of an ecolabel in promoting luxury in Italy" highlights that ecolabels are becoming increasingly important in the luxury hospitality market as well. As sustainability and luxury are increasingly seen as compatible concepts, high-end hotels are adopting these certifications to appeal to eco-conscious luxury travelers (Re, 2021).

In Italy, small and medium-sized enterprises in the lodging industry can benefit from various forms of support, including financial, technical, and advisory assistance. The European Investment Bank (EIB) has allocated a €150 million credit line to the Emilia-Romagna region to support micro and small businesses in the tourism sector, including hotels. This funding offers favorable interest rates and is aimed at modernizing facilities and improving services (European Investment Bank, 2023). Initiatives like "UniCredit per l'Italia" provide state guarantees of 80% on loans for SMEs and micro-businesses, facilitating access to working capital and investments in sustainable practices (UniCredit, n.d.).

Many regional governments implement incentives and public concourses for PMI to stimulate local sustainable tourism. For instance, the Calabria Region has announced a €50 million initiative to support tourism SMEs. This program offers grants covering up to 60% of expenses for small businesses and 50% for medium-sized enterprises. The funding is divided into two lines: €40 million for hotels (minimum 3-star rating) and €10 million for extra-hotel accommodations (minimum 3-smile rating). The grants aim to improve competitiveness through projects focused on renovation, innovation, and digitalization. Applications open on March 5, 2025 (Regione Calabria, 2025).

Italy has a small range of vocational education and training programs aimed at enhancing skills within the lodging industry:

1. **GSTC Training Programs:** The Global Sustainable Tourism Council (GSTC) offers training courses focused on sustainable tourism practices. These courses are designed for professionals seeking to align with international sustainability standards (GSTC Italy Working Group, n.d.).
2. **Hospitality Management Courses:** Many Italian universities and hospitality schools provide specialized programs in hospitality management that cover operational management, customer service, and sustainability practices.
3. **AITR School:** The Italian Association for Responsible Tourism (AITR) offers an official course on Responsible Tourism, covering fundamentals, tools, and management (Associazione Italiana Turismo Responsabile, n.d.).

Austria

Austria is a tourism nation. With its historical sites, national parks, hiking and mountainbiking trails, ski slopes and lakes, thermal spas, as well as regional agriculture and cultural events, it has been one of the top tourism destinations worldwide for many years in terms of international arrivals. In 2022, it was the tenth largest nation in terms of international arrivals, accounting for 2,73% of the global market (United Nations World Tourism Organisation 2024, p. 7). According to the Meeting Industry Report Austria 2023, over 151 million overnight stays were registered in 2023. The meeting industry also plays a relevant role for the lodging industry. Approximately 2,1% of all overnight stays in 2023 could be contributed to congresses, company meetings and seminars (Austrian Convention Bureau & Österreich Werbung, 2024, p. 5).

In 2022, the tourism sector contributed 6,2% (about 28 billion EUR) to the country's nominal GDP in terms of direct and indirect effects. About 28,9% of this number can be allocated to the lodging industry, meaning it contributed by about 1,8% to Austria's GDP in 2022 (BMAW, 2023). Most overnight stays can be attributed to Germans, Austrians and Dutch visitors (BMAW, n.d.d).

Even though the Covid-19 pandemic hit the tourism industry especially hard, the Austrian tourism sector was able to recover quickly (BMAW, n.a.d). In 2023, a total of 15.294 hotels were registered with Austria's lodging industry professional association, 99,9% or 15.276 of which were SMEs (Wirtschaftskammer Österreich, 2024). With a mix of winter, summer and city tourism, the lodging industry is an important employer in rural areas. The potential for awareness raising is therefore significant: In 2023, 109.601 people were employed in the lodging industry.

There is an interesting "double materiality" (as it is called in ESG reporting) to many forms of tourism relevant in Austria. Tourism is the source of significant amounts of greenhouse gas emissions and contributes to land use change as well as biodiversity loss. On the other hand, many tourism destinations rely mostly on ecosystem services to provide value to the customer, and are required to change infrastructure and business models due to the effects of climate change (Carlisle et al., 2022; Calisto et al., 2021). In Austria, notable examples for these threats to tourism are a loss of ecosystem services required for winter and summer

sports and agriculture. Additionally there is the threat of heat for outdoor activities in summer and natural disasters which are especially severe in the plentiful and tourism-heavy alpine and lake regions in Austria.

National policies or strategies in Austria which promote sustainability in the lodging industry:

On a high level, Austria has implemented an overarching political strategy for sustainable tourism called “Plan T”. This “Masterplan for Tourism” was developed as a participatory process in 2018 and 2019 and includes the ecological, economic and social dimension of sustainability. It is supported by an “action plan”, which is updated regularly and provides more tangible steps to bring Plan T to life (BMAW, n.d.c). The responsible ministry is the Federal Ministry of Labour and Economy. Three important partners of the Ministry’s sustainability efforts are the Austrian National Tourist Office (Österreich Werbung ÖW), the Austrian Chamber of Commerce (Österreichische Wirtschaftskammer WKÖ) and the Austrian Hotelier Association (Österreichische Hotelierversammlung ÖHV) with different information services and events (BMAW n.d.a).

Sustainability initiatives and certifications in the lodging industry in Austria: A central initiative in the Austrian lodging industry is “Nachhaltigkeit in der Hotellerie – Zeichen setzen” (“Sustainability in the lodging industry – make a mark”), which was implemented in 2019 (BMAW, n.d.b). Additionally, there are a lot of eco labels available for sustainable hotels, hence why Österreich Werbung has issued recommendations as to which schemes are 1) based on the three dimensions of sustainability (ecological, socio-cultural and economic) and 2) are issued by an independent third party based on an external evaluation. The recommended schemes for Austrian lodging industry businesses are (Österreich Werbung, n.d.; BMK, 2025):

- Austrian Ecolabel (06.02.2025: 389 businesses)
- EU Ecolabel (06.02.2025: 208 businesses)
- Green Key (06.02.2025: 30 businesses, Green Key, n.d.)
- In addition, there is an Austrian Ecolabel for Camping Sites (17 businesses) and alpine huts (19 businesses).

Forms of support offered to SME lodging businesses in Austria: There are multiple forms of financial support available to SMEs in the lodging industry. Co-funding of consulting for the Austrian Ecolabel is currently available in all of Austria, with varying amounts of funding. Additionally, co-funding for sustainable investments in the lodging industry are currently available in all of Austria for a broad variety of measures: For heating and cooling, vehicles and charging infrastructure, energy efficiency and lamp replacements with LEDs, solar energy production, recycling of previously used areas for owners, hazardous waste management and building refurbishment. Other financial support includes a funding scheme for waste prevention measures (by the Austrian packaging coordination office), co-funding for energy consulting as well as corporate social responsibility related consulting. There are also options for advisory support available, with a variety of paid and free of charge consulting services, workshops (a free option is offered by Umweltberatung) and a free webinar series by the Chamber of Commerce that is relevant for SMEs in the lodging industry.

VET programmes for the lodging sector: VET programmes for the lodging industry in Austria exist on the levels of secondary and post-secondary education as well as tertiary education (Arbeitsmarktservice Österreich s.a.): Special training programmes focusing on sustainability in the lodging industry are rare but do exist.

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| Secondary education |
| School-based VET: Höhere Lehranstalt für Tourismus (5 years), Hotelfachschule (3 years) |
| Apprenticeships: <ul style="list-style-type: none"> ● Hotel- und Gastgewerbeassistent:in: Variety of organisation tasks in different parts of the business ● Hotelkaufmann/-frau: Similar to above, but more specialised, without catering-related organization. ● Cook ● Restaurantfachmann/-frau: Tasks related to the guest areas in restaurants, like servicing, table-setting, event organizing... ● Gastronomiefachmann/-frau: Catering-related tasks (cooking and servicing) ● Hotel- und Restaurantfachmann/-frau: Lodging industry related generalists |
| Post-secondary education |
| “Kolleg” for tourism (2 years) with different specialisations, for example: Destination and Hotel Management, Hospitality Management (English), Hotel & Tourism Management (English), Digital Tourism, Startups & Entrepreneurship, Sport and event tourism |
| Tertiary education |
| Bachelor’s degrees: <ul style="list-style-type: none"> ● Tourism, Hotel Management & Operations ● Tourism and Hospitality Management – Tourism and Event Management ● Tourism and Hospitality Management – Hotel Management ● Hospitality Management ● Betriebswirtschaftslehre – Schwerpunkt Tourism and Hospitality management ● Wirtschaft – Hotel Management ● Unternehmensführung, Tourismus & Freizeitwirtschaft ● Tourismus-Management |
| Master’s degrees: <ul style="list-style-type: none"> ● International Tourism Management ● Urban Tourism & Visitor Economy Management ● Lebensqualität und Nachhaltigkeit im Tourismus ● Innovation & Management in Tourism ● Entrepreneurship & Tourism |

Other:

- FH-Lehrgang International Hospitality & Spa Management
- Weiterbildungsstudium Smart Service and Experience Design
- Weiterbildungsstudium Marketing and New Media Technologies

Other relevant VET programmes: Lehrgang Nachhaltigkeitsmanagement der Österreichischen Hotelierversammlung (Österreichische Hotelierversammlung s.a.)

2. Knowledge gaps among SMEs

Germany

The lodging sector in Germany's small and medium enterprises (SMEs) faces significant challenges in addressing sustainability knowledge gaps. A recent study on environmental skills gaps across the European tourism industry highlights several critical areas where these gaps are pronounced, particularly among SMEs in Germany.

Key Findings

1. **Low Proficiency in Key Environmental Skills:** German SMEs in the accommodation sector reported below-average proficiency in managing waste, sewage, recycling, and energy efficiency. Specific gaps were found in advanced skills such as implementing renewable energy systems and reducing carbon emissions. For instance, German managers ranked their proficiency in waste management at an average level of 3.24 (on a scale of 1-5), highlighting room for improvement compared to other European counterparts (Carlisle, 2022, p. 419)
2. **Training Deficits:** The study revealed a lack of comprehensive environmental training for employees. While larger organizations are more likely to provide training on-site, micro and small enterprises often face financial and logistical constraints. In Germany, 128 out of 246 respondents reported receiving no environmental training, further compounding the skills gap (Carlisle, 2022, p. 424ff.)
3. **Lack of Focus on Biodiversity and Sustainable Transport:** SMEs displayed minimal engagement with biodiversity conservation and sustainable transportation, scoring lower in these areas compared to other skills (Carlisle 2022, p. 420). This lack of focus could hinder efforts to meet the Sustainable Development Goals (SDGs), especially SDG 12 on sustainable consumption and production.

The study "Messung der Nachhaltigkeit des Tourismus in Deutschland" (Umweltbundesamt 2023) provides valuable insights into sustainability knowledge gaps among SMEs in the lodging industry in Germany. Key findings include:

1. **Limited Knowledge on Resource Efficiency:** The lodging sector exhibits significant energy consumption and greenhouse gas (GHG) emissions. While energy intensity has decreased slightly, the overall environmental footprint remains above average compared to the broader economy. SMEs often lack targeted knowledge and tools

for optimizing energy use and implementing renewable energy solutions (Umweltbundesamt, 2023, p. 28-29).

2. **Data Gaps on Sustainability Metrics:** The lack of robust, standardized data hampers SMEs' ability to assess their environmental impact. For example, the environmental indicators such as biodiversity impacts, water quality, and waste management are not fully integrated into sustainability metrics due to insufficient regional and sector-specific data (Umweltbundesamt, 2023, p. 6-7, 24).
3. **Challenges in Social Sustainability:** SMEs in the lodging industry face difficulties addressing labor issues, such as low wages and high rates of seasonal employment. These factors contribute to lower job satisfaction and impede the adoption of sustainability practices that require stable and well-trained staff (Umweltbundesamt, 2023, p. 26-27).
4. **Tourism-Specific Issues:** The accommodation and gastronomy sectors are highlighted as areas with high water intensity and significant waste generation. Yet, SMEs struggle to find practical solutions to reduce these impacts due to knowledge and resource limitations (Umweltbundesamt, 2023, p. 113-114).

These gaps underscore the need for targeted educational initiatives, improved access to sustainability data, and collaboration between SMEs and larger industry stakeholders to address these deficiencies comprehensively.

The article "Sustainability Efforts in Practice in European Hotels: A Tricky Business?" primarily explores sustainability practices in hotels across 11 European countries, including Germany. It highlights several relevant points concerning sustainability knowledge gaps among SMEs in the lodging industry. Here's a summary with references (Oxenswärdh, 2022):

1. **Lack of Knowledge and Training:** Hotel managers and staff often lack sufficient knowledge about sustainability practices, with only about 10% demonstrating strong understanding and application of sustainability in their operations (p. 14).
2. **Inconsistent Staff Training:** While some managers acknowledge the importance of sustainability, few actively train their staff in sustainable practices. High staff turnover and the predominance of untrained or seasonal employees make systematic training challenging (Oxenswärdh, 2022, p. 13-14).
3. **Limited Use of Certifications:** Only about 20% of hotels use green certification systems like Green Key, which help structure and standardize sustainability efforts. Many hotels implement ad-hoc measures without formal frameworks, limiting the effectiveness of their actions (Oxenswärdh, 2022, p. 12-13).
4. **Guest Expectations and Challenges:** Hotel guests increasingly demand sustainable options, yet their expectations sometimes conflict with practical realities (e.g., seasonal availability of local products). This discrepancy further complicates efforts to standardize sustainable practices (Oxenswärdh, 2022, p. 14).
5. **Focus on Basic Measures:** Most sustainability initiatives in hotels revolve around basic measures like reducing energy and water usage or sorting waste. These efforts often stem from local government regulations rather than proactive strategies by the hotels (Oxenswärdh, 2022, p. 13).

Poland

In Poland, the hospitality industry, including small and medium-sized enterprises (SMEs), faces many challenges related to implementing sustainability principles. Although the topic of sustainability in tourism is becoming increasingly popular in recent years, there are still many knowledge gaps that hinder the effective implementation of sustainable practices. Below, we present the main areas where SMEs in the hospitality industry may face difficulties in terms of sustainability, as well as potential knowledge gaps that need to be identified and addressed.

1. Sustainability Management and Monitoring

SMEs in Poland often lack the appropriate tools for monitoring and managing sustainability. Many businesses do not have an organized environmental management system (e.g., EMS – Environmental Management Systems), which makes it difficult to assess and improve their environmental impact (Kapera, 2018). An example is the lack of knowledge about effectively monitoring energy, water, or waste consumption. There is also limited knowledge about available sustainability tools and indicators, which restricts the ability to measure progress in this area (Wikipedia, n.d.).

2. Eco-Certification Schemes

Eco-certification, which could help small hotels gain customer trust, is still not very popular in Poland. Many small hospitality establishments are unaware of available certification schemes, such as Green Key, EU Ecolabel, or Green Globe, or do not fully understand the requirements of these programs. As a result, many SMEs do not make an effort to obtain such certifications, which affects their competitiveness in the market. The lack of knowledge about the benefits of certification (e.g., increased guest numbers seeking eco-friendly properties) and the challenges of meeting certification requirements represent significant knowledge gaps in this area.

3. Energy Efficiency and Renewable Energy

Although the topic of energy efficiency and renewable energy is increasingly present in public debate, small hospitality establishments in Poland still struggle with implementing such solutions. Too few SMEs in the tourism sector have knowledge about available energy-efficient technologies, such as photovoltaic panels, energy management systems, or renewable energy-based technologies. Initial costs and a lack of knowledge about available subsidies or support programs under EU funds prevent many hotels from investing in eco-friendly solutions. There is some government and external funds for this activity (Polish Ministry of Climate and Environment - for renewable energy).

4. Water Usage and Conservation

Sustainable water management is an area where there are many knowledge gaps. Despite water becoming an increasingly valuable resource, many small establishments are unaware of opportunities for saving water. There is a lack of knowledge about modern water-saving technologies, such as rainwater harvesting systems or water-saving devices. Additionally, few establishments are aware of the potential benefits of implementing water conservation strategies, both in terms of cost savings and reducing environmental impact.

5. Waste and Waste water Management

Waste and wastewater are other areas where SMEs in the hospitality sector often encounter difficulties. Small establishments do not always implement proper waste segregation procedures and face challenges in introducing recycling practices. Moreover, there is a lack of knowledge regarding efficient wastewater management systems and treatment solutions, leading to inefficient use of resources and negative environmental impacts (Kapera, 2018).

Summary:

The study analyzed data from Booking.com (2021-2022) to assess the involvement of Polish tourist facilities in sustainable development initiatives promoted by the country and the European Union. The research focused on accommodations participating in the Travel Sustainable Badge program. Findings revealed that only 1,224 out of 50,319 tourist facilities (approximately 2%) received the badge, indicating limited engagement in sustainability efforts.

The study also examined which types of accommodations are most active in sustainable development. Apartments were the most frequently awarded category, making up 46.12% of all recognized facilities, while boats received the fewest badges (0.16%), likely due to their limited presence in Poland (only 40 rental units).

Furthermore, the research identified the most and least commonly implemented sustainable practices. The most frequent practices included the availability of recycling bins, water-efficient toilets, the elimination of single-use plastic toiletries, and food waste reduction. The least commonly adopted practices were providing guests with information on local ecosystems, bicycle rentals, and offering organic food. These insights can serve as recommendations for tourist facility owners looking to enhance sustainability and qualify for the Travel Sustainable Badge (Rutecka 2023).

Bulgaria

The sustainability knowledge gaps among small and medium-sized enterprises (SMEs) in Bulgaria's lodging industry have become an increasingly important topic in both academic and practical discussions. As the global tourism sector faces mounting pressure to adopt environmentally responsible practices, SMEs, which represent a significant portion of the Bulgarian lodging industry, often struggle to integrate sustainability into their operations. This is due to various factors, including limited awareness of sustainability practices, insufficient access to financial resources and a lack of specialized knowledge in green certifications and digital tools for sustainable management. The existing literature highlights these knowledge gaps, emphasizing the need for targeted interventions, including training programs, financial support and greater awareness of the benefits of sustainability certifications.

According to a study by Vassileva & Kirova (2020) one of the key sustainability knowledge gaps in Bulgarian SMEs, especially within the hospitality sector, is the limited awareness and understanding of sustainable practices. Many lodging businesses, particularly smaller ones, are either unaware of the importance of sustainability or lack the necessary training to implement such practices effectively. This gap hinders the widespread adoption of green technologies and eco-friendly operations within the sector. The study suggests that there is a significant need for more focused education and training on topics such as energy efficiency, waste management, and sustainable sourcing.

Another study by Nikolov (2021) highlighted that SMEs in Bulgaria's lodging industry struggle to access financial resources to support sustainability initiatives. The financial knowledge gap is especially notable among smaller hotels, where there is little understanding of how to secure grants or loans for environmental projects or the long-term benefits of such investments. Many lodging businesses lack the resources or expertise to apply for EU and national funding programs that could help them become more sustainable.

Petrov & Petkova (2020) discuss how the transition to digitalization in the hospitality industry has been slow in Bulgaria, particularly in SMEs. This delay affects the implementation of sustainable practices, such as efficient energy management systems and waste reduction tracking. SMEs in the lodging industry are not fully leveraging digital tools that could help them monitor energy usage, optimize resource allocation and reduce their environmental footprint. The gap in knowledge regarding available digital tools and solutions for sustainability is significant.

These studies stated above show that while Bulgarian lodging SMEs are becoming more aware of sustainability's importance, there are still critical knowledge gaps that need to be addressed, including access to financial resources, certification processes, training in sustainable practices and the use of digital tools for sustainability management.

Knowledge gaps among partners, stakeholders and staff in Bulgaria's lodging industry that impact sustainability efforts stem from a lack of awareness and understanding of sustainable practices, limited access to training and insufficient communication and collaboration among different stakeholders. These gaps are again identified by the three pieces of research cited above.

According to those researches, front-line employees in hotels and other lodging businesses often lack specific training on sustainability initiatives such as energy efficiency, waste management and sustainable sourcing. Many staff members are not equipped to implement or communicate green practices effectively to guests, which limits the overall impact of sustainability measures. Studies show that many staff members may be unaware of how to apply eco-friendly practices in their daily work, such as reducing water and energy usage or properly sorting waste.

Lodging businesses in Bulgaria often rely on suppliers for eco-friendly products and services. However, there is a lack of knowledge about sustainable sourcing options and some suppliers may not offer sustainable alternatives, which makes it difficult for SMEs to align their entire supply chain with sustainability goals. Additionally, many lodging businesses may not have the expertise to assess the environmental impact of their suppliers and partners, hindering the overall sustainability efforts within the industry.

The collaboration between stakeholders, including government agencies, local municipalities, tourism associations and lodging operators, is crucial for driving sustainable tourism initiatives. However, there are often gaps in knowledge about the policies, grants and incentives available to support sustainability in the lodging sector. Many businesses are unaware of the financial and technical support that can help them implement green

practices, and a lack of communication between stakeholders can lead to missed opportunities for SMEs to improve their sustainability performance.

Italy

There is still a lack of understanding regarding effective sustainability management practices among hotel operators. Many SMEs struggle with the implementation of structured sustainability monitoring systems, which hinders their ability to track and improve their environmental impact effectively. When it comes to energy systems, despite the availability of renewable solutions, many hotels have outdated infrastructures that do not comply with modern energy efficiency standards. This results from a combination of low investment capacity and a lack of awareness about available technologies. One important aspect underlined in research is the minimal integration of eco-friendly transportation options within hotel services, reflecting a knowledge gap regarding sustainable travel alternatives that could be offered to guests (Crapolicchio et al., 2020).

Besides, awareness and knowledge of eco-certification schemes are insufficient among many small hotel operators. This gap affects their ability to leverage certifications that could enhance their marketability and operational efficiency (Franco et al., 2021).

There are also problems in terms of how to measure and answer to the real need of the consumers, as there is a gap in understanding the difference between customers' stated intentions regarding sustainability and their actual behavior (e.g., willingness to pay a premium for sustainable services). SMEs need to better understand how customers perceive sustainability efforts in the context of tourism, as customers may view certifications as a restriction on their experience rather than a positive attribute (Belcastro, 2020).

Based on our interviews with SMEs, several knowledge gaps regarding sustainability are apparent. A recurring theme is a lack of in-depth understanding of specific sustainability practices and technologies. For example, one owner admits to lacking specific training in ecology or sustainability and relies on independently gathered information. This owner, along with another interviewee, expresses uncertainty about available funds and incentives for improving sustainability, as well as difficulty navigating the process of accessing and utilizing this information. Furthermore, a lack of awareness about sustainability certifications such as Green Key or EU Ecolabel is evident, with owners unsure of their value or the requirements for obtaining them. Overall, the interviews suggest that SMEs often lack the specialized knowledge and skills needed to effectively implement and improve sustainability practices within their businesses.

Austria

There is little published research on the measurement of sustainability in the lodging industry (Calisto et al., 2021), and no relevant literature that is specific to Austria could be identified. Additionally, very little research on skills and knowledge gaps in the lodging industry was found in the writing of this report. This finding is validated by Carlisle et al. (2022), who analysed environmental skill gaps in the tourism and hospitality sector in Europe, and also observed a lack of academic research on the gaps in sustainability skills in the tourism and

hospitality industry. The authors emphasize the importance of these skills for all staff in the lodging industry in order to achieve higher levels of sustainability.

This study by Carlisle et al. (2022) was conducted among eight European countries, which included 525 survey responses and 72 interviews with people working in the lodging industry, Carlisle et al. (2022) observed that the self-reported level of current and necessary environmental skills depends of factors such as country and size of the business. It was found that organisation size had the biggest influence on the gap between self-reported current proficiency level and self-reported need for developing future environmental skills among staff. Smaller hotels reported a smaller gap between current and required skill levels (Carlisle et al., 2022). Depending on the country, people reported different levels of current and required proficiency in environmental skills (Carlisle et al., 2022).

The majority of respondents stated that they had not received training in environmental skills (ca. 57%, Carlisle et al., 2022, p. 423). Around 73% of those who received environmental skills training did so on the job. Far less respondents used online courses or on-site training by an external expert. Very few respondents received environmental training via higher education programmes. Interestingly, micro and small organisations made more use of off-site training as opposed to medium and large companies. The authors hypothesize that this is because of organisational and financial challenges increasing with the amount of staff needing to be trained (Carlisle et al., 2022).

A variety of skill levels and perceived knowledge gaps in tourism and hospitality businesses and organisations are described in the literature:

- **Biodiversity**

Carlisle et al. (2022) note a lack of understanding and skills when it comes to the connection of businesses in the tourism industry and biodiversity. Their survey shows a self-report of skills on a 5-point scale from 1 (“no skills”) to 5 (“expert”). “Conservation of biodiversity” was rated with a mean of 2.84 among 1.404 respondents from all countries across different tourism sectors, making it a comparatively less developed skill. The mean self-reported required skill level was 3.51 (Carlisle et al., 2022, p. 420).

- **Communication and greenwashing**

The communication of sustainability efforts is arguably one of the most controversial aspects of sustainability in the lodging industry. With regulations like the Green Claims Directive being negotiated on an EU level, the risk of greenwashing is increasingly perceived as a threat for business. At the same time, customers in the hospitality industry need to understand how their choices contribute to climate change and biodiversity loss in order for them to take corrective action. Carlisle et al. (2022) therefore advocate for the need of skilled employees able to correctly and transparently disseminate information relevant to sustainability performance.

- **Waste**

In the analysis of skills conducted by Carlisle et al. (2022), respondents across a variety of tourism sectors reported a mean current skill level of 3.24 regarding their “ability to manage

waste, sewage, recycling and composting”. This makes it a relatively well developed skill among personnel according to their self-reporting. Future required proficiency levels in this regard were on average 3.75 (Carlisle et al., 2022, p. 420). Reducing food waste from plates is one particular aspect of this skill set. Dolnicar et al. (2020) describe a lack of research and consistent data when it comes to the drivers of plate waste in particular in the hospitality industry.

- **Transportation**

Transportation is an important contributing factor to the greenhouse gas emissions of the hospitality industry, for example due to air travel, cruise ships and cars. Therefore, personnel working in the industry need to have the knowledge to encourage sustainable modes of transport to guests (Carlisle et al., 2022). Respondents in the work by Carlisle et al. (2022, p. 420) reported an average skill level of 2.98 regarding “promotion of sustainable forms of transport”, as opposed to a self-reported required level of 3.67.

- **Promotion of environmentally friendly activities and products**

In the survey conducted by Carlisle et al. (2022, p. 420), respondents had a current self-reported skill level of 3.34 in terms of this aspect, making it the best developed self-reported skill in this study. On average, respondents considered that they would require a future skill level of 3.95 in this area. Therefore, the average respondent considered this aspect to require the highest skill level for their work in the industry.

- **Knowledge of climate change**

Respondents in the survey by Carlisle et al. (2022) on average assessed their current proficiency levels in this aspect at 3.34, with a required future skill level of 3.84. This aspect therefore had the lowest level of dissonance between self-reported current and required skill level.

- **Ability to minimise the use and maximise efficiency of energy and water consumption**

In this aspect, respondents in the survey by Carlisle et al. (2022, p. 420) reported a current skill level of 3.19, making it one of the lower rated current proficiency levels, as opposed to a required future skill level of 3.76.

The authors observe that overall it proved challenging for the interviewees to come up with environmental skills they would need to develop for the future. Interviewees quoted skills in the categories of waste management and reduction as well reduction of electricity water and paper consumption. It was noted that multiple respondents did not classify these themes as skills – “(...) instead behaving in a sustainable way is more about attitude, awareness and values.” (Carlisle et al., 2022, p. 425)

3. Support for SMEs

Germany

To help SME lodging industry staff and leaders change their behavior toward sustainability, the following insights are derived from the article “An academic and practical exploration of Extraordinary (E) Pro Environmental Behavior (PEB) in the hotel industry” (Zizka, 2024):

1. Employee Engagement and Emotional Connection:

- Creating emotional attachments to sustainability initiatives can drive employees to take ownership of environmental actions and engage actively. Employees who connect emotionally with environmental practices are more likely to become advocates for sustainability in the workplace (Zizka, 2024, p. 7-8)

2. Training and Education:

- Providing targeted, interactive workshops on sustainability across all organizational levels helps bridge knowledge gaps. Workshops and green training sessions tailored to the hospitality context are crucial for improving understanding and implementation of sustainability practices (Zizka, 2024, p. 7)

3. Management Support and Recognition:

- Managers need to foster a green culture within their organizations by supporting and recognizing employees who engage in pro-environmental behaviors. This includes aligning green initiatives with the organization’s values and ensuring all stakeholders, including managers, participate actively in these initiatives (Zizka, 2024, p. 8-9)

4. Incorporation of Green HR Practices:

- Green Human Resource Management (GHRM) practices, such as green recruitment, training, and reward systems, play a significant role in encouraging pro-environmental behavior. These practices ensure that sustainability efforts are embedded into the organizational framework, motivating employees to act sustainably (Zizka, 2024, p. 9-10)

5. Fostering Organizational Fit:

- When employees feel their personal values align with the organization’s environmental goals, they are more likely to engage in sustainable practices. Organizations should ensure that their sustainability initiatives resonate with employees’ values and are communicated effectively (Zizka, 2024, p. 10).

Poland

According to an article by Figiel-Koźlak (2024), the following measures can help SME lodging industry leaders and staff in Poland shift their behavior towards sustainability:

1. Education and Training on ESG

Providing training on ESG principles for employees and leaders can significantly enhance their awareness and involvement in sustainable practices, covering environmental, social, and governance aspects.

2. Adoption of Eco-Certifications

Encouraging small hotels to obtain green certifications such as Green Key or Green Globe can improve their market competitiveness and align their practices with sustainability standards, while motivating staff to adopt more eco-friendly approaches.

3. Engagement with Local Communities

Small hotels can enhance their social responsibility by supporting local suppliers and initiatives. Leaders should encourage employees to participate in such community-driven activities, strengthening the hotel's connection to its environment.

4. Investment in Sustainable Technologies

Leaders should invest in energy-efficient technologies like photovoltaic panels and smart lighting systems. These investments not only reduce environmental impact but also lower operational costs, benefiting the hotel in the long run.

5. Guest Awareness of Sustainability Practices

Educating guests about the hotel's sustainability initiatives, such as water-saving options and eco-friendly food choices, can lead to more responsible behavior and greater guest engagement in sustainable practices.

6. Transparency and ESG Reporting

Publishing regular ESG reports can build guest trust and encourage responsible practices within the hotel. Transparency in actions and results can motivate employees and improve the hotel's reputation.

In summary, focusing on education, transparency, technology investments, and community engagement can significantly shift SME lodging industry practices towards sustainability in Poland.

Bulgaria

In the context of Bulgaria's lodging industry, the interplay between knowledge, skills and attitudes is crucial for fostering sustainable practices among staff and leaders. A study by the Next Tourism Generation Alliance (2019) highlights that Bulgarian tourism professionals recognize the importance of environmental, personal and digital competencies. However, there is a notable gap in the current and future skill levels, indicating a need for targeted training programs to enhance sustainability knowledge. Leaders in the lodging sector must be proactive in driving sustainability. According to research by Ivanov & Mihailovic (2016), a commitment to sustainability from top management is crucial for the successful integration of green practices in Bulgaria's lodging sector. Managers need to prioritize sustainability as a core business value, as this influences not only decision-making but also inspires employees to embrace green practices. This commitment can be enhanced through clear communication, role modeling and aligning the business strategy with sustainability goals.

According to Kulevska et al. (2020), Bulgarian lodging businesses can benefit from national and EU initiatives aimed at improving sustainability, such as grants or tax incentives for implementing energy-efficient technologies or reducing waste. Financial support not only

alleviates the costs associated with sustainability investments but also signals the government's commitment to fostering a green tourism economy.

Research by Bohdanowicz (2006) emphasizes that staff training plays a key role in adopting sustainability practices. In Bulgaria, where knowledge gaps exist in terms of sustainability, training programs tailored to the specific needs of hotel employees (e.g., on energy management, waste reduction and sustainable sourcing) can significantly improve the operational impact of sustainability measures. Employees must be equipped with practical skills, such as efficient water usage or energy-saving techniques, to directly influence the eco-friendly behaviors of the organization.

These strategies indicate that fostering leadership commitment, enhancing employee training, utilizing financial support programs and building a strong sustainability culture are all essential for shifting the behavior of staff and leaders in Bulgaria's SME lodging sector.

Italy

Research suggests several factors that can influence the adoption of sustainable practices in the hotel and hospitality sector. Management commitment is crucial for implementing environmental management practices and positively affects business sustainability in general. This commitment involves integrating energy management systems, retrofitting buildings, and implementing on-site renewable energy production. Additionally, fostering stakeholder collaboration, operational improvements, and guest engagement are vital strategies (Mbise & Mungure, 2023).

Training should not only focus on theoretical knowledge but also on practical skills, such as waste management techniques, energy efficiency measures, and water conservation practices. The commitment of top management is essential for fostering a culture of sustainability within organizations. When leaders prioritize sustainability, it encourages staff to adopt similar attitudes and behaviors. Leadership training that emphasizes green transformational leadership can positively influence employee engagement in sustainability initiatives, as discussed in this research paper focused on sustainability in Italian luxury hotels (Aslam et al., 2023). Additionally, implementing internal monitoring systems to track sustainability performance can provide valuable feedback to staff and management.

Based on the interviews with SMEs in the lodging industry, access to financial incentives and resources is crucial. Interviewees consistently mentioned that the high initial costs of implementing sustainable solutions are a significant barrier. Financial support, such as subsidies and incentives, would make sustainable investments more feasible. Secondly, participants expressed a lack of specific training in sustainability and a need for expert advice to understand how to reduce their environmental impact. Clear and practical information on sustainability practices, regulations, and technologies is also needed. Finally, specific programs and initiatives with clear instructions on how to integrate them into their businesses would be particularly helpful.

Austria

In order to answer what can help staff and leaders to change towards sustainability, it is helpful to point out so-called success factors, i.e. factors that have been found to contribute

to a stronger sustainability integration in the lodging industry. This chapter analyses motivating and supporting factors that drive sustainability and enhance results.

Motivating factors

In terms of factors which motivate lodging industry businesses, internal as well as external factors were identified. Factors internal to the respective business are related to costs, and internal stakeholders' attitudes and values. One study which includes interviews with entrepreneurs and executives identified the reduction of costs as the main reason for hotel owners implementing sustainability. In a similar vein, there are studies that support the idea that corporate social responsibility, a concept closely linked to sustainability, can contribute to turnover. A survey of Accor hotels from the year 2015 found an increase of the contribution of CSR between 2012 from 9% to 11% (Cigir, 2017). Due to the fact that costs are often central factors for implementing sustainability measures, these measures are not always communicated about – when sustainability is implemented for efficiency reasons, it is oftentimes not seen as relevant information for customers (Calisto et al., 2021). In line with the logic of cost as an important reason for sustainability however, price remained the most important factor for choosing suppliers in the surveyed Accor hotels, followed by quality and then location. Reputation of the hotel also played a role, conviction was ranked low as a motivation in this study (Cigir, 2017).

When it comes to hotels with sustainability certifications, the literature paints a different picture. Motivations for obtaining certifications might include internal and external reasons. Some people in the industry see certificates as a competitive advantage and differentiation factor, which emphasizes external communication and brand as motivating factors. This might be a relevant reason in particular when competition is stiff, risk is high and differentiation between competitors is low, which is the case for the hospitality sector (Cigir 2017). In a study by Eskerod und Đurić (2018), one of the cited reasons are the requirements of corporations who make use of the services of the lodging industry. Other reasons given by an interviewee in this paper were based on value and operational efficiency, with cost reductions being brought up as more of a secondary reason. Additionally, certifications are seen as a way to objectively determine the sustainability of operations (Eskerod und Đurić 2018).

There is a vague idea described in the literature that choosing not to implement sustainability might create a competitive disadvantage in the future due to the demands of external stakeholders and the future market. Carlisle et al. (2022) point to three ways that this might come to fruition:

- Discriminatory systems (for example in the areas of taxes and access to financing) and stricter environmental regulations– this idea is also put forward by Alreahi et al. (2023),
- A growing market segment that factors sustainability into their decision making when it comes to booking accommodations,
- Sustainability might no longer be able to justify a price premium and therefore increasingly serve as a differentiation feature in the eyes of customers.

Calisto et al. (2021) emphasize the importance of defining which stakeholders actually demand a good sustainability performance from hotels. The authors come to the conclusion

that most owners require efficiency, whilst corporate responsibility is less of a requirement. Customers are commonly not very demanding when it comes to sustainability practices, with some exceptions (Calisto et al., 2021). This means that sustainability requirements and therefore pressure from customers is generally low compared to internal pressures. Regardless, improving relationships with internal and external stakeholders is oftentimes stated as a motivation. An analysis of CSR related issues in the hotel industry identified guest loyalty as well as recruitment, motivation and retention of employees as motivational factors. Another reason is the reduction of public scrutiny (Cigir, 2017).

Supporting factors

One of the most crucial supporting factors for sustainability is the support of stakeholders. Stakeholders of an organisation can be defined as all groups or persons that influence or are influenced by an organisation's operations. Their support is a highly relevant factor in the success of a hotel's sustainability efforts. Relevant internal stakeholders in the lodging industry include staff, management and owners, relevant external stakeholders are for example suppliers, customers and governments (Alreahi, et al. 2023).

A central group of stakeholders is the staff. According to a master's thesis by Schaffler (2020), hotels tend to overemphasize external communication for sustainability and under-estimate the role of staff when it comes to the implementation and communication of sustainability practices. The thesis states that staff need to identify with the vision and responsibility assumed by the business, therefore communication about sustainability measures is crucial. Staff training is cited as necessary in her thesis. Similarly, Carlisle et al. (2022) point out that learning about sustainability means that staff are capable of self-correcting efforts towards sustainability. Environmental indicators and environmental management systems can support learning within a company (Carlisle et al. 2022). In her master's thesis on sustainable procurement in the Austrian lodging industry, Schaffler (2020) points out that staff needs to first and foremost understand the company's philosophy when it comes to sustainability. Whilst according to her analysis long-term employees live this philosophy in their daily work, involving new employees is perceived as a bigger challenge among the hotel managers in this study. The cited methods for improvement include staff training, staff magazines, excursions, as well as including staff in conversations with suppliers. The author recommends internal marketing efforts to attract employees who want to support sustainability efforts (Schaffler, 2020).

This also connects to the size of the organisation: According to Calisto et al. (2021) as well as a literature review by Cigir (2017), hotel chains are more likely to implement sustainability practices and communicate them. This is likely due to the fact that bigger organizations might have more internal personnel and/or might have dedicated positions responsible for sustainability practices. Another factor could be the amount of public scrutiny and regulatory requirements of an organization due to size, i.e. pressure from external stakeholders.

Another important group of external stakeholders are customers and their willingness to pay for sustainability. Schaffler (2020) states that a high level of quality is usually a requirement for increasing prices due to sustainability measures. The fostering of an appreciation of sustainability therefore becomes a necessity, as only few target groups are a priori willing to pay for sustainability measures in the lodging industry (Schaffler, 2020; Calisto et al., 2021).

For this reason, few hotels in Austria are able to adapt their prices in connection with sustainability efforts. This underlines the importance of communication about sustainability despite doubts regarding greenwashing perceived by some hotel managers. The author recommends storytelling methods for better results in terms of reaching the target group (Schaffler, 2020).

Common measures

A plethora of sustainability measures is described in the literature. Some pertinent examples are described in this chapter.

Cost reduction measures: A study conducted with small local hotels in Portugal by Calisto et al. (2021) differentiates common sustainability measures in the construction versus the operation phase. For the construction phase, commonly stated measures are energy related (installation of solar panels, of high efficiency lighting and air conditioning), water consumption related, or related to waste management or the training of staff. Hotels reported that in the last three years of operation, they had been implementing actions similar to those in the construction phase, including energy related measures (insulation, lighting, air conditioning), water consumption, acoustic insulation, offering the option to reuse towels and sheets, minimizing printing, choosing local suppliers as well as staff training. Motivation to implement these measures does not fundamentally change between the construction and operations phase, whereby cost reduction is the primary reason and brand differentiation a secondary reason (Calisto et al., 2021). In terms of cost reduction, another aspect is (smaller) hotels optimizing their supply logistics by joining purchasing cooperatives like Hogast, which might as a negative side effect lead to a neglect of sustainability principles (Schaffler, 2020).

Green supply chain management: Supply management is the “holistic, integrative planning in the supply sector, the steering and monitoring of the internal and external value chain” (Schaffler, 2020, 4f., translated from German). It also serves strategic purposes (Schaffler, 2020). Greening the supply chain is therefore an effective and strategic way to integrate sustainability into the business and requires cooperation of all involved parties. Due to its proactive nature, it helps with spotting sustainability risks and problems, for example with greenwashing. However, it is described as challenging due to its complexity (Alreahi et al. 2023; Schaffler, 2020). In a study by Alreahi et al. (2023), supplier selection is described as one of the most crucial aspects to greening the supply chain. The importance of investing in personal relationships with suppliers is described in the thesis by Schaffler (2020).

However, tracing back sustainability in upstream parts of the supply chain is often challenging and the surveyed hotel managers were less confident about possible solutions. Currently, there is often a need to rely on certifications and statements by suppliers due to a lack of time for verification in SMEs. Researching sustainability aspects of potential partners is described as time intensive, but less of an issue for country hotels with longstanding relationships to suppliers. Goals for the supply chain are oftentimes set via concrete targets, for example a certain radius for the procurement of foodstuff, or a certain percentage of organic products. Larger hotels are much more likely to document and analyse procurement processes as part of their monitoring efforts (Schaffler, 2020).

Solutions to reduce plate waste: Plate waste is not only an ecological but also a financial issue for hotels. It is affected by a lot of different factors: Country (possibly due to different cultural norms), type of party eating together (notably families vs. other), the amount of self service areas, plate size, food quality (quality of ingredients and preparation, suitability for buffets...), difficulty or unfamiliarity with certain foods as well as psychological factors (fear of missing out, unwillingness to go for multiple rounds at the buffet etc.) (Dolnicar et al. 2020). Proven “nudging” techniques for reducing plate waste at buffets in hotels are reducing plate size as well as communicating to the guests that they are welcome to return to the buffet instead of taking a lot of food all at once (Kallbekken und Sælen, 2013, cited after Dolnicar et al., 2020).

In an effort to better understand the factors contributing to plate waste in the hospitality sector, and to develop effective interventions for buffets, Dolnicar et al. (2020) chose an approach which centres the pursuit of pleasure as opposed to sacrifice because of the nature of the tourism business. The study was conducted among families. The study interventions included a flyer (version a – asking to help the hotel reduce waste and version b – with an additional pro-environmental appeal) and a stamp booklet (version a – without and version b – with a pro-environmental appeal) for those families who managed to leave zero waste behind and were promised a gift for a fully stamped booklet. Whilst the average control group family member left on average 45g of plate waste per meal and an average of only 29g across all intervention groups. There were no statistically significant differences in average plate waste across the different interventions, even though there were more plates with zero waste for the booklet intervention. Stamp collection booklets contributed to the pleasure of those who used them, however the flyers are a much cheaper and similarly effective intervention. Surprisingly, adding a pro-environmental appeal to the flyer and booklet did not significantly contribute to reducing plate waste. This implies that contrary to common theory on pro-environmental behaviour, activating pro-environmental beliefs did not in this case contribute to reducing plate waste, while appeal to social norms can be effective (Dolnicar et al. 2020). With the interventions of this study, it was estimated that foodstuffs with a value between approximately 0,18 and 0,21 EUR per plate could be saved in theory. The cost of printing flyers was cited as 105 EUR. It is easy to imagine the vast potential of cost reduction possible with these numbers (Dolnicar et al., 2020).

Organic and regional foodstuff

There is no general common understanding of the environmental impact of buying regional and or organic ingredients and hotels make their own decisions. Schaffler (2020) identifies multiple focal points regarding this aspect. For example, there is a certain scepticism among hotel managers regarding the health and sustainability of regional and organic products. Additionally, products with an organic label are generally preferred by hotels, even though it does not make sense for some (smaller) producers to certify their otherwise organic products due to the financial and bureaucratic burden. The author also states that animal welfare which goes beyond organic standards is increasingly salient to the interviewees (Schaffler, 2020).

4. Barriers for SMEs

Germany

The main obstacles to sustainable behavior change in German SME lodging businesses are financial misconceptions, limited financial support, managerial resistance, and inadequate external resources. However, the younger generations in particular are paying more attention to sustainability practices in hotels. Addressing these barriers through better financial education, increased access to sustainability incentives, and fostering an innovation-friendly mindset could significantly improve sustainability adoption rates.

Economic Barriers

- The perception of high costs is the most significant barrier to sustainability adoption (Sloan et al., 2010). Many hoteliers believe green hotel construction and sustainability upgrades increase costs by 11%, while actual increases for LEED-certified buildings are closer to 1.6%.
- The lack of financial incentives and state subsidies further discourages investment in sustainability. 49.6% of respondents cited this as a key obstacle (Legrand et al., 2012).
- There is a general misconception that capital investment in sustainable measures is too high, leading to reluctance in implementing green technologies (Legrand et al., 2012).

Organizational Factors

- Managerial attitudes are crucial in determining whether sustainable practices are adopted (Koch et al., 2020). Hotels where leadership is committed to sustainability are more likely to implement green strategies.
- Openness to innovation is another important factor. More innovative hotels are generally more inclined to adopt sustainable practices (Koch et al., 2020).

External Support Systems

- Lack of communication about available financial incentives prevents many hoteliers from taking advantage of sustainability support programs (Legrand et al., 2012).
- Limited access to online tools and other resources that could facilitate energy efficiency improvements is another factor impeding sustainable transitions (Legrand et al., 2012).

Customer Demand & Marketability

- Eco-conscious consumers, particularly Millennials and Generation Z, are increasingly selecting hotels based on their sustainability credentials (Green Key, Travelife) (Velaoras et al., 2025).

Poland

A striking 92% of small and medium-sized enterprises in tourism struggle to hire skilled staff. The EU is tackling this challenge by connecting job seekers with employers across Europe, investing in reskilling and upskilling, and supporting the sector's move towards green and

digital jobs. Funding programmes provide additional support for businesses and jobseekers, ensuring a strong and competitive tourism workforce (European Commission, n.d.).

According to the article published by the Polish Institute for Entrepreneurship Support (Fundacja Instytut Przedsiębiorczości Społecznej), at a general level—without distinguishing between specific industries—the SME sector faces several key challenges in implementing sustainable development practices (FIPS, 2024). The main barriers preventing SME employees and leaders from changing their behavior towards sustainability include:

1. Financial constraints – Many SMEs struggle with the high initial costs of sustainable investments and a lack of access to financial support or subsidies.
2. Regulatory complexity – Entrepreneurs often find sustainability-related regulations to be unclear, inconsistent, or difficult to comply with, leading to uncertainty and reluctance in implementing changes.
3. Limited awareness and knowledge – There is a widespread lack of understanding of sustainable business practices and their long-term benefits among SME leaders and employees.
4. Resistance to change – Many businesses prioritize short-term profitability over long-term sustainability, fearing that green initiatives might disrupt their operations or require significant effort without immediate returns.
5. Weak market demand – Customers in certain sectors do not prioritize sustainability, reducing the pressure on SMEs to adopt environmentally friendly practices (FIPS, 2024)

Based on the article "Sustainable Tourism is Not a Choice, but a Necessity" (Polska Organizacja Turystyczna, 2024), several key factors are preventing employees and leaders in the SME lodging industry from changing their behavior towards sustainable practices. The answers derived from the article are as follows:

1. Financial Constraints – Implementing sustainable practices often involves high initial costs, which are a barrier for many small and medium-sized enterprises in the lodging sector. The lack of adequate funds or financial support makes investing in eco-friendly solutions difficult.
2. Low Awareness of the Benefits of Sustainable Development – Many SME leaders in the lodging sector do not fully recognize the potential benefits of implementing sustainable practices. Additionally, the lack of knowledge about available solutions and their long-term advantages makes entrepreneurs less likely to make changes.
3. Complex Regulations – In the Polish tourism sector, including the lodging industry, regulations related to sustainable development are often considered unclear or difficult to implement. Complex legal frameworks pose a challenge for small and medium-sized enterprises, which may lack the resources or knowledge to navigate these obstacles effectively.
4. Insufficient Consumer Support – There is also the issue of low consumer demand for eco-friendly services in Poland. From the perspective of many SMEs in the lodging industry, the lack of demand for sustainable services from tourists limits their motivation to adopt environmentally friendly solutions.

In summary, the main barriers to implementing sustainable practices in Poland's SME lodging sector are limited financial resources, insufficient knowledge and awareness, complex regulations, and weak support from the consumer market.

Based on the survey conducted by PAIZ Konsulting among 23 entrepreneurs in the lodging industry, we present the following conclusions:

1. Financial Constraints

- 65.2% of respondents identified the lack of financial resources as the primary barrier to implementing sustainable practices.
- High investment costs, such as for renewable energy installations (e.g., photovoltaic panels) and rainwater harvesting systems, were highlighted as significant obstacles to scaling up existing initiatives.

2. Lack of Knowledge and Training

- 73.9% of respondents indicated that they lack sufficient knowledge about the available support options for sustainability.
- 47.8% of respondents rated their ability to communicate with business partners and guests regarding sustainable practices as insufficient.
- The self-assessment of knowledge on sustainable development averaged between 3 and 4 out of 5, suggesting that targeted training and step-by-step guides could help close these educational gaps.

3. Complex Regulations

- Respondents reported that sustainability-related regulations are often complex and unclear, which discourages them from adopting new practices.
- Although specific percentages were not provided for this category, the complexity and ambiguity of legal requirements significantly hinder efforts to implement sustainable measures.

4. Insufficient Consumer Demand

- 39.1% of respondents noted that low consumer interest in sustainable solutions is a barrier to the adoption of eco-friendly practices.
- Despite 52.2% of respondents believing that customers would be willing to pay more for accommodations that implement sustainable practices, the overall demand remains insufficient to drive widespread change.

5. Time Constraints

- 21.7% of respondents cited time constraints as a significant barrier, attributing this to the limited number of staff and the daily demands of managing operations, which leave little time to implement new sustainability measures.

Summary

The survey findings indicate that the main obstacles preventing SME lodging industry employees and leaders from adopting sustainable practices are:

- Limited financial resources (65.2%)
- Knowledge gaps and the need for training (73.9% regarding available support options; 47.8% regarding communication skills)

- Insufficient consumer demand (39.1%)
- Time constraints (21.7%)

In addition, the complexity of regulations remains a significant hurdle, although it was not quantified in this study. These results underscore the need for dedicated financial and educational support programs, as well as regulatory simplification, to facilitate the broader adoption of sustainable practices among small and medium-sized lodging enterprises. Small accommodation providers face several challenges in adopting sustainable practices, primarily due to financial constraints, regulatory complexity, and lack of consumer demand. High initial costs for renewable energy and waste management, coupled with insufficient financial support, hinder progress. Additionally, businesses struggle with limited knowledge and time to implement sustainability measures. To support these businesses, financial incentives, educational resources, and simplified regulations are needed. Addressing these barriers would help accelerate the adoption of sustainable practices across the industry.

Bulgaria

There could be identified several factors for Bulgaria that hinder the adoption of sustainable practices in the lodging industry, particularly among SMEs. These barriers can be linked to a combination of external pressures, internal challenges and gaps in knowledge, skills, and attitudes.

Customer demand plays a crucial role in the implementation of sustainable practices within the Bulgarian lodging industry. However, according to research by Ivanov (2014), customer interest in sustainability remains relatively low, especially among Bulgarian guests. While international tourists may show more interest in eco-friendly accommodations, Bulgarian consumers tend to prioritize cost over environmental concerns. This gap between global trends and local customer expectations hinders SMEs from investing in sustainability, as the return on investment in green initiatives is not always immediately visible or financially rewarding. Hotels and guesthouses in Bulgaria are thus less inclined to invest in sustainability measures unless there is direct consumer demand or external pressure.

Economic constraints are a significant barrier to the adoption of sustainable practices in Bulgaria's SME lodging sector. Bulgaria's tourism industry, particularly SMEs, faces financial challenges such as limited access to capital, high operational costs and low profit margins. According to Doncheva and Stoyancheva (2021), many small lodging establishments do not have the financial resources to invest in green technologies or sustainability-related training. In addition, Bulgaria's economic recovery post-communism and its current focus on price-based competition further reinforce the reluctance to adopt long-term sustainability strategies that may initially increase costs.

Culturally, the Bulgarian tourism market has traditionally been more focused on affordability than on eco-consciousness, making it harder for sustainability efforts to be prioritized. Research by Petrova & Atanasova (2021) found that in Bulgaria, sustainability is often seen as a secondary concern to economic survival, especially in small family-run businesses.

The likelihood of **sustainability adoption varies across different types of lodging** establishments in Bulgaria. Larger hotels with more resources, often catering to international

tourists, are more likely to implement sustainability measures such as waste management systems, energy efficiency improvements and eco-certifications (e.g., Green Key). Smaller establishments, such as guesthouses or hostels, often lack the financial capacity to implement such practices. Furthermore, these smaller accommodations usually cater to domestic tourists, whose expectations for sustainability are lower compared to international guests. As noted by Ivanov et al. (2014), the size and clientele of the establishment play a crucial role in determining the level of sustainability adoption.

Several factors have been identified as **key drivers of sustainability** in the Bulgarian SME lodging sector:

- **Financial Incentives:** EU funding programs and national subsidies for eco-friendly upgrades (e.g., energy-efficient technologies) can be a strong motivator for SMEs. However, many small businesses are either unaware of these financial programs or find it challenging to navigate their complexities, limiting access to these resources. A study assessing the effectiveness of an SME support scheme in Bulgaria, which received over EUR 150 million from the European Regional Development Fund, underscores the need for more accessible and straightforward application processes to enhance participation.
- **Regulatory Pressure:** Bulgaria's national and municipal regulations often provide weak enforcement of sustainability standards. While there are initiatives like the National Strategy for Sustainable Development of Tourism (2014-2030), they are not always strictly enforced, leading to low compliance rates among SMEs. Some businesses, particularly those in rural areas, may also face difficulties in understanding or implementing these regulations.
- **Customer Demand:** While global awareness of sustainable tourism is increasing, customer demand for such practices in Bulgaria remains relatively underdeveloped. Nonetheless, there is a growing potential market among international tourists who prioritize sustainability. SMEs that proactively adopt and promote sustainable practices may gain a competitive advantage by attracting this emerging segment of environmentally conscious travelers.

In the Bulgarian SME lodging industry, the adoption of sustainable practices is influenced by the **interplay of knowledge, skills, and attitudes**. Research indicates the importance of enhancing knowledge, developing relevant skills and cultivating positive attitudes to drive sustainability in the Bulgarian SME lodging industry.

A study on the standardization and certification of hotel services in Bulgaria (Teofilova, 2022). highlights that entrepreneurs' awareness of the need to apply new knowledge and skills to hotel service standardization and certification is essential. This awareness is vital for implementing sustainable practices effectively.

The same study emphasizes the importance of acquiring new skills to meet the evolving demands of the tourism industry. Developing competencies in areas such as sustainable service delivery is necessary for SMEs to remain competitive and align with sustainability standards.

Research by Kiryakova-Dineva et al. (2019) on soft skills for sustainable development in tourism in Bulgaria indicates that attitudes toward sustainability are influenced by the acquisition of soft skills. The study suggests that fostering positive attitudes through education and training can enhance the adoption of sustainable practices in the tourism sector.

These studies underscore the importance of enhancing knowledge, developing relevant skills and cultivating positive attitudes to drive sustainability in the Bulgarian SME lodging industry.

Italy

In the Italian SME lodging industry, barriers to adopting sustainable practices include awareness and knowledge gaps, economic factors, regulatory pressures, and cultural attitudes. A study in Apulia indicated that while hotel managers showed relatively high awareness of sustainability, their attitudes toward food waste management were lower, revealing a disconnect between awareness and implementation (Lagioia et al., 2023). Financial constraints, such as the initial costs of implementing sustainable technologies, also deter SMEs. Additionally, the effectiveness of regulations in incentivizing sustainable practices can vary, and traditional practices or a lack of perceived necessity can contribute to resistance to change.

Based on one PhD research paper from Rome University, there are also more marketing-based barriers and obstacles currently preventing SME lodging industry staff and leaders from changing their behavior regarding sustainable practices:

- The proliferation of green practices is creating confusion and skepticism among customers, who are bombarded with terms like "green," "sustainable," "ecological," and "environmentally friendly."
- There's a risk that the emphasis on communicating environmental consciousness outweighs the actual adoption of sustainable practices, leading to greenwashing. This involves misleading consumers about the environmental benefits of a product or service.
- Clients may not trust certifications, viewing them as actions that require renunciation or commitment rather than as a genuine effort towards sustainability.
- The tourism sector is driven by the desire for relaxation, which may lead clients to have prejudices against certifications, perceiving them as an action that implies renunciation or commitment (Belcastro, 2020).

When it comes to our interviews, the interviewees mentioned that the initial investment for measures like photovoltaic panels or energy-efficient appliances is often substantial and not fully covered by existing incentives. Another key obstacle is a lack of time and resources for research and implementation, particularly for owner-operators who manage all aspects of the business independently. The limited access to clear and up-to-date information about available funds, incentives, regulations, and ecological technologies also hinders progress. A further barrier is a lack of awareness and understanding of sustainability certifications like Green Key or EU Ecolabel and uncertainty about their value or how to obtain them. They

shared the perception that there is no strong customer demand for sustainability practices which reduces their motivation to invest in them.

Austria

Luxury versus sustainability: The literature alludes to a certain tension between conveying luxury, comfort or quality and implementing environmental sustainability in the hospitality sector (Calisto et al., 2021; Schaffler, 2020). An interviewee in a study by Calisto et al. (2021, p. 11) stated that “99.5% of the clients appreciate good environmental practices, but they have their comfort as a red line not to be crossed”. Another interviewee said that sometimes clients might complain about for example low water pressure connected to sustainability measures, even though they report that this has been changing (Calisto et al., 2021). Therefore a promising way forward is to market luxury/comfort and sustainability simultaneously. An increasing appreciation for sustainability goes along with a better understanding of related costs among customers (Schaffler, 2020), as the group of customers with high sustainability standards remains small (Calisto et al., 2021). Additionally, this highlights a need to educate customers to generate more understanding and therefore acceptance for sustainability initiatives.

Gap between attitude and behavior among customers: Interestingly, there appears to be a notable difference between customers’ self-reported attitudes and preferences in comparison to actual behavior regarding e.g. booking more sustainable hotels (so-called “intention-behavior gap”, Khan et al., 2024). Khan et al. (2024) speculate that context might be crucial: “(...) within sustainability, intentions may influence consumer behaviour only under favourable conditions. It highlights the need for context-specific adaptations given the altered consumer behaviour on vacation.” (Khan et al., 2024, p. 3).

Responsibility of consumers: Not communicating sustainability measures has an additional drawback – it removes the customer from the responsibility equation. Carlisle et al. (2022) point out that even for customers who do not hold a particularly pro-environmental attitude, methods like social media marketing can be effective. The lodging industry can invite its customers to support sustainability efforts (Carlisle et al., 2022).

Lack of communication: Communication of sustainability measures was a common barrier that emerged in this literature review. If the main reason for sustainability measures is cost reduction, then there is less of a drive amongst management to communicate these practices to customers.

As mentioned before, larger companies tend to have stronger sustainability practices and are less likely to talk about them. SMEs might be missing out on an opportunity to mobilize and market to staff, which can consequently be a missed opportunity for better effort and service (Calisto et al., 2021). Calisto et al. (2021) find that smaller hotels are more sensitive to stakeholders’ demands (Calisto et al., 2021), which can also be seen as an opportunity for sustainability related change depending on the stakeholders.

Regardless, international/bigger hotel chains were found to invest more effort into communicating sustainability practices as opposed to smaller chains (Calisto et al., 2021). Interviewees stated that those who communicate their sustainability practices are “more exposed to environmental groups, especially the most extreme ones” (Calisto et al., 2021, p.

11). Schaffler (2020) emphasizes the importance of honesty and finding the right tone when it comes to communicating sustainability. This might affirm customers in their choice, enhance customer loyalty as well as generate more direct bookings. Additionally, a better understanding of sustainability in the lodging industry among customers helps them understand the added value of these practices (Schaffler, 2020).

Barriers - food waste: One difficulty in avoiding food waste is the variety of factors contributing to it, which can also be seen as an opportunity for different solutions. Factors include: Quality of ingredients and preparations, foods not compatible with buffet-style presentation, unfamiliarity or difficulty with certain foods, plate size or psychological factors (Dolnicar et al., 2020).

Barriers due to building: It is mentioned that in historic buildings, certain sustainability measures prove to be challenging, leading some people to question if certain laws around historical buildings are still topical. Regardless, there is generally still room to reduce energy consumption (Calisto et al., 2021). Investments regarding the building can have long payback methods (Calisto et al., 2021).

Lack of training: Sustainability practices require a certain level of related skills among staff (Alreahi et al., 2023). In her study, Schaffler (2020) found that in smaller hotels, there is less emphasis on training staff. Possible reasons are that the costs for such training do not outweigh the benefits especially for seasonal workers (Schaffler, 2020) which are common in the industry.

Obstacles in green supply chain management: Alreahi et al. (2023) point out the difficulty of green supply chain management, for example because there are few standard processes to be relied on for new products and services (Alreahi et al., 2023; Schaffler, 2020), and because convincing stakeholders to change their activities to be more sustainable is challenging. This is especially true if the market for the product is big so that hotels as a group have little power as customers. Managing the relationships among suppliers is crucial. An additional reason for this is that for green supply chain management, according to Alreahi et al. (2023), more parties need to be in communication and find ways to cooperate in a way that still allows for sufficient efficiency (Alreahi et al., 2023). Additional investments or personnel might be necessary to successfully integrate sustainability into the supply chain (Alreahi et al., 2023; Schaffler, 2020). This contributes to the fact that sustainability practices are generally better integrated into larger or chain hotels, where there might be a dedicated position to manage supply chain related issues (Schaffler, 2020). It is also possible that corporate sustainability aspects are used to assess tender qualification, i.e. the capability of a potential organisation to perform a service or provide a product. The risk in this is that sustainability standards are relatively low and mandatory standards could lead to proactive behaviour not being incentivised (Cigir, 2017).

5. What VET does well

Germany

Sustainability education in Vocational Education and Training (VET) programs in Germany has gained increasing importance in recent years, particularly through national initiatives such as the *National Action Plan for Education for Sustainable Development (NAP ESD)*.

Significant progress has been made in Germany in recent years to anchor sustainability in vocational education and training. A key step was the introduction of the standard occupational profile position (Standardberufsbildposition (SBP) "Environmental protection and sustainability" in August 2021, which is mandatory for all new and modernized training occupations. This measure aims to systematically integrate sustainable practices into training (Hemkes et al., 2022).

In particular the 2023 Impulse Paper by the National Platform for Education for Sustainable Development (ESD) highlights both progress and existing challenges in integrating sustainability into vocational training (Nationale Plattform BNE, 2023). While certain sectors, such as renewable energy and environmental sciences, have successfully embedded sustainability principles, other areas still exhibit significant gaps.

Strengths in Sustainability Education

Several vocational training sectors in Germany have successfully integrated sustainability principles into their curricula. Renewable energy and environmental technology programs, for example, emphasize circular economy principles, waste reduction, and energy efficiency, ensuring that apprentices are well-equipped to support Germany's transition to clean energy sources (Bericht der Bundesregierung zur Bildung für nachhaltige Entwicklung, 2021, p.18). Similarly, agricultural and food production training programs increasingly incorporate sustainable farming practices, regional sourcing strategies, and biodiversity conservation methods, reflecting the growing demand for environmentally responsible food systems (Nationale Plattform BNE, 2023).

The automotive industry has also adapted its vocational training to reflect sustainability priorities, particularly in light of the shift toward electric vehicles (EVs). Updated curricula now include battery technology, alternative fuels, and eco-friendly servicing practices. In addition, sustainable construction techniques, including energy-efficient building design and life-cycle assessments, are becoming standard in vocational training for the wood and construction sectors (Bericht der Bundesregierung zur Bildung für nachhaltige Entwicklung 2021, p. 24). These examples demonstrate that structured frameworks and industry collaborations can effectively embed sustainability into vocational training programs.

Poland

Research highlights several areas where Vocational Education and Training (VET) programs in Poland's lodging and hotel industry effectively address sustainability:

In the article "Sustainable Development in Hospitality – Between Theory and Practice in Poland" by Izabela Kapera, the importance of ecological education in training programs for

hospitality professionals is highlighted. The author emphasizes the need to incorporate sustainable development topics into the curriculum so that future employees are aware of the environmental aspects of their work (Kapera, 2018).

Profile of the Higher School of Tourism and Hotel Industry in Gdańsk provides insights into how VET institutions integrate sustainability into their curricula. Their programs include specialized courses in sustainable tourism and hospitality management, which prepare students with practical skills and theoretical knowledge for implementing sustainable practices in the industry (educatly, n.d.).

1. Many vocational schools and higher education institutions have introduced courses related to the ecological aspects of tourism and hospitality. For example, the Higher School of Management in Bydgoszcz offers postgraduate studies in "Tourism and Hospitality Management" that include modules such as "Sustainable Development in Tourism and Hospitality," preparing professionals to operate in accordance with sustainable development principles.
2. The Warsaw Tourism Organization (WOT) collaborates with local institutions, such as the Warsaw School of Economics, on educational projects aimed at developing the professional skills of future tourism and hospitality experts, with an emphasis on sustainable development.

Bulgaria

In Bulgaria, Vocational Education and Training (VET) programs targeting the lodging industry are designed to equip professionals with the necessary skills and knowledge to excel in the hospitality sector. These programs are offered at various levels and by multiple providers, including state, municipal and private institutions. The VET system in Bulgaria comprises four qualification levels, ranging from EQF level 2 to EQF level 5, ensuring a comprehensive approach to vocational education.

Key VET Programs in Bulgaria, targeting the Lodging Industry are:

- Hospitality and Tourism Management: These programs focus on developing managerial skills specific to the hospitality sector, including hotel and restaurant management, event planning and customer service excellence.
- Culinary Arts: Training in culinary arts prepares individuals for careers as chefs, pastry chefs, and other culinary professionals, emphasizing both traditional and contemporary cooking techniques.
- Tourism and Travel Services: This area covers the organization and management of travel services, including tour guiding, travel agency operations and tourism marketing.
- Hotel and Restaurant Services: Programs in this category focus on the practical aspects of hotel and restaurant operations, such as front desk management, housekeeping, and food and beverage service.

As a whole, there are some stand alone initiatives, which are coming from EU funded projects or NGO sector, targeting the integration of sustainability into Bulgaria's Vocational Education and Training but the government's commitment to integrating sustainability into

the VET system - developing specialized curricula addressing sustainability in any industry is an ongoing process.

The Bulgarian government has initiated several measures to embed sustainability into VET programs, but its focus on the lodging industry is very vague.

1. Strategic Framework for Education Development (2021-2030): This framework identifies "Sustainable Development in Education" as one of its nine priority areas, aiming to integrate sustainable practices across all educational levels. However, detailed implementation plans specific to the lodging industry are not explicitly outlined.

2. Updates to the List of VET Professions: In alignment with the National Recovery and Sustainability Plan, the government has revised the List of Vocational Education and Training Professions. These changes aim to reflect labor market dynamics and include professions pertinent to sustainability. While this indicates a move towards incorporating green skills, specific references to the lodging sector are limited.

3. Embedding Green Skills in Educational Standards: Recent reforms have introduced units focusing on digital and green skills within State Educational Standards (SES) and programs. Every SES adopted between 2022 and 2023 includes components related to these competencies. However, the extent to which these units address the unique sustainability challenges of the lodging industry remains unclear.

While Bulgaria has taken steps to incorporate sustainability into its VET system, **there is no strong evidence** that existing programs **fully and systematically cover sustainability topics**, particularly in the lodging industry. Sustainability education remains **limited and inconsistent**, and there is still a need for **comprehensive curriculum updates** to align with modern green standards.

Some reforms in vocational education mention sustainability, but they do so within broader digitalization efforts rather than through specialized sustainability-focused training. Environmental Awareness in some curricula – in certain tourism and hospitality programs, covers basic environmental awareness, energy efficiency and responsible tourism, but these topics are often fragmented and not mandatory across all VET institutions.

Italy

Many VET programs focus on teaching energy management practices, including the use of renewable energy sources and energy-efficient technologies. This includes training on how to implement energy audits and optimize energy consumption in lodging facilities (Bessi et al., 2024).

Programs often cover strategies for reducing, reusing, and recycling waste. This includes training on composting, proper disposal of hazardous materials, and minimizing single-use plastics within lodging operations.

VET curricula frequently include modules on water-saving technologies and practices. This encompasses training on the installation of low-flow fixtures, rainwater harvesting systems, and water management plans to reduce consumption.

There is an emphasis on sourcing local and organic food products for hospitality services. Training often includes understanding supply chain sustainability and the importance of reducing food waste in the kitchen (Christofi et al., 2022).

Many programs educate students about various eco-labels and certifications relevant to the lodging industry. This knowledge helps future professionals understand how to achieve and maintain these certifications.

Austria

No literature specifically on gaps in VET programmes related to sustainability in the lodging industry could be identified. Carlisle et al. (2022) note that the integration of sustainability aspects into study programs for the tourism sector are still rare and have potential for improvement. Their study found that among a large sample of European tourism professionals, approximately 57% had received sustainability training, most of which occurred on the job. The amount of respondents who had received sustainability training as part of a higher education programme was very small (approximately 2%). Smaller companies tended to rely more on off-site training (Carlisle et al., 2022).

6. Gaps in VET

Germany

Despite the advancements, several vocational training sectors still lack comprehensive sustainability education. In the hospitality and tourism industries, for instance, sustainability is often limited to energy efficiency and waste reduction, without addressing broader concerns such as sustainable supply chains, biodiversity conservation, or social sustainability (Nationale Plattform BNE 2023, p. 8). Similarly, while awareness of sustainable practices is increasing in the textile and fashion industry, many vocational programs do not sufficiently cover circular economy approaches, ethical production, or sustainable material innovation.

Another significant gap is found in logistics and supply chain management. Given the sector's substantial contribution to carbon emissions, there is a pressing need to integrate training on emissions reduction strategies, green procurement, and sustainable transport solutions. Likewise, business and administration-related VET programs often provide only a superficial treatment of sustainability, focusing primarily on compliance rather than practical implementation.

A major challenge in these sectors is the fragmented integration of sustainability, which often remains an optional or supplementary topic rather than a core element of vocational training. Without standardized sustainability education across all disciplines, vocational learners may enter the workforce without a clear understanding of how sustainability applies to their respective fields.

Barriers to Comprehensive Sustainability Education

Several systemic barriers hinder the full implementation of sustainability education across VET programs. One of the most prominent challenges is the inconsistent curriculum development across industries. While some sectors have successfully embedded sustainability, others lack standardized modules, leading to significant disparities in the quality and depth of sustainability education.

Another challenge is the limited training available for vocational educators. On the one hand, educators must deal intensively with the topic of sustainability in order to pass it on effectively to learners. On the other hand, trainers need specific training programs that are tailored to the integration of sustainability in their respective subject areas (Langenkamp, 2024). Many educators do not receive specialized instruction in sustainability topics, making it difficult for them to effectively convey the importance of sustainable practices to learners. In addition, industry collaboration remains insufficient in certain fields, preventing vocational training from keeping pace with evolving sustainability demands in the labor market. Furthermore, the lack of digital and practical learning resources means that learners often lack access to interactive tools and case studies that would allow them to apply sustainability concepts in real-world settings.

Recommendations for Strengthening Sustainability Education

To address these gaps, sustainability education should be systematically integrated across all VET sectors. One approach is to make sustainability a mandatory component of vocational curricula, ensuring that all professions incorporate relevant sustainability competencies. Additionally, comprehensive training programs for vocational educators should be introduced to equip teachers with the knowledge and pedagogical skills needed to effectively teach sustainability (Nationale Plattform BNE, 2023, p. 14).

Stronger industry partnerships are also necessary to ensure that sustainability education aligns with real-world professional requirements. By collaborating with businesses, vocational institutions can develop training modules that reflect current sustainability challenges and opportunities. Furthermore, the development of digital learning tools, gamified sustainability training, and sector-specific case studies can enhance engagement and practical understanding among students.

Poland

According to the literature, despite progress in integrating sustainability topics into VET curricula in Poland's lodging and hotel industry, several gaps remain:

- **Limited Specialized Courses:** While sustainability is often included as part of broader hospitality programs, few VET programs offer dedicated courses on green transformation and sustainable practices tailored to the lodging sector.
- **Misalignment with Industry Needs:** Evaluations indicate that current curricula do not fully address the practical and technical challenges faced by SMEs in the lodging industry, particularly regarding modern sustainable technologies and digital tools.
- **Underutilization of Digitalization:** Although digitalization is recognized as a key factor in bridging knowledge gaps, many VET programs have yet to fully incorporate digital competencies and innovative learning methods into their sustainability training.

- **Insufficient Feedback and Evaluation:** There is a lack of systematic assessments and industry feedback on the effectiveness of these training programs, which hinders the continuous improvement of curricula to match the evolving needs of the lodging industry.

These gaps suggest a need for more targeted, industry-specific, and digitally enhanced sustainability training in the VET sector to better support the lodging industry's green transformation (Kapera, 2018).

The curriculum framework for a profession is a document that defines the scope of knowledge, skills, and competencies that a student should acquire during vocational education in a given profession, in line with labor market requirements. The objectives of the curriculum framework for the profession of Hospitality Technician are to prepare students to provide high-quality hospitality services, manage hotel establishments, ensure excellent guest service, and implement modern ecological and technological solutions in the hospitality industry. By analyzing the curriculum for the profession of Hospitality Technician, the following conclusions can be drawn (Regulation of the Minister of National Education, 2011):

Green Transformation and Ecological Practices: The curriculum mentions applying ecological policies in hospitality establishments, but there is a lack of information on participation in more specialized training in sustainable tourism, energy efficiency, and waste management. Given the current market situation, training on ecological certifications such as Green Key or Eco-label is also necessary.

Environmental Education: The curriculum includes educating guests about the pro-ecological activities of the establishment, but there is a lack of detailed guidance on communication strategies with guests and information for them regarding involvement in resource conservation (e.g., water, energy).

Ecological Standards: The teaching framework includes ecological standards, but there is a lack of a practical approach to their implementation in SMEs, which often struggle with limited resources and knowledge in this area.

Digitalization and Sustainable Development: The program does not place enough emphasis on digital tools that support sustainable development, such as energy management systems or platforms that support eco-friendly hospitality practices.

Conclusions: The program should address these gaps in order to better prepare future hospitality workers to implement sustainable development practices in the industry.

Bulgaria

While there is a recognized need for integrating sustainability into VET programs for the lodging industry in Bulgaria, significant gaps remain in curriculum development, training effectiveness and the application of digital tools to address these challenges. Addressing these gaps requires a concerted effort from educational institutions, industry stakeholders,

and policymakers to develop and implement targeted training programs that equip lodging staff and leaders with the necessary skills and knowledge for sustainable practices.

Gaps in Current VET Programs:

Limited Integration of Sustainability Topics: while there is a general emphasis on digital and green skills, specific sustainability topics relevant to the lodging industry are not comprehensively covered. This results in a lack of specialized training for lodging staff and leaders. This leads to gaps in the training offered to lodging sector staff (Bulgaria Tourism Sector Report, 2022). Specifically, sustainability practices such as energy efficiency, resource management, and waste reduction are not universally embedded in VET curricula for tourism and hospitality (cedefop.europa.eu).

Inconsistent Curriculum Updates: some regions and institutions have updated their curricula to include sustainability, but this is not widespread across the country. Consequently, there is a lack of uniformity in the education of sustainability practices among staff at lodging establishments, making it harder for small and medium-sized enterprises (SMEs) to adopt sustainable practices comprehensively (European Commission, 2022).

Specific Knowledge Gaps for SME Lodging Staff and Leaders:

According to the STARGrowth Project (2022), Bulgarian SMEs in the tourism sector are motivated to adopt sustainability practices, yet many are not fully aware of the available training programs. SMEs are also challenged by the complexity of integrating sustainability into their daily operations. Additionally, a report by Petrova & Atanasova (2021) mentions that SMEs often struggle to make use of the EU funding programs aimed at supporting eco-friendly upgrades due to complexity and a lack of tailored training. Several other evaluations have pointed out the effectiveness of EU-funded initiatives to provide sustainability knowledge, but they also highlight a need for more targeted training programs. These programs are often not well-tailored to the specific needs of smaller, family-run businesses within the lodging industry (STARGrowth Project, 2022).

The biggest challenge identified for lodging businesses is the lack of expertise in sustainable resource management. Many SMEs do not possess adequate knowledge regarding energy-efficient systems or waste-reduction strategies. This gap leads to inefficiencies and missed opportunities for businesses to lower their carbon footprint and reduce operational costs (STARGrowth Project, 2022; Petrova & Atanasova, 2021).

Another gap is the lack of digital literacy among lodging staff, which makes it harder to implement and monitor sustainability practices. Digital tools for sustainability management are increasingly seen as critical, yet many SMEs are unfamiliar with their application (Graci & Dodds, 2010). Bulgarian hospitality managers are often not sufficiently trained to understand and promote sustainability as a core business strategy. Studies (Petrova & Atanasova, 2021) highlight that while these businesses understand the value of sustainability, they lack the leadership knowledge to embed it effectively.

There is a **clear demand among** Bulgarian lodging SMEs for training in sustainable practices, though this is often tempered by limited resources. SMEs recognize the long-term

benefits of sustainability but face barriers related to funding and accessing specialized training programs. The demand for tailored training is high, especially in areas such as energy efficiency, sustainable tourism and waste management (STARGrowth Project, 2022).

In Bulgaria, digitalization is starting to play an important role in bridging sustainability knowledge gaps within the lodging industry, but the process is still in its early stages. SMEs, such as small hotels and guesthouses, are gradually adopting **digital tools** to improve their sustainability practices. Platforms like the **National Tourism Portal** and **Ecolodging Bulgaria** provide **online training**, resources, and guidelines on sustainability, enabling lodging businesses to better understand **eco-friendly practices** like **energy efficiency** and **waste management**. Digital technologies such as **smart energy systems** and **Property Management Systems (PMS)** are also being used to monitor and optimize resource consumption, reducing operational costs and environmental impacts. Additionally, international platforms like **Booking.com** are influencing the market by offering green certifications that help **Bulgaria-based SMEs** showcase their sustainability efforts and attract eco-conscious travelers. However, the adoption of digitalization is hindered by **financial constraints**, **limited digital literacy**, and **awareness gaps** among many SMEs, especially in rural areas, which restricts the full potential of digital tools in improving sustainability.

Italy

In the early twentieth century, the Italian hospitality industry was characterized by a shortage of labor that limited its development, caused by the absence of an adequate training system. Despite attempts to start a specific school by the Italian Society of Hoteliers, the first school for hotel workers was opened only in 1914 by the Italian Touring Club. Despite the increase in training opportunities, the effort to establish a modern training system for hospitality workers, like the Swiss and German systems, was not fully successful (Zanini, 2012).

Italy is working to overcome the fragmentation and lack of integration that characterizes the national training-educational-professional scenario, and to align with EU policies aimed at ensuring the transparency of training pathways and the recognition of the skills in any case acquired by individuals for the purpose of obtaining the relevant titles and qualifications. The overall objective is to enable entry or re-entry into the vocational education and training system and to facilitate the matching of labor supply and demand (Antonazzo et al., 2012).

Austria

No literature specifically on gaps in VET programmes related to sustainability in the lodging industry could be identified. Carlisle et al. (2022) note that the integration of sustainability aspects into study programs for the tourism sector are still rare and have potential for improvement. Their study found that among a large sample of European tourism professionals, approximately 57% had received sustainability training, most of which occurred on the job. The amount of respondents who had received sustainability training as part of a higher education programme was very small (approximately 2%). Smaller companies tended to rely more on off-site training (Carlisle et al., 2022).

7. Discussion and conclusion

Germany

The lodging industry in Germany plays a crucial role in the country's tourism sector, significantly contributing to both the economy and cultural identity. In 2025, the industry generated approximately 33.7 billion euros in revenue, with 32.3 million overnight stays recorded. This sector supports around 300,000 jobs, spanning management, operations, culinary arts, and customer service. Small and medium-sized enterprises (SMEs) are particularly vital, accounting for about 77% of total hospitality revenue and employing 87% of the workforce. Family-run guesthouses, boutique hotels, and eco-lodges showcase Germany's focus on regional economic development and cultural authenticity.

Sustainability is increasingly influencing the lodging industry, with around 67% of hospitality businesses implementing energy-saving measures, waste reduction strategies, and regional product sourcing. However, sustainability certifications remain underutilized, with only 26% of businesses adopting them due to administrative and financial challenges. Despite this, many businesses recognize sustainability as an economic advantage that enhances customer loyalty.

Germany offers numerous sustainability certifications, including **Green Globe, EU Ecolabel, GreenSign, and Bio Hotels**, which provide structured frameworks for sustainable hotel management. National policies also support sustainability in tourism, with organizations such as the **German National Tourist Board (GNTB)** promoting eco-friendly accommodations and the **Federal Government's 'Future of Tourism' platform** emphasizing long-term sustainable development.

SMEs in the lodging sector face **sustainability knowledge gaps**, particularly in energy efficiency, waste management, and biodiversity conservation. Research indicates that many SMEs lack proper environmental training, leading to inefficiencies and missed opportunities to meet sustainability standards. Furthermore, businesses struggle with **limited access to sustainability metrics**, which hinders informed decision-making regarding energy use and waste reduction.

Key barriers to sustainable transformation include **financial constraints, managerial resistance, and insufficient external support**. Many hoteliers perceive green initiatives as costly, even though studies show only marginal increases in costs for sustainable building certifications. Additionally, a lack of government incentives and limited awareness of available resources hinder broader sustainability adoption.

To address these challenges, literature suggests **enhancing training programs, increasing financial support, and fostering employee engagement**. Encouraging sustainability through **Green Human Resource Management (GHRM)** practices and aligning business goals with sustainability objectives can significantly improve outcomes. Additionally, **stronger industry partnerships** and government-backed incentives could provide SMEs with the necessary resources to integrate sustainability effectively into their operations.

Germany's **Vocational Education and Training (VET) system** has made substantial progress in integrating sustainability education, particularly in sectors like **renewable energy, environmental sciences, and agriculture**. However, gaps remain in **hospitality, logistics, and business administration**, where sustainability education is still limited. Expanding **educator training, digital learning tools, and industry collaborations** will be crucial for equipping future professionals with the skills needed for a sustainable economy.

In conclusion, while Germany has made significant strides in sustainability within its lodging industry, challenges remain in **certification adoption, financial feasibility, and knowledge transfer**. Strengthening educational frameworks, providing targeted financial incentives, and fostering a culture of sustainability within SMEs will be essential to ensuring long-term success in the country's green transition.

Poland

The tourism branch in Poland plays a significant role in the country's economy and cultural heritage, contributing approximately 4,5 % to the national GDP (Stockwatch, 2024). With a growing number of domestic and international tourists, the industry continues to expand, creating employment opportunities and supporting local communities. However, alongside this growth, the sector faces increasing pressure to adopt sustainable practices in response to national policies, EU regulations, and changing consumer expectations.

Poland has made strides in promoting sustainability in the lodging industry through initiatives such as the National Strategy for Responsible Development and alignment with the European Green Deal. The Polish Tourism Development Program and support from the Ministry of Climate and Environment have encouraged eco-friendly infrastructure and green certifications, such as Green Key and EU Ecolabel. Despite these efforts, SMEs in the lodging sector still face significant knowledge gaps, particularly in areas such as sustainability management, eco-certification, energy efficiency, and waste management.

Research highlights that only a small percentage of lodging businesses in Poland actively engage in sustainability initiatives. Data from Booking.com's Travel Sustainable Badge program indicate that just 2% of tourist facilities in Poland have received sustainability recognition. This suggests that many SMEs are either unaware of or unable to meet the requirements for sustainable operations. The most commonly implemented eco-friendly practices focus on waste reduction and water efficiency, while initiatives such as promoting biodiversity, local ecosystems, and sustainable transportation remain underutilized.

The analysis of sustainability in Poland's lodging industry reveals a mixed landscape. While national policies and EU-driven strategies provide a strong framework for green tourism, SMEs still struggle with implementation due to financial, technical, and informational barriers. One of the key challenges is the lack of awareness and knowledge among small business owners and hospitality staff. Many do not fully understand the benefits of sustainability certifications or the long-term cost savings associated with energy-efficient technologies.

Financial support programs, such as the Operational Program for Smart Growth 2021-2027, offer grants and low-interest loans to encourage investment in sustainable practices. However, the adoption rate remains low, suggesting that additional advisory and technical

support is needed to help SMEs navigate these funding opportunities. More structured education and vocational training programs focusing on sustainability could play a crucial role in bridging knowledge gaps and equipping the workforce with the necessary skills.

Behavioral change within the SME lodging industry is influenced by multiple factors, including economic constraints, consumer demand, and regulatory pressures. While larger hotel chains are increasingly adopting sustainability as a competitive advantage, smaller businesses often struggle to balance operational costs with green investments. Additionally, the hospitality workforce faces skill shortages, with many SMEs finding it difficult to recruit and train staff in sustainability-oriented roles.

To accelerate sustainability efforts, Poland's lodging sector could benefit from a more integrated approach that combines financial incentives, education, and stronger collaboration between industry stakeholders. Increasing consumer awareness and demand for sustainable accommodations may also serve as a driving force for change. By addressing the existing barriers and fostering a culture of sustainability, Poland has the potential to establish itself as a leading eco-friendly travel destination in Europe.

Bulgaria

The Bulgarian SME lodging sector faces multiple challenges when it comes to adopting sustainability practices. **Financial constraints** emerge as a central barrier, with many small businesses struggling to afford eco-friendly upgrades and green technologies. Despite the availability of **EU grants** and **national subsidies** aimed at improving energy efficiency and sustainability, many SMEs are unaware of these funding opportunities or find them difficult to access, thus limiting their ability to implement sustainable practices (Kulevska et al., 2020). Furthermore, **regulatory pressure** remains weak, with **national** regulations on sustainability often lacking strong enforcement. The **National Strategy for Sustainable Development of Tourism (2014-2030)** outlines important sustainability goals, but its implementation has been inconsistent, particularly among smaller businesses in rural areas, who often struggle to navigate regulatory frameworks (Petrova & Atanasova, 2021).

In terms of **knowledge, skills, and attitudes**, gaps are significant. Many SMEs in the Bulgarian lodging sector still lack basic **knowledge** about sustainability practices and their long-term financial benefits (Graci & Dodds, 2010). **Training programs** are often minimal or not specifically tailored to sustainability needs. The absence of specialized training for staff limits the ability of front-line employees to implement or communicate sustainability practices effectively, hindering overall impact (Ivanov, 2021). Similarly, attitudes towards sustainability are shaped by a combination of economic factors and a general reluctance to view sustainability as a priority, with many operators seeing green investments as unnecessary costs rather than long-term benefits (Petrova & Atanasova, 2021).

However, **digitalization** presents an opportunity to bridge these gaps. The introduction of online platforms like Ecolodging Bulgaria and smart energy systems in some lodging businesses allows SMEs to access important sustainability resources, track energy consumption, and implement cost-effective solutions (Booking.com, 2022).

Digital tools such as Property Management Systems are becoming increasingly popular, enabling SMEs to monitor and reduce waste, energy usage, and overall carbon footprints. Furthermore, online certifications offered by platforms like Booking.com encourage hotels to adopt more sustainable practices in exchange for better visibility and access to eco-conscious consumers. Yet, despite these advancements, challenges persist, such as financial barriers, a lack of digital literacy, and limited awareness among many small and rural businesses about the potential of digital solutions for sustainability.

Regarding Vocational Education and Training (VET), there is a noticeable gap in the integration of sustainability into the training programs for the lodging sector. The National Vocational Education and Training Programme 2022 does not emphasize green skills in a comprehensive manner, and sustainability topics remain largely underrepresented in existing curricula. This results in a workforce that lacks the practical skills required to implement green practices effectively. Efforts to address this gap, such as integrating digital tools for training, are still emerging, but substantial progress is needed to meet the sustainability demands of the sector.

Conclusions

- ✓ Financial and regulatory constraints continue to hinder the adoption of sustainability practices in Bulgaria's SME lodging sector. More accessible and clear financial incentives are needed to help businesses make sustainable investments.
- ✓ Knowledge, skills, and attitudes around sustainability need significant improvement, particularly in small and rural businesses. Enhanced training programs focused on green skills should be prioritized.
- ✓ Digitalization is a valuable tool to bridge knowledge gaps, but its full potential is not yet realized due to digital literacy barriers and financial limitations.
- ✓ VET programs in Bulgaria are currently inadequate in addressing sustainability needs in the lodging sector. A more robust inclusion of sustainability topics in vocational training is required to equip the workforce with the skills needed to drive sustainability in the sector.

Italy

Sustainability in the Italian lodging industry is an increasingly relevant topic, with national policies, financial support, and vocational training playing a crucial role in its advancement. Sustainable tourism is gaining traction, with both tourists and operators becoming increasingly involved.

Travelers are showing a preference for organic food, electric vehicles, and accommodations like bed and breakfasts. Restaurants that offer locally sourced products and organic ingredients are also favored. Ecobnb highlights the advantages of sustainable tourism, including job creation, preservation of cultural traditions, and improved infrastructure.

The industry is a vital part of the Italian economy, contributing significantly to GDP and employment while also shaping the country's cultural and social landscape. The government has taken steps to encourage sustainability through funding initiatives, eco-certifications, and support for SMEs, helping businesses transition towards greener practices. However, despite these efforts, challenges remain. The Bank of Italy has acknowledged the

importance of sustainability in the tourism sector's evolution. Italy's cultural heritage is a significant asset in this context, requiring protection and enhancement.

One of the key issues identified in this research is the knowledge gap among SMEs regarding sustainability management, eco-certifications, energy efficiency, waste management, and customer expectations. Many lodging operators lack structured monitoring systems, struggle with outdated infrastructure, and have limited awareness of eco-friendly technologies. Additionally, the disconnect between customer intentions and actual behavior presents marketing challenges, requiring a better understanding of sustainable tourism demand.

Financial barriers also pose a significant challenge, particularly for SMEs that lack access to capital for implementing sustainable technologies. While some financial incentives and credit lines are available, more targeted funding and advisory services could help bridge this gap. Moreover, regulatory complexity and cultural attitudes towards sustainability sometimes lead to resistance in adopting greener practices.

VET programs have made progress in integrating sustainability topics, with courses covering energy management, waste reduction, water conservation, and sustainable sourcing. However, gaps remain, particularly in digitalization, advanced sustainability training, and industry-specific needs. There is a need for more practical and hands-on training, especially for SMEs, to ensure that sustainability becomes an integral part of hospitality operations rather than an optional initiative. Further efforts are required to close knowledge gaps, improve access to funding, and refine vocational training programs.

When it comes to our research through questionnaires sent to the Italian participants, the survey results reveal that while there is a growing awareness of sustainability in the hospitality sector, most respondents feel they lack sufficient knowledge, particularly in areas like sustainability management systems, reporting standards, and energy efficiency. Many businesses, especially smaller ones, struggle with implementing sustainable practices due to financial constraints, lack of expertise, and limited customer interest. However, there is a clear willingness to adopt greener practices if the right support is available. Respondents highlighted financial assistance, step-by-step toolkits, and access to sustainability experts as key resources that could help them transition towards more eco-friendly operations. Motivations for prioritizing sustainability include cost savings, regulatory compliance, and meeting increasing customer demand for environmentally responsible hospitality services.

Despite existing challenges, some businesses have already taken steps toward sustainability, such as installing photovoltaic panels, improving recycling practices, and reducing energy and water consumption. However, others have yet to take any significant action, often citing high costs and lack of knowledge as primary barriers. To accelerate sustainable adoption, greater financial support, accessible educational resources, and stronger customer engagement are needed. Encouraging regulatory incentives and demonstrating the long-term benefits of sustainability could help businesses overcome initial hesitations. Ultimately, fostering a culture of sustainability in the hospitality industry will require a combined effort from businesses, policymakers, and consumers.

Austria

Austria is one of the world's top tourism destinations, ranking tenth in international arrivals in 2022, accounting for 2,73% of the global market (United Nations World Tourism Organisation, 2024). With over 151 million overnight stays in 2023, tourism remains a vital sector of the Austrian economy. The tourism industry contributed 6.2% to Austria's GDP in 2022, with around 1.8% of this attributable to the lodging sector (BMAW, 2023). The sector is dominated by small and medium-sized enterprises (SMEs), which make up 99.9% of Austria's registered hotels (Wirtschaftskammer Österreich, 2024).

The environmental relevance of tourism in Austria presents a unique case of "double materiality": while it significantly contributes to greenhouse gas emissions and biodiversity loss, it also depends on natural ecosystems for its viability (Calisto et al., 2021; Carlisle et al., 2022). Alpine and lake regions, central to Austria's tourism offering, are particularly vulnerable to climate change, heatwaves, and natural disasters.

To promote sustainability, Austria developed the "Plan T – Masterplan for Tourism", which outlines ecological, economic, and social sustainability objectives. It is backed by a continuously updated action plan and supported by the Federal Ministry of Labour and Economy in cooperation with Österreich Werbung, the Austrian Chamber of Commerce (WKÖ), and the Austrian Hotelier Association (ÖHV) (BMAW, n.d.c). Prominent recommended third-party certifications include, from most to least used, the Austrian Ecolabel, EU Ecolabel, and Green Key, reflecting Austria's emphasis on verified sustainable practices (BMK, 2025; Österreich Werbung, n.d.).

Despite broad awareness of sustainability, there is limited academic research specific to Austria on sustainability skills in the lodging sector (Calisto et al., 2021). Carlisle et al. (2022) found that across Europe, self-reported proficiency in key environmental skills remains low particularly in biodiversity conservation and sustainable transportation. Most training is acquired informally on the job - only a small proportion of staff receive structured environmental education.

VET offerings in Austria span secondary, post-secondary, and tertiary levels. Specialized sustainability-focused programs exist, such as the ÖHV's "Lehrgang Nachhaltigkeitsmanagement", but they remain limited. Apprenticeships and higher education programs increasingly include modules on eco-tourism and hospitality management, though integration of sustainability varies (Arbeitsmarktservice Österreich, n.d.). Several institutions offer degree programs with a sustainability component..

Austria provides a range of financial and advisory support to SMEs aiming to improve sustainability. These include co-funding for consulting services related to the Austrian Ecolabel, investment subsidies for energy-efficient technologies, solar panels, recycling systems, and waste prevention (BMAW, n.d.b). Advisory services such as free webinars, workshops, and counseling through Umweltberatung and the Chamber of Commerce help SMEs navigate sustainability requirements.

Motivations for adopting sustainable practices are both internal and external. Cost savings are a key driver (Cigir, 2017; Eskerod & Đurić, 2018). Many hotels implement sustainability primarily for operational efficiency and may not communicate these efforts effectively,

particularly to staff (Calisto et al., 2021; Schaffler, 2020). Smaller businesses often lack dedicated sustainability personnel, which hinders strategic implementation.

Barriers include limited time, financial resources, and knowledge to assess upstream sustainability in supply chains. Certification processes are sometimes seen as burdensome, and guest willingness to pay a premium for sustainable offerings is uncertain. According to Schaffler (2020), successful sustainability integration requires long-term staff engagement, internal marketing, and inclusion in supplier discussions.

Common measures include reducing energy and water usage, installing LED lighting, offering organic and regional food, and minimizing plate waste at buffets. Proven interventions include reducing plate size and nudging guests to avoid over-serving themselves - simple but effective methods with both ecological and financial benefits (Dolnicar et al., 2020).

To summarize, Austria's lodging sector demonstrates strong structural readiness for sustainability through strategic frameworks, financial incentives, and a well-developed VET system. However, closing knowledge and implementation gaps will be essential to ensuring that the industry remains competitive, resilient, and environmentally responsible.

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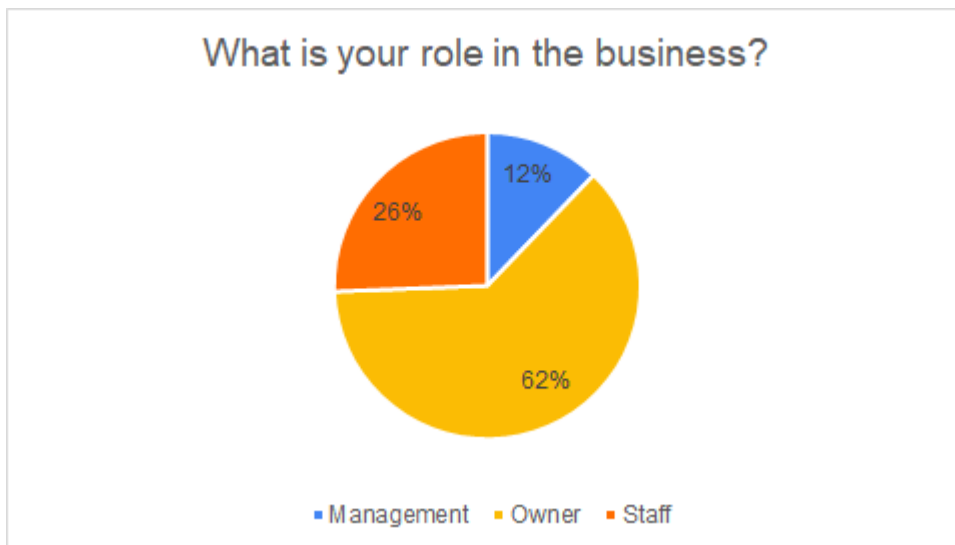
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Results - Part 2: Survey and interviews with lodging industry SMEs

As part of the analysis of the present state, expectations and good practices of WP2, persons working in the lodging industry were asked directly about their current practices and needs. The survey was created and distributed via Google Forms. No personal information was required to fill out the survey. In total, 81 employees and leaders from lodging industry SMEs responded to the survey (target: 75 employees/leaders). This chapter shows the results for the survey questions.

Q1: What is your role in the business?

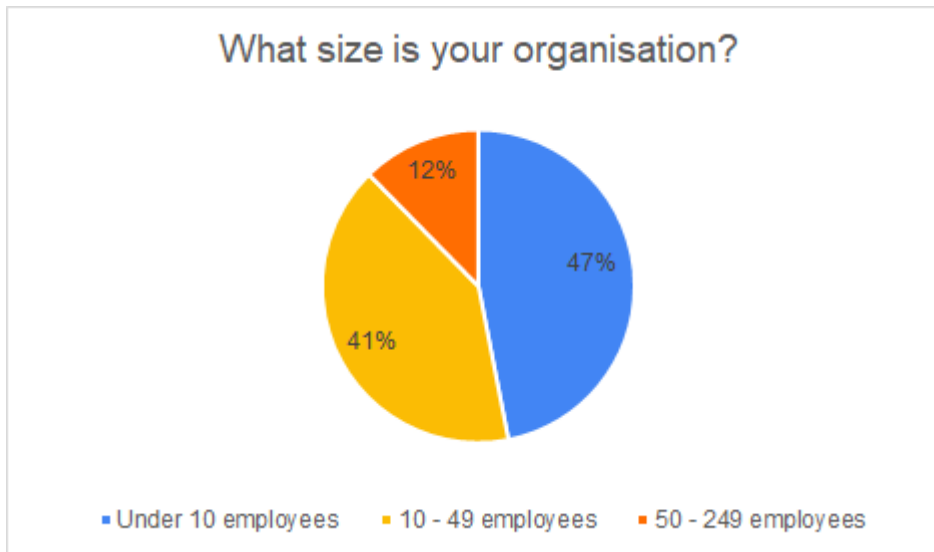
| Role | Number of responses |
|------------|---------------------|
| Management | 10 |
| Owner | 51 |
| Staff | 21 |



This graph shows the distribution of the survey respondents' role in the respective business. Over 62% of respondents were lodging industry business owners, and a little over a quarter of respondents were staff. Only 12% described themselves as "management".

Q2: What size is your organisation?

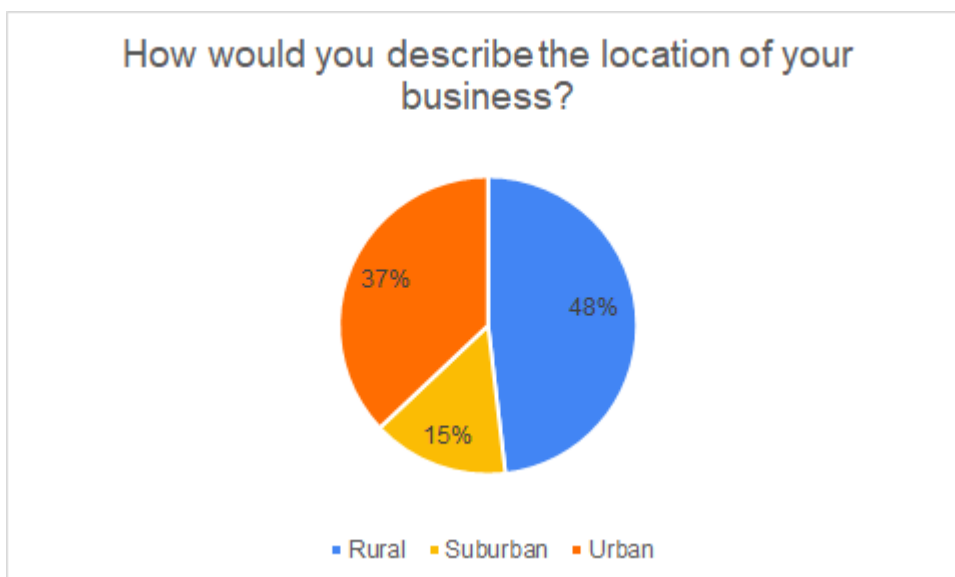
| Size | Number of responses |
|--------------------|---------------------|
| Under 10 employees | 38 |
| 10 - 50 employees | 33 |
| 50 - 250 employees | 10 |



Almost half of respondents stated that the business they were operating in had under 10 employees, and 41% of businesses had between 10 and 49 employees. Only 12% were SMEs with 50 employees or above.

Q3: How would you describe the location of your business?

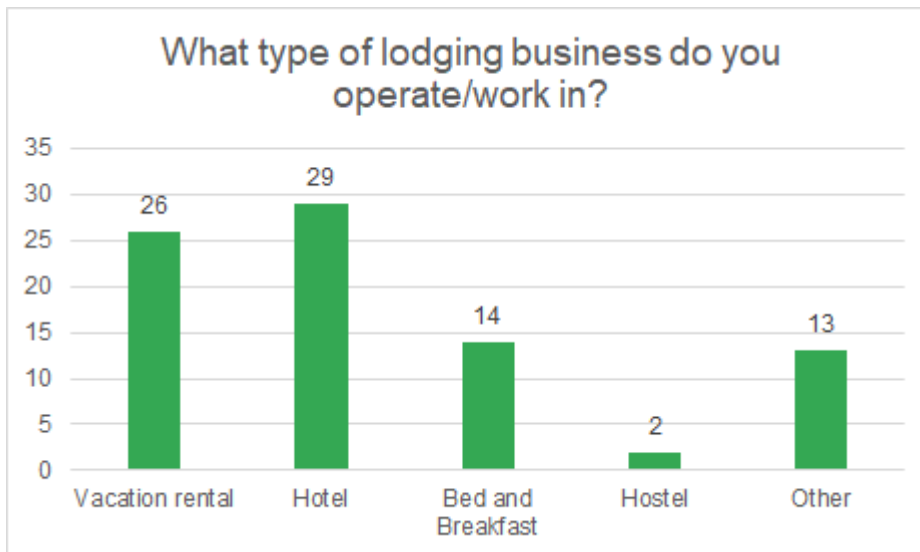
| Location | Number of responses |
|----------|---------------------|
| Rural | 39 |
| Suburban | 12 |
| Urban | 30 |



Almost half of the respondents' organizations were situated in rural areas, 15% in suburban areas and 37% in urban areas.

Q4: What type of lodging business do you operate/work in?

| Type | Number of responses |
|-------------------|---------------------|
| Vacation rental | 26 |
| Hotel | 29 |
| Bed and Breakfast | 14 |
| Hostel | 2 |
| Other | 13 |



The majority of businesses included in the survey were hotels and vacation rentals. 14 Bed and Breakfasts and only 2 Hostels responded to the survey. The total sum exceeds the number of respondents as 3 businesses fell into more than one category.

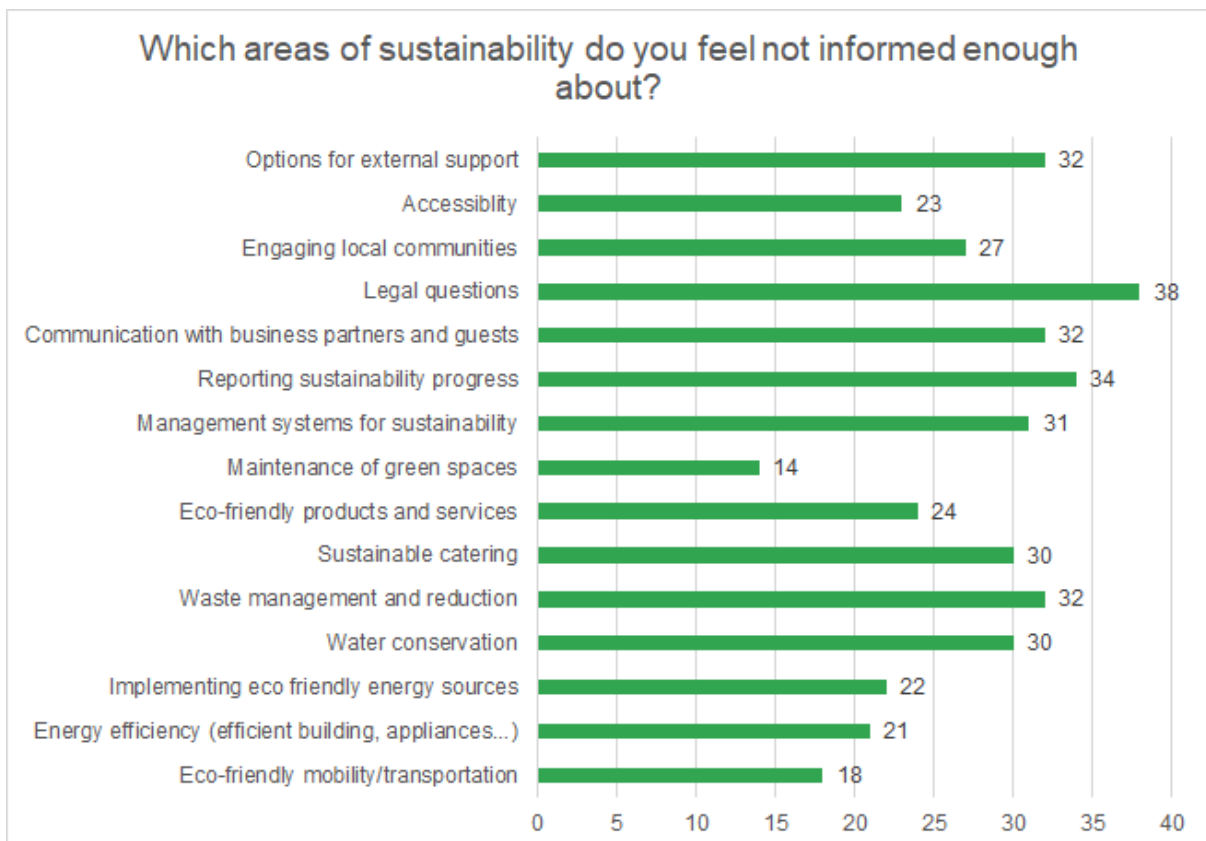
Q5: How would you rate your knowledge of ecological sustainability in the lodging industry? (1 star = very low; 4 stars = very good)

Respondents' self-reported knowledge of ecological sustainability had an arithmetic mean of 2.47, which could be described as "acceptable" or "ambivalent".

Q6: Which areas of sustainability do you feel not informed enough about?

| Area | Number of responses |
|---|---------------------|
| Eco-friendly mobility/transportation | 18 |
| Energy efficiency (efficient building, appliances...) | 21 |
| Implementing eco friendly energy sources | 22 |
| Water conservation | 30 |

| | |
|---|----|
| Waste management and reduction | 32 |
| Sustainable catering | 30 |
| Eco-friendly products and services | 24 |
| Maintenance of green spaces | 14 |
| Management systems for sustainability | 31 |
| Reporting sustainability progress | 34 |
| Communication with business partners and guests | 32 |
| Legal questions | 38 |
| Engaging local communities | 27 |
| Accessibility | 23 |
| Options for external support | 32 |



The survey asked respondents to state in which areas of sustainability they felt that they were lacking information. The areas which were stated most often are “legal questions”, followed by “reporting sustainability progress”. Other commonly stated areas were “options for external support”, “communication”, “management systems”, and “waste management”. Areas that were stated most rarely were “maintenance of green spaces” and “eco-friendly mobility/transportation”.

Q7: Which resources would most help your organization adopt sustainable practices? (Select up to 3)

| Type of support | Number of responses |
|--|---------------------|
| Step-by-step guides or toolkits | 46 |
| Access to sustainability experts or consultants | 33 |
| Financial assistance (e.g., grants, subsidies) | 50 |
| Networking opportunities with similar businesses | 31 |
| Training of staff | 35 |
| Certification programs (e.g., eco-labels) | 13 |

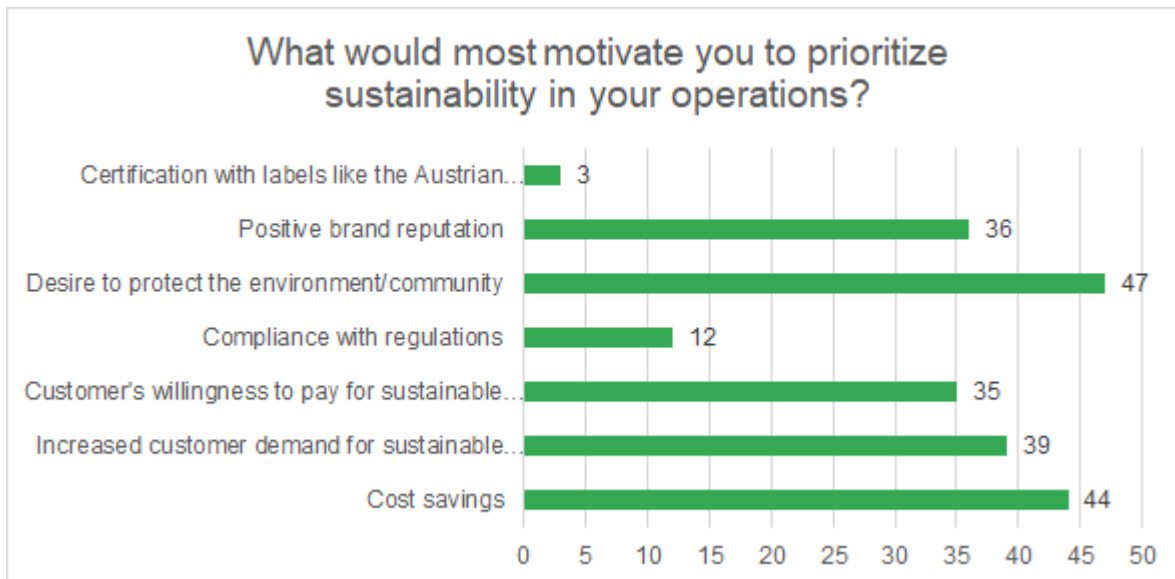


When asked which resources would most help their organisations adopt sustainable practices, the most common response was financial assistance. Second in place were step-by-step guides or toolkits. Few respondents said that certification programs would be supportive to them.

Q8: What would most motivate you to prioritize sustainability in your operations?

| Motivation | Number of responses |
|---|---------------------|
| Cost savings | 44 |
| Increased customer demand for sustainable practices | 39 |

| | |
|--|----|
| Customer's willingness to pay for sustainable practices | 35 |
| Compliance with regulations | 12 |
| Desire to protect the environment/community | 47 |
| Positive brand reputation | 36 |
| Certification with labels like the Austrian Ecolabel/EU Ecolabel | 3 |

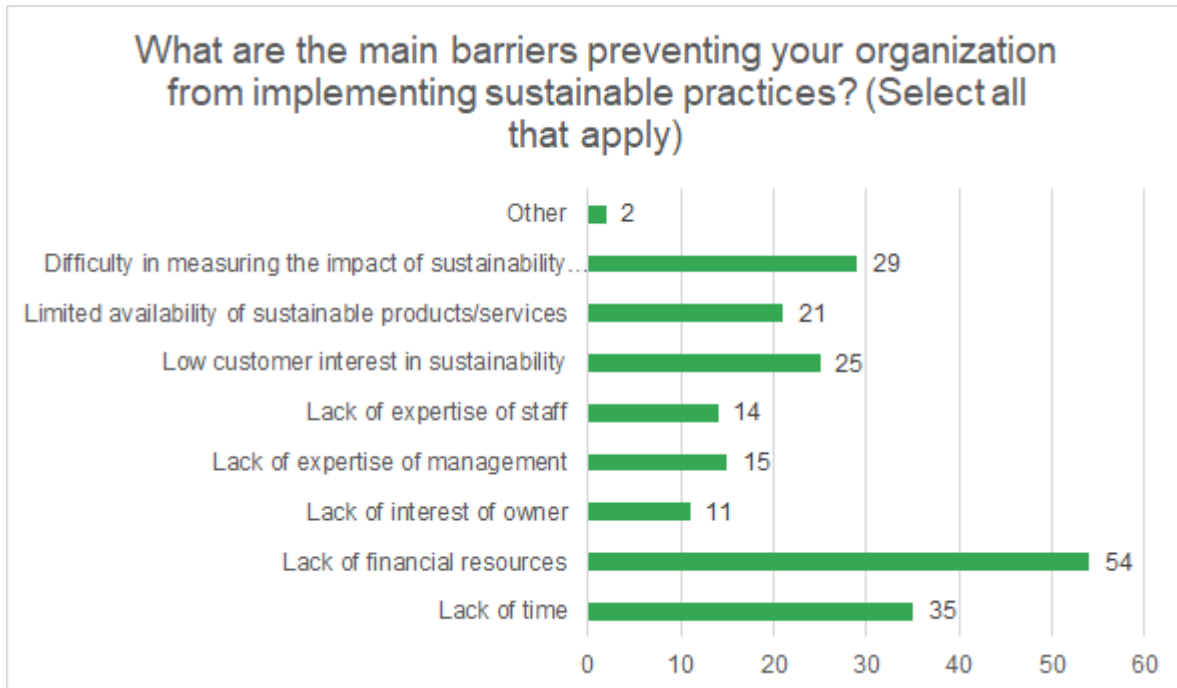


When asked about their main motivations to prioritize sustainability in their organisations, the most frequent response was a “desire to protect the environment/community”. Second in place were cost savings. External motivations were still common but less frequent.

Q9: What are the main barriers preventing your organization from implementing sustainable practices? (Select all that apply)

| Barrier | Number of responses |
|---|----------------------------|
| Lack of time | 35 |
| Lack of financial resources | 54 |
| Lack of interest of owner | 11 |
| Lack of expertise of management | 15 |
| Lack of expertise of staff | 14 |
| Low customer interest in sustainability | 25 |

| | |
|--|----|
| Limited availability of sustainable products/services | 21 |
| Difficulty in measuring the impact of sustainability efforts | 29 |
| Other | 2 |



By far the most commonly perceived barrier to implement sustainable practices was a lack of financial resources, which approximately 67% of respondents could agree with. Time was also an important factor. Constraints based on the building itself (falling into the “other” category, where this reason was cited) or lack of interest of the business owner were stated least frequently.

Q9: How significant are financial constraints in adopting sustainability practices?

In the academic literature, financial constraints are a common theme in terms of barriers to more sustainable practices. On average, the importance of financial constraints as a barrier was rated as 3,35 on a scale from 1 to 4 (4=“very important”), which could be described as “quite important”. This is in line with the results for Q8 on main barriers (see question above).

Q10: What specific obstacles have prevented your organization from starting or expanding sustainability initiatives?

Poland

- installation finances
- Local regulations + finance
- high costs of rubbish collection and the need to separate them for guests

- Low number of willing workers
- Costs, the implementation of green energy solutions is currently extremely expensive and is an action for the climate, it does not contribute at all to the reduction of operating costs (beforehand you have to spend huge amounts of money for the investment, which pays off after about 17 years). The lack of supporting programmes, the huge costs of selling energy to PGE, the lack of infrastructure on the part of PGE are a major obstacle.
- Cost of building photovoltaics, governmental restrictions on the construction of backyard windmills
- Lack of financial support
- Mainly lack of time to get more involved. In order to introduce new things you first of all need knowledge, which we lack the time to acquire, and then it takes time to do new activities systematically on a daily basis.
- We are at a fairly advanced stage of implementing good sustainable tourism practices. At the moment we are blocked by a lack of funds for, for example, renewable energy sources or a rainwater/grey water harvesting and recovery project. We would like to renovate the sewage treatment plant but lack the funds for this.
- When it comes to activities let's call them 'physical', basically the main limitation is financial resources. We have many activities implemented and some I would like to have, for example, a biodynamic garden and our plot is just gravel.... So replacing the soil and preparing the ground is a big cost. Maybe a natural pond? A ground source heat pump? I would be happy to replace all the white goods with AA+ Ltd class. As for traffic restrictions, I am put off by the ubiquitous greenwashing but also by the experts' one-sided view of sustainability. Not taking into account the needs and traditions of local communities, not listening to their concerns. I'm horrified by the environmentalist on a vege box diet (sic! with a whole lot of plastic plus transporting that etc) who lectures me about eating meat once a week and it's so terrible for the climate.
- Lack of customer interest
- Lack of finance to buy a new heating cooker, too difficult access to finance through the Clean Air Programme
- Resistance from the local community
- I am not on site - difficult to manage remotely.
- Lack of funding from the municipality
- Lack of grants or low-cost financing for entrepreneurs
- Portals such as Slowhop can promote the huge commitment of many hosts to sustainability by ensuring that such properties can be found in the search functions and are promoted more than properties with little or no sustainability efforts. Because only more accommodation in sustainable properties leads to them being able to invest even more in sustainability.
- Lack of funding to expand photovoltaic installations
- Financial constraints prevent us from achieving total energy independence and using only RES. We have very limited opportunities to purchase green products locally. On our own, without funding for salaries, we are not able to plant as many trees and shrubs as we would like.
- Incompetence of officials, blocking action due to their ignorance
- We write a project, wait for funding. Procedures are too long (one year waiting for project to start because gov sector doesn't know how to use IT systems)

- Lack of interest from visitors.
- Lack of funds, no transmission lines with good capacity,

Germany

- We don't know exactly where to start and our building is old and not designed not designed for modern energy-saving measures.
- Sustainability sounds good, but in practice there are often conflicts with economic necessities.
- Uncertainty in energy planning
- As a small company, I don't have the time
- Our building is historic and difficult to renovate in terms of energy efficiency.
- I don't know enough about this area myself, as my day-to-day business keeps me completely busy.
- Lack of staff who can deal specifically with sustainability issues.
- Sustainable products and measures are expensive and we don't have a big budget.
- So far, no one in the management has prioritised the issue.
- The time
- Hardly any time to deal with something like this
- Zeit sich mit Veränderungsmöglichkeiten genauer zu beschäftigen

Bulgaria

- There are no clearly defined environmental requirements and no specific guidelines on how hotels can become more sustainable.
- There is a lack of specialised training and consultancy for implementing green practices in small hotel businesses.
- Introducing new procedures requires additional training and resources, which can be challenging with limited staff...
- Complex administrative procedures when applying for eco-certificates, subsidies or permits to implement green technologies
- high energy costs
- We are a high and low season hotel and investing in sustainable solutions seems risky
- While there is a growing trend towards sustainable tourism, not all customers choose a hotel based on its environmental initiatives.
- Our team lacks the expertise to implement sustainable practices and certification processes. We struggle to find accessible and applicable guides or advice on implementing environmental measures in urban environments.
- Difficult to convince guests to actively participate in environmentally friendly practices such as reusing towels or separate waste collection.
- Guests expect amenities such as air-conditioning, swimming pools, lavish buffets and daily towel changes, which can be at odds with sustainable practices.
- Obtaining environmental certifications such as Green Key or EU Ecolabel is expensive
- Low Awareness and Expertise - There is a lack of specialized training and consulting to implement green practices in small hotel businesses.
- Limited financial resources - Investment in sustainable technologies, such as renewable energy or water saving systems, is expensive and access to finance and subsidies is difficult.

- Investment in sustainable technologies, such as renewable energy sources or water saving systems, is expensive

Austria

- Finances, Time
- Finances
- x
- Finances; procurement of organic foods
- Greenwashing of large businesses
- Lack of time
- current credit situation / Finances
- economic efficiency; Lack of time - for example ESG report
- Elevated costs for sustainable products and practices
- Lack of time
- concrete ideas for projects
- Time
- Time
- Lack of knowledge on how to get started and which first steps could be implemented
- Structural limitations and related costs (old villa) > thermal renovation, especially exterior/facade insulation
- Lack of structures and appropriate containers for the steering of sustainability projects

Italy

- Sustainable products are more expensive on average
- Ownership of the facility is by a public entity with budget problems and little training on these issues
- Non-knowledge and high costs
- Economic resources
- don't know
- Lack of time and resources
- I think management does not think about ecology because it is not a condition that drives us to have more clients
- Not very interested because it is not profitable
- don't know
- the owner is not interested
- -
- high initial costs
- lack of financial resources and training
- We want to make some changes, such as changing the insulation of the house so that we don't have to use air conditioning and heating, but this requires a lot of funds
- we have never discussed this with the owner

Q11: What is your organization currently doing to improve ecological or social sustainability?

Poland

- is committed to the community
- We have financed photovoltaics + a heat pump, we run an ecological (but not certified) farm
- everything that is currently possible. really.
- Renovation of retro architecture and equipment
- Energy transformation - renewable energy, we intend to enter the off-grid model. We have set up a foundation to clean up the forest in which we live.
- Segregation of rubbish, composting, reusable packaging, no disposable cosmetics, Yope organic cosmetics, cotton bags for guests for shopping, bidons for water
- We are trying to take part in a local grant project from the Local Action Group for farmers 'Agritourism Farm Development' to take the next step towards a more sustainable site (including, among other things, the installation of photovoltaic cells)
- Ecological activities on the site where we run the cottages. Non-interference with the ecosystem found on our site. These include, for example, an ecological wastewater treatment plant, no paved road, no alleys, no mowing, taking care of the natural character of the flowing river and similar measures, which I think are basically already standard in places like ours.
- In addition to running agritourism in a sustainable way, we promote and spend a lot of time talking to our guests about the quality of the service and the new definition of luxury travel, i.e. one where you can relax in the bosom on a mature river, have a meal prepared with products from the organic garden and stop for a while.
- see the report for Cottage Chrosiówka on slowhop.com
- we have heat pumps, install PV panels, drink tap water, reduce plastic, reuse packaging, cook according to zero and much more
- What can
- Talks at the local school about activities for children
- I try to make individual decisions accordingly but I don't have an overall plan.
- Segregation of rubbish, eco-friendly household chemicals, reusable packaging, we take care of the forest that grows by the property
- We install photovoltaic panels, insulate the building, save water, do not use disposable packaging, plant trees and shrubs, use eco-friendly washing products, take care of the wellbeing of the surrounding nature (cleaning the surrounding forest, wise feeding of animals,)
- You can read all about it here:
<https://slowhop-docs.s3.eu-central-1.amazonaws.com/ecocert/Recertyfikacja-2024-Beniaskie!.pdf>
- Photovoltaics, slowhop certification, cooperation with the local community
- We are an organically certified farm, and we strive to grow the garden and operate the environment in accordance with permaculture principles. All the chemicals we use are 100% biodegradable and as far as possible organic-we do not contaminate the water. Our energy needs are covered by PV panels, but sometimes we send the excess production to the grid and then, unfortunately, we have to use the energy, e.g. in winter. We take a lot of measures to protect the cultural landscape and the environment.
- These are small measures that we can do ourselves at little cost.
- Segregation, education, promotion of ecological activities
- Strictly ecological activities, dictated by our own needs rather than business needs.

- Each year we change further elements of our activities in line with certification in the responsible travel programme

Germany

- Wir beziehen unsere Produkte so weit wie möglich aus der Region. Wir haben vor kurzem auf ökologische Reinigungsmittel umgestellt.
- Wir schalten Heizung und Klimaanlage in ungenutzten Zimmern automatisch herunter.
- Wir haben alle Prozesse digitalisiert, wo es möglich ist. Wir verwenden nachfüllbare Seifen- und Shampoo-Spender statt Einwegverpackungen. Wir nutzen Strom aus erneuerbaren Energien.
- Heizungserneuerung
- Wir haben uns intensiv mit Ökostrom beschäftigt. Außerdem achten wir sehr auch biologische Vielfalt in unserem Städtischen Garten. Es gibt aber keine konkrete Strategie
- Die Hotelwäsche wird nur auf Wunsch der Gäste täglich gewechselt.
- Wir sind regional fest verwurzelt und leben diese Verbindung, z.B. bei/mit unseren Zulieferern. Zimmerreinigung wird nur noch auf Wunsch erledigt. Im gesamten Hotel sind Energiesparleuchten installiert. Alle Duschen haben Wassersparköpfe installiert.
- Das übliche machen wir auch. Außerdem wurden Lieferanten gewechselt – wir setzen stärker auf nachhaltige und regionale Produkte.
- Wir trennen Müll und versuchen, weniger Plastik zu nutzen. Wir nutzen nur noch LED-Beleuchtung.
- Gäste können selbst entscheiden, ob sie ihre Handtücher täglich gewechselt haben möchten. Frühstücksbuffet mit weniger Verpackungsmüll, z. B. keine Einzelportionen mehr.
- Aufklärung im Unternehmen mit dem Personal
- Regionales Frühstück, Weniger Einwegverpackungen
- Wir sind ein integratives Hotel. Wir machen eine Menge im Bereich soziale Nachhaltigkeit. Inklusion zieht sich bei uns durch jede unserer Aktivitäten. Wasser- und Energiesparen wird bei uns standardmäßig mitgedacht. Wir haben einen hauseigenen Bienenstock, stellen Joghurt selbst her, achten darauf nicht immer sofort Dinge wegzuschmeißen, sondern wenn möglich zu reparieren. Achten dabei auf die umweltfreundlichkeit eingesetzten Materialien. Präferieren nachhaltige Alternativen bei z.B. der Hotelkosmetik.

Bulgaria

- Separate collection, recycling, reducing plastic packaging and eliminating single-use plastic products.
- We don't have much activity in this area
- We use LED lighting and motion sensors in hallways and common areas.
- We have installed smart thermostats to optimize heating and air conditioning use.
- We organise internal training on sustainable practices so that our team is more aware and motivated
- We provide charging stations for electric vehicles.
- We invest in solar panels, green roofs - this is the most widespread
- We are gradually moving towards more energy efficient appliances and electronics.

- We are gradually eliminating single-use plastic products - replacing small shampoos and soaps with dispensers.
- We are reducing paper use through electronic invoices, digital menus and mobile room keys.
- We use LED lighting, motion sensors in corridors, energy-saving appliances
- We install water-saving showers and taps
- We use LED lighting, energy saving appliances and smart energy management system in the rooms.
- Collect information
- Seeks opportunities to implement this type of work with European funding

Austria

- Austrian Ecolabel
- Just got certified with EU ecolabel and Austrian Ecolabel
- More efficient water supply
- Replacement of heating system; expansion of the palette of organic products
- Electricity, water, heating - everything eco
- Implementation of Austrian Ecolabel
- Completed Austrian Ecolabel and EU Ecolabel in autumn 2024 and continue to work on action plan
- we already implement a lot and still have a lot of ideas, some things are difficult due to economic efficiency and a lack of understanding among guests
- We have the Austrian Ecolabel and the EU Ecolabel
- Austrian Ecolabel
- Trying out sustainable laundry and cleaning products
- We have completed the "common good balance sheet" and always try to improve sustainability, regional products, Austrian Climate Ticket for Employees, 5% reduction for a stay if the guest travels with public transportation
- Water conservation, saving energy, waste separation system, eco-friendly cleaning products, training of staff, solar panels, wallbox, Room with charging stations for eBikes
- Regional suppliers, sustainable promotional materials, Re-use of old furniture and materials, food preparation awareness, mostly reusable packaging
- Yearly improvements related to the Austrian Ecolabel
- Voluntary sustainability reporting inspired by VSME

Italy

- Photovoltaic plant
- no actions
- Photovoltaic plants,
- Proper recycling, light saving
- we have replaced washing machines with water- and electricity-saving ones
- nothing
- We introduced the option of using towels several times in a row and eliminated disposable toiletries and bottled water
- we inform to turn off lights and air conditioning when possible
- don't know.
- -

- -
- We are taking several initiatives: reducing energy consumption by using LED lighting, eliminating single-use plastic, improving waste management with recycling and composting program, and promoting local and organic products
- Water conservation, Waste management and reduction, Sustainable catering
- Our breakfast products are sourced from local producers. We avoid single-use plastic. All of our equipment is energy efficient, and we provide bicycles for guests to get around
- don't know

Q12: Is there anything else you'd like to share about sustainability in the lodging industry?

Poland

- Not
- -
- No.
- I keep my fingers crossed for the promotion of this type of tourism
- Visitors do not pay attention to it
- General education of children and adults is needed
- Yes, there is a lack of clear guidelines and guidance on what sustainable tourism is. On the one hand it is e.g. a photovoltaic installation powering a building and on the other hand we use a water tub for 2 people. I can understand swimming pools in hotels that are also made available to the local community for a fee. Such not too clear criteria of what is eco and what is not very discouraging.
- I would like to know about the possibilities of financial support and subsidies.
- I think we should talk more about sustainable tourism. Promote places that share the experience of peaceful living.
- A lot of solutions are very easy to implement and not that expensive at all. It's worth starting with that. It is worth making a guide on how to go WISELESSLY in the eco direction. Without suddenly replacing half your appliances and furniture. Or e.g. windows, because not that ratio!!! To me this is sick. Many people in the countryside have a house at 19 degrees in winter, they use less fuel than someone who has a super eco house that complies with standards but likes it to be 26 degrees. Then some group of experts sits down and says that the former's house doesn't meet the standards, so sorry, you pay a fine, you pay more tax, and so on. It doesn't matter that you use less fuel, we know better. This puts the brakes on me on the eco theme....
- 3/4 of the guests staying on an organic farm (EU-certified) don't care.
- .
- I would find it very useful to have an 'audit' of organicness.
- I do not have the knowledge
- Some guests do not always appreciate the measures taken, e.g. organic laundry detergents do not smell, the lack of disposable cosmetics is associated by guests with the host's frugality. There is a lack of widespread education and large government campaigns on ecological issues.

- -
- I think it's often just greenwashing that has little to do with real action. There is also probably a limited and small number of customers for whom such actions matter. Unfortunately, price and so-called attractions are still the most important thing for guests.

Germany

- Many of our measures only pay off in the long term, which makes them difficult to implement.
- Sustainability must be simple and practicable, otherwise it will not be implemented.
- Government support for sustainable hotels could help.
- No
- In my field, AirBnb, sustainability is not a big issue for customers
- We are on the right track, but there is still a lot to do.
- -
- Guests want sustainability but don't want to sacrifice comfort - that's a challenge.
- Small hotels need more support to become more sustainable.
- Guests are increasingly focussing on sustainability, but only if comfort is not compromised.
- Sustainable mobility is our biggest problem
- Customers need to become much more interested in such issues
- Every hotel is individual. Sometimes you can learn from each other, sometimes you have to find your own way.

Bulgaria

- We organize internal training on sustainable practices so that our team is more aware and motivated to contribute to the sustainability of the hotel.
- No, but we are interested
- No
- Yes, we need systematic knowledge
- Ensure accessibility for people with disabilities, offer services in different languages
- Sustainability training, social responsibility
- No
- We are interested in Training programs - practical guidance and good examples of implementing green practices.
- topic we would like to increase our knowledge
- While some tourists actively seek sustainable hotels, others do not pay attention to these factors
- Work with local producers and suppliers for products
- How to work to raise awareness among tourists about the importance of sustainable practices to encourage them to make greener choices during their stay.
- Need for more support and guidance - It would be helpful to have more practical guidance, training and funding for small hotels, especially in rural areas.
- We would like to see more practical guidance

Austria

- Saving energy, utilizing or donating food leftovers
- no

- no
- improving internal communication, marketing
- seems to be in fashion - we have always been doing this
- no
- In rural areas, regional products should be more highly rated than organic with long delivery routes. Kilometer limit was suggested to current auditor
- needs to be common practice
- no
- more awareness needs to be created
- marketing meaningful modernizations: it is not about getting rid of furniture every year
- It is the most important thing to watch out for the environment
- Always keep going!
- Would be easier to implement if we knew concretely what could be done and to be supported in it
- Truly very difficult as a SME/one person company
- -

Italy

- I don't know.
- no I don't think so
- Energy conservation, more attention to small things, and recycling collection
- So far no
- no
- no
- in my opinion, until green credentials give us more customers and make services cheaper, many companies will not want to introduce green solutions
- no
- no
- many companies advertise themselves as environmentally friendly, even though they really are not
- -
- economic incentives and clearer regulations are needed
- no
- I am pleased that more and more companies are opting for green choices, even if the main motivation is money
- no

Results - Part 3: Interviews with SMEs in the lodging industry

Germany - Interview 1

Company Overview

- **This hotel has 73 rooms** and accommodates a mix of private guests, business travelers, and groups, particularly from the sports and conference sectors.
- The hotel collaborates with **Yoga Vidya**, a large yoga training center in the region, offering guests yoga sessions while providing more comfortable accommodation than the center itself.
- The hotel emphasizes **regionality** and highlights its **natural surroundings** as a key feature.

Current Sustainability Practices

The hotel has implemented various sustainability measures:

- **Reducing resource consumption:** Room cleaning is only carried out upon request to save **water, energy, and cleaning products**.
- **Energy efficiency:**
 - A **combined heat and power plant (CHP)** supplies 50% of the hotel's heating and feeds excess electricity into the grid.
 - **LED lighting** is used throughout the hotel.
 - **Targeted heating management:** In winter, unoccupied hotel floors are not heated.
 - **Sauna is operated only upon request** to minimize unnecessary energy consumption.
- **Waste management:**
 - Waste is separated into **general waste, paper, and packaging**.
 - **Refillable soap dispensers** are used instead of single-use shower gel bottles.
- **Sustainable supply chains:**
 - The hotel sources food locally, such as **bread and pastries from Bäckerei Bier** and **vegetables and potatoes from Biohof Maises**.
 - A **regional Westphalian menu** is being developed to reflect local culinary traditions.
- **Sustainability in hotel amenities:**
 - Single-use plastic packaging has been replaced with **recycled materials** where possible.
 - Some sustainability efforts are hindered by **classification requirements**, such as mandatory plastic shoehorns and individually wrapped hygiene items.

Motivation for Sustainable Practices

- Primarily driven by **cost savings and efficiency improvements**.
- Increasing customer demand, especially among **younger guests**.
- Legal regulations are **not yet a major factor**, though they may change in the future.
- Sustainability is currently **not actively used for marketing**, but it is highlighted on the hotel's website.

Employee Engagement

- Employees are **minimally involved** in sustainability efforts.
- **Little initiative** from staff in suggesting new sustainability ideas.
- No official training programs, but there are **internal guidelines**, e.g., for **energy-saving and waste separation**.
- One staff suggestion: giving guests **wildflower seed mixes** as a sustainable gift for birthdays.

Sustainability Goals

- No **fixed targets or measurable indicators** in place.
- Sustainable measures are implemented **within financial and logistical capabilities**.

Challenges in Implementing Sustainability

- **Main issue: Costs** – financial resources are limited, and investments must be economically viable.
- **Lack of time** – Sustainability requires additional research and implementation efforts that are difficult to prioritize.
- **Regulatory requirements** – Some **hotel classification standards** enforce unsustainable practices, such as single-use hygiene products.

Knowledge & Expertise

- Need for **training for staff**, particularly in **housekeeping and service areas**.
- Lack of **centralized information** on simple sustainability measures for hotels.
- Hotel management would appreciate **easily accessible resources**, such as **webinars or newsletters**.

Support Needed

- **Training**: A **one-hour webinar** on sustainability and environmental certification options would be helpful.
- **Information on environmental certifications** that are easy to implement.
- **Financial support** to make sustainable investments, such as solar panels, more affordable.

Certifications & Programs

- The hotel is working towards the **DEHOGA Environmental Certification** (“Umweltcheck”), aiming for **Silver or Gold status**.

- Criteria include **energy consumption, waste reduction, and sourcing from regional suppliers.**
- Other certifications like **Green Key or EU Eco Label** have not been actively considered.
- The hotel plans to complete the certification **by 2025.**

Collaboration Opportunities

- **Minimal exchange** with other hotels in the region on sustainability.
- A **regional sustainability network** could be beneficial for sharing **best practices.**
- Interest in **cooperative initiatives** for sustainable tourism.

Conclusion

This hotel has already implemented **effective sustainability measures**, particularly in **energy efficiency, waste management, and local sourcing.** However, **financial constraints and regulatory requirements** pose challenges. Improved **training and access to information** could further strengthen the hotel's sustainability strategy.

Germany - interview 2

Company Overview

The hotel is a small but well-established city hotel with 16 rooms, 4 serviced apartments, and a vacation home under management. It has been in operation for 20 years and caters to both business travelers and individual tourists, including international guests.

A central component of the hotel's concept is inclusion: at least 40% of the 16 employees have a disability level of 50% or higher, qualifying the hotel as an inclusive business. Guests with mobility impairments particularly appreciate the hotel, as wheelchair-accessible accommodations are still far from standard.

The hotel is a member of the Embrace Hotels network – a group of inclusive hotels in Germany, Austria, Switzerland, and South Tyrol. This affiliation offers opportunities for exchange, access to best practices, and discounts. However, inclusive hotels still lack broader recognition in Germany.

Sustainability Practices

The hotel pursues both social and environmental sustainability goals. Current initiatives include:

- Energy efficiency: The hotel operates a combined heat and power unit in the basement that generates electricity. There is also an EV charging station available for guests.
- Water conservation: Water-saving fixtures are installed in the showers. Plans to reduce water usage in toilet flushing systems were considered but discarded for hygiene reasons.

- Waste management: Waste reduction is a top priority. The hotel avoids unnecessary packaging and, for example, has eliminated bathroom trash bags. Rooms are only cleaned upon request to conserve water, cleaning agents, and energy.
- Local suppliers: The hotel deliberately works with regional vendors – including Detmold beer, Bad Meinberg mineral water, and a local egg supplier whose chickens are kept in mobile coops. They are also considering adding products from an inclusive brewery in Bad Lippspringe.
- Sustainable dining: Plastic packaging at breakfast has been drastically reduced. Instead of single-serving margarine packets, 250g blocks are used. Yogurt is homemade and served in glass jars. Only cream cheese and Nutella are still in single-use containers.
- Furniture refurbishment instead of replacement: Recently, beds were refurbished rather than replaced. Old faux leather was removed and replaced with recycled, eco-friendly fabrics.
- On-site beehive: The hotel maintains its own beehive. The honey is served at breakfast and is also available for purchase.
- Inclusive travel guide: The hotel has created a custom guidebook featuring accessible local attractions.

Motivation for Sustainability

The decision to implement sustainable practices was driven by both personal conviction and economic considerations. Many guests appreciate the sustainability efforts, even if they are not explicitly looking for them. The initiative to pursue GreenSign certification, achieved three years ago, originated from internal discussions. Recertification is scheduled for this year.

The hotel has also learned that not every sustainable idea is practical. For instance, an attempt to switch to reusable cleaning gloves failed because they became difficult to put on when wet. In such cases, the hotel reverted to less sustainable but more functional solutions.

Employee Involvement

Sustainability is actively discussed with employees, including through regular team days. These workshops offer a platform to introduce new measures and allow staff to contribute their own ideas.

Staff are well-informed about waste sorting and reduction.

Annual employee reviews also include discussions on social and sustainability topics.

Sustainability Goals and Measurement

The hotel has not set formal sustainability goals with quantifiable targets, but progress is visible – such as reductions in plastic use and the sourcing of more sustainable products. Although no official monitoring tools are in place, there is a clear preference for sustainable alternatives.

The GreenSign certification uses a points-based system. For example, the hotel scored 70% of available points in the social responsibility category. Further improvements are a future objective.

Challenges to Sustainability

- Cost: Sustainable alternatives often come with a price premium. For example, eco-friendly toiletries and packaging typically cost more.
- Availability: Certain sustainable options, especially in the food sector, are not always available in the required quantities or through regional supply chains.
- Time investment for certification: GreenSign certification is time-consuming and costly for small hotels. The initial certification cost over €1,000, plus the fee for a consulting day provided by the previous hotel management.

Needed Support

The interviewee views training and knowledge-sharing as essential for further progress in sustainability. They would appreciate more practical training opportunities provided by industry associations like Dehoga or the Embrace network, including materials that clearly explain how hotels can implement sustainable practices.

Opportunities for Cooperation

Collaboration within the Embrace network is especially helpful for sharing challenges related to inclusion.

The interviewee sees potential in stronger networks between sustainable and inclusive businesses – for instance, by prioritizing inclusive companies for catering services.

Although an exchange of sustainability strategies with other hotels would be valuable, many solutions tend to be highly individual.

Conclusion

The hotel exemplifies a strong integration of social and environmental sustainability. As an inclusive operation with GreenSign certification, it prioritizes resource conservation, waste reduction, and local supply chains. Employees are actively involved in implementing sustainable initiatives, and many decisions are made consciously in favor of sustainability – even when challenges arise. The biggest obstacles remain the cost and availability of sustainable products. More training options and stronger collaboration with other sustainable hotels could support further development.

Poland - interview 1

1. Could you briefly describe your company? How many rooms do you have, how many employees, and what kind of guests do you usually host?

We have two houses with a total of 3 rooms, accommodating up to 12 people. We don't have employees.

2. What is your role in managing the company?

I am the owner.

3. What sustainable practices do you currently apply? For example, energy efficiency, water saving, waste management, or working with local suppliers?

We use ecological construction, focus on energy efficiency, and manage waste.

4. What motivated you to implement these practices? Was it customer expectations, cost savings, legal regulations, or personal beliefs?

We were motivated by customer needs, our personal values, and cost savings.

5. How do you engage employees in sustainability efforts? Are there specific policies, trainings, or initiatives that support them?

Not applicable – we have no employees.

6. Does your company have specific sustainability goals? If so, what are they and how do you monitor progress?

No specific goals were indicated.

7. What are the main challenges in adopting or developing sustainable practices? For example, costs, lack of time, limited access to suppliers or information?

The main challenge is costs.

8. Are there areas where you or your team need more knowledge or skills to better implement sustainable practices?

Yes.

9. What kind of support could help your company become more sustainable? For example, financial incentives, training, or better access to resources?

Financial incentives.

10. Have you considered obtaining sustainability certifications, such as Green Key or EU Ecolabel? If not, what was the main barrier?

Costs are the main barrier.

11. Do you think collaboration with other companies, industry associations, or local authorities could help improve sustainability?

Yes.

12. Would you like to add anything about sustainability in your company or the hospitality industry?

No additional comments were added.

Poland - interview 2

1. Could you briefly describe your business? How many rooms do you have, how many employees, and what kind of guests do you usually host?

This business is an ecological agritourism, surrounded by forests and meadows. We have 5 rooms, where we can host up to 14 people.

We host guests in the bed & breakfast & dinner formula.

In the farm works our whole family, we grow vegetables and cook ourselves using local products.

Our guests are mostly residents of big cities. About 10% are guests from abroad, looking for an eco-stay.

2. What is your role in managing the business?

Together with my husband, we are the owners of the farm and agritourism.

We take care of everything in the farm – cleaning, cooking, growing vegetables, raising animals, and above all, spending time with guests.

My main goal in managing the farm is to show that sustainable tourism is possible.

3. What sustainable practices do you currently apply? For example, energy efficiency, water saving, waste management, cooperation with local suppliers?

We do all of that. The best source of information will be the Slowhop report, available on the website – Responsible Tourism Program by Slowhop.

We save water – we recover greywater, we use deep mulching in the garden to water as little as possible.

We have no attractions for guests requiring electricity, we show that to truly rest what you need is peace, a hammock, a good book and coffee :)

We conduct strict waste management.

We serve meals based on local products.

We cooperate with local artists.

We educate children on respect for nature.

We encourage guests to come to us by train.

And many more...

4. What motivated you to implement these practices? Was it the need to meet customer expectations, cost savings, legal regulations, or personal beliefs?

It was a process. It started from being tired of mediocrity in the tourism industry.

The desire to change – I started with myself.

I started traveling differently, paying attention to how my presence affects the surroundings.

I have been connected with the hospitality and gastronomy industry for over 25 years.

I knew that the place I would create myself would be responsible.

5. How do you engage employees in sustainability efforts? Are there specific policies, training, or initiatives that support this?

Since our whole family works together, we feel that our work is a kind of mission.

Based on great travel experience, we introduce good practices in our farm.

Additionally, we use a database of various meetings, events, and trainings.

They are organized by very different organizations, private persons – WMODR, Przystanek Łąka, Warming, Slowhop – we look for events promoting responsible traveling.

6. Does your company have specific sustainability goals? If so, what are these goals and how do you monitor their implementation?

The main goal is to show that it is possible to travel differently.

We are changing the image of agritourism to one where rural tourism shows its huge potential – one of the great assets of the countryside is its authenticity, coherence, dependence on nature and on each other.

We build relationships.

Each year over 60% of guests return to us, which is probably the best indicator that it works.

Besides, we have set specific goals – for example, obtaining renewable energy sources.

We have set a specific time by 2027.

Another goal is to treat the water we draw from the well so that it can be consumed raw. Deadline is also 2027.

These goals we set ourselves, and we monitor them ourselves. The Slowhop report helps us with that.

7. What are the main challenges in adopting or developing sustainable practices? For example, costs, lack of time, limited access to suppliers or information?

In such a small business like ours, the biggest challenge is the budget.

In the case of goals – water treatment or energy – these are expenses exceeding our capabilities.

On the other hand, the region we operate in – Warmia – offers huge opportunities for activities in the socio-cultural sphere.

8. Are there areas where you or your team need more knowledge or skills to better implement sustainable practices?

Every event related to sustainable practices brings surprisingly a lot.

Personally, I am most interested in agriculture-related topics.

I would like to take part in training on building a micro-scale ecosystem.

9. What support could help your company become more sustainable? For example, financial incentives, training, or better access to resources?

Definitely trainings related to good practices in agriculture.

Financial support would certainly be invaluable, especially for small agritourism farms like ours.

We dream of building a laboratory where we could use wild edible plants and spread knowledge about them.

10. Have you considered obtaining sustainability certificates, such as Green Key or EU Ecolabel? If not, what was the main barrier?

There is a lack of eco-certification on the Polish market in the hotel industry, where rural tourism could also be represented.

There are certificates like Culinary Heritage of Warmia and Mazury, but they mainly concern food products.

There is a lack, or maybe I have no knowledge about it, of a certificate like eco-stay, where the experience of resting in harmony with nature could be appreciated.

11. Do you think that collaboration with other companies, industry associations, or local authorities could help improve sustainability?

If I understand sustainable development well, it is only possible by working in a group with other entities.

12. Would you like to add anything about sustainability in your company or in the hospitality industry?

It is hard to write a summary on such a broad topic.

I believe that sustainable/responsible tourism is the future of the industry.

It is a huge opportunity for small farms/family businesses.

An opportunity to return to our roots.

SUMMARY:

This business is a family-run ecological agritourism focused on showing that sustainable and responsible tourism is possible. They implement a wide range of eco-friendly practices, from water-saving and waste management to local cooperation and guest education. Their main challenges relate to limited financial resources for investments like renewable energy or water treatment. Despite this, they maintain clear sustainability goals, supported by long-term guest relationships and community involvement. They highlight the need for better eco-certification in rural tourism and express a strong belief in collective action for sustainability.

Bulgaria - interview 1

Business Overview

The hotel is located approximately 16 kilometers from a regional city and is a 3-star establishment offering a tranquil retreat in a natural setting. It features a seasonal outdoor swimming pool, fitness center, garden, restaurant, terrace, sauna, and hot tub.

Accommodations include single, double, triple rooms, apartments, and bungalows, all equipped with modern amenities. The property spans around 10 decares, offering a peaceful environment for guests.

During the summer months, the staff increases to around 25 people, while in the winter, it decreases to about 10 due to lower seasonal demand.

The hotel hosts a diverse range of guests depending on the season. In summer, it is popular among families, nature lovers, and tourists looking for a relaxing getaway with outdoor activities. Many guests come from the country and neighboring regions for vacations. In the off-season, the hotel accommodates business travelers, corporate groups, and guests attending local events. Its peaceful environment also suits wellness retreats and small private gatherings.

The interviewee is responsible for overseeing daily operations and maintaining the hotel's facilities and services. This includes managing staff, coordinating with suppliers, and implementing marketing strategies to attract and retain guests.

Current Sustainability Practices

The hotel is committed to environmentally friendly practices across its operations. Solar panels have been installed on the roof to heat pool water, reducing energy use and reliance on non-renewable sources.

To support the local economy and reduce the carbon footprint, the hotel primarily sources food from nearby suppliers, ensuring a shorter supply chain and fresher ingredients. Food waste from the restaurant is composted and used in a small on-site vegetable garden, which supplies produce back to the kitchen, creating a sustainable loop.

The outdoor restaurant uses only reusable tableware to avoid single-use plastic waste. The hotel also filters tap water to make it safe for drinking, reducing the need for bottled water. Signs in guest rooms offer instructions for reusing towels to save water and detergent.

Guests are offered complimentary bicycles to explore surrounding villages and towns, promoting sustainable, car-free travel.

Motivation for Sustainability Initiatives

The decision to adopt sustainability practices was influenced by several factors. Cost savings and long-term efficiency played a role, as reducing energy and waste lowers overall expenses. Growing guest interest in eco-friendly tourism also contributed, along with a strong personal commitment to environmental responsibility.

Staff Involvement

Staff play an important role in sustainability efforts. Regular training is provided on eco-friendly practices such as waste management, energy conservation, and sustainable

hospitality methods. Employees are encouraged to follow established guidelines, including minimizing plastic use, monitoring energy consumption, and managing food waste responsibly.

Sustainability Goals

The hotel has no formal sustainability goals, but there is an ongoing commitment to improving eco-friendly practices. The focus remains on reducing environmental impact, increasing energy efficiency, and promoting responsible tourism. Progress is informally tracked through guest feedback and internal evaluations.

Barriers to Sustainability

There are several challenges to improving sustainability further. Financial limitations are a major barrier, as sustainable technologies and infrastructure upgrades can be expensive for a business of this size. Time constraints also make it difficult to implement and monitor new strategies while managing daily operations.

Limited access to sustainable suppliers and products presents another obstacle. While local sourcing is prioritized, finding high-quality, eco-friendly alternatives at affordable prices remains a challenge.

Knowledge and Expertise

There are areas where the team would benefit from more expertise, such as advanced energy-saving technology, improved waste reduction strategies, and water conservation. External consultation and further training would support the hotel in expanding its sustainability initiatives.

Support Needed

Support in the form of financial incentives like grants or subsidies would help invest in energy-efficient upgrades. Staff training on innovative sustainability practices would improve operational efficiency. Additionally, better access to sustainable products, services, and expert guidance would enhance the hotel's ability to reduce its environmental footprint and strengthen its contribution to responsible tourism.

Certifications and Programs

The hotel has not pursued any sustainability certifications such as Green Key. There is no specific reason for this, but it remains an option for the future as sustainable practices continue to develop.

Certifications can offer credibility, signal a strong commitment to sustainability, and attract environmentally conscious travelers. They also provide helpful guidelines and performance benchmarks. However, the process can be resource-intensive, and since many eco-friendly practices are already in place, certification has not been prioritized so far.

Collaboration Opportunities

Collaboration with similar businesses could facilitate knowledge exchange and shared resources. Industry associations could offer access to expert guidance, training, and sustainability benchmarks to help improve operations.

Final Thoughts

Sustainability is a continuous journey for the hotel and for the hospitality industry more broadly. While many eco-friendly initiatives have already been adopted, there is always room for growth. The hotel's commitment is not only about reducing environmental impact but also about fostering a more ethical and responsible business that benefits guests, staff, and the local community.

Bulgaria - interview 2

Business Overview

The hotel is a boutique establishment located in a mountainous region, nestled within a forested landscape. It consists of three alpine-style guest houses offering a total of six family apartments equipped with modern amenities.

The hotel caters to a range of guests, including couples, families with children, and groups looking for a peaceful escape in nature. Its quiet surroundings and comfortable accommodations make it ideal for those seeking a break from urban life.

The team consists of approximately 10 staff members.

Current Sustainability Practices

The hotel is committed to environmental sustainability and has implemented initiatives focused on energy efficiency, water conservation, waste management, and sourcing from local suppliers. These efforts are designed to minimize environmental impact and encourage responsible tourism.

The motivation for adopting these practices stems from a blend of personal commitment to environmental values and the desire to provide guests with an eco-conscious experience.

Staff Involvement

Staff members are involved in sustainability efforts through regular training sessions, clearly defined environmental policies, and initiatives that promote active participation. These practices help ensure that employees understand and contribute to the hotel's sustainability goals.

Sustainability Goals

The hotel has developed a comprehensive five-year sustainability plan in line with international environmental standards. This plan includes initiatives related to energy use, water conservation, waste reduction, and supporting local suppliers.

The plan aligns with the requirements of an internationally recognized certification, which calls for continuous improvement, routine monitoring, staff education, and adherence to global sustainability criteria.

Barriers to Sustainability

The hotel faces challenges in reducing plastic waste due to the cost and limited availability of eco-friendly alternatives. Financial constraints also make it difficult to implement certain sustainable upgrades, which can be especially burdensome for small businesses.

Knowledge and Expertise

At this time, no specific areas have been identified where additional knowledge or expertise is required.

Support Needed

The hotel would benefit from training and improved access to sustainability resources. Ongoing education for staff could strengthen the integration of eco-friendly practices into daily operations. Workshops and hands-on training could help with waste reduction, energy efficiency, and water conservation.

Certifications and Programs

The hotel currently holds an internationally recognized sustainability certification. This certification confirms adherence to high environmental standards in areas such as energy, water, waste management, and sourcing practices.

These certifications are considered highly valuable as they lend credibility, demonstrate a clear commitment to sustainability, and attract environmentally conscious guests. They also provide structured guidance, benchmarks, and access to best practices. Although certification requires ongoing effort and investment, the benefits—such as cost savings, compliance, and enhanced reputation—make it worthwhile.

Collaboration Opportunities

Collaboration with similar businesses, associations, or local authorities can support sustainability efforts. Sharing best practices, pooling resources, and working together on initiatives such as waste reduction or energy-saving programs can lead to greater collective impact.

Final Thoughts

Sustainability is becoming an essential component of the lodging industry, not only for environmental reasons but also for maintaining competitiveness. For businesses like this hotel, embracing sustainability is about more than meeting certification requirements—it is also about making a lasting positive contribution to the local community and natural environment.

Italy - interview 1

Could you briefly describe your business? For example, how many rooms, how many employees, and what type of guests do you usually host?

My business is based on hosting guests for short stays, both for work and tourism. I have a total of 20 beds divided across 3 structures. Most of the work is done by myself, including the commercial, administrative, bureaucratic tasks, and room management (check-in and check-out).

What is your role in managing the company?

I have a managerial, supervisory, and administrative role.

What sustainability practices does your business currently implement? For example, energy efficiency, water saving, waste management, or use of local suppliers.

Currently, I am not adopting specific sustainability practices.

What motivated you to adopt these practices? Were they driven by customer demand, cost savings, regulations, or personal values?

How do you involve your staff in sustainability efforts? Are there specific policies, training, or initiatives to encourage their participation?

Currently, I do not have staff, so all management and daily tasks are handled by myself. Regarding sustainability, I still try to raise awareness among guests about more responsible behaviors. For example, I encourage them to turn off lights, air conditioning, or heating when they are not in the room to reduce energy waste.

Does your business have specific sustainability goals? If so, what are they, and how do you monitor progress?

No.

What are the main challenges your business faces in adopting or improving sustainability practices? For example, financial costs, lack of time, or limited access to suppliers or information.

Since I run the entire business by myself, I don't have enough time or resources to focus on new initiatives or projects related to sustainability. Without support from a team, every aspect of the management—from administration to daily operations—is concentrated on me, which limits the ability to implement ecological changes or initiatives in a more structured way.

Are there areas where you or your team lack the knowledge or skills necessary to improve sustainability?

I do not have specific training in ecology or sustainability. I believe we lack knowledge about available funds and incentives to improve sustainability. It's not always easy to find this information and understand how to use it quickly and simply. It would be helpful to have support to implement these opportunities without complications.

What kind of support would help your business become more sustainable? For example, financial incentives, training, or better access to resources?

Financial incentives would be crucial to help cover the initial costs of sustainable solutions. These incentives could make it easier to invest in ecological practices without facing large expenses. Also, better access to resources and clear information on how to implement sustainability in a simple and practical way would be a great help.

Have you considered obtaining sustainability certifications, such as Green Key or EU Ecolabel? If not, what has stopped you?

I haven't considered obtaining sustainability certifications such as Green Key or EU Ecolabel, mainly because I am not familiar with them.

Do you think certifications or programs like these are valuable for businesses like yours? Why or why not?

I can't say for sure because I have no idea what these certifications or programs involve. If they were useful for improving the sustainability of my business and attracting more environmentally-conscious clients, I might consider them.

Do you think collaboration with other businesses, industry associations, or local governments could help improve sustainability? If so, how?

I would say yes.

Italy - interview 2

Could you briefly describe your business? For example, how many rooms, how many employees, and what type of guests usually stay?

We have a "Holiday Home" located on our residential property, consisting of 1 double bedroom, a fully equipped kitchen, and a bathroom. The apartment (which is on the first floor) is exclusively accessible to guests via a large staircase.

What is your role in the management of the business?

Owner and co-host.

What sustainability practices does your business currently implement? For example, energy efficiency, water saving, waste management, or use of local suppliers.

We chose to invest in a photovoltaic system to reduce the environmental impact and make our structure more energy self-sufficient. Thanks to this solution, we use renewable energy to cover most of the holiday home's energy needs.

Regarding waste management, we provide guests with specific containers for waste sorting, with clear instructions for proper disposal.

Additionally, we try to adopt other small sustainable practices, such as using low-consumption appliances, LED light bulbs, and encouraging guests to use water and energy resources responsibly. Whenever possible, we prioritize local suppliers to reduce transportation impact and support local businesses.

What motivated the adoption of these practices? Were they driven by customer demand, cost savings, regulations, or personal values?

The installation of the photovoltaic system, for example, was made possible by government incentives, which represented a concrete opportunity to improve the energy efficiency of our structure while also reducing long-term costs. Sustainability regulations further reinforced this choice, encouraging us to implement more eco-friendly solutions in managing the holiday home.

However, beyond the economic and regulatory aspects, there is also a strong personal value behind these decisions. We believe that every small action can make a difference, and we want to offer our guests an experience that is as environmentally friendly as possible. Therefore, we aim to raise awareness among those who choose us, encouraging conscious behaviors and a more sustainable lifestyle, even while on vacation.

How do you involve your staff in sustainability efforts? Are there policies, training, or specific initiatives to encourage their participation?

The management of the structure is personal, with an ecological vision. Although we do not have a formal team of employees, we personally ensure that every sustainable practice is applied consistently and with dedication.

Does your business have specific sustainability goals? If so, what are they, and how do you monitor progress?

We do not have formalized sustainability goals, but we adopt daily practices that reflect our ecological ideas. Our commitment is not tied to deadlines or specific targets, but to a way of living and managing the structure in harmony with the environment.

We are constantly trying to improve our impact by observing how our choices affect consumption and resource use. For example, we monitor the performance of the photovoltaic system to ensure we make the most of renewable energy and pay attention to water and electricity consumption, adopting measures to reduce it when possible.

What are the main challenges your business faces in adopting or improving sustainability practices? For example, financial costs, lack of time, or limited access to suppliers or information.

The main challenges we face in adopting and improving sustainability practices are primarily high costs and a lack of in-depth knowledge in the sector.

The initial investment to implement eco-friendly solutions, is usually very expensive, and state incentives do not always cover the full costs. Furthermore, the economic return from these choices is seen over the long term, which requires careful financial resource management.

As a family-run business, we rely on our own research and the advice of experts to understand the best solutions and how to apply them effectively. Access to clear and up-to-date information is often difficult, especially when it comes to ever-evolving regulations or new ecological technologies.

Are there areas where you or your team lack the knowledge or skills needed to improve sustainability?

Our approach to sustainability primarily comes from personal values, which we try to apply concretely in managing the structure. However, we recognize that there are areas where we could deepen our knowledge to further improve our environmental impact.

Without specific training in the sustainability sector, we rely on our own experience and information gathered independently.

What kind of support would help your business become more sustainable? For example, financial incentives, training, or better access to resources?

To make our business more sustainable, it would be very helpful to have access to appropriate training, more financial incentives, and more available resources.

Specific training would help us better understand how to reduce the environmental impact of the structure. Participating in courses or receiving expert advice would make everything simpler and clearer.

Greater financial support would also be important. More incentives and subsidies would allow us to invest in sustainable solutions without facing such high costs.

Have you considered obtaining sustainability certifications, such as Green Key or EU Ecolabel? If not, what has held you back?

We have never heard of these certifications, so we haven't considered them so far. One aspect to evaluate is whether the certification process is accessible for a structure like ours, both in terms of costs and time required.

Do you think certifications or programs like these are valuable for businesses like yours? Why or why not?

Being a very small family-run business, the choice to adopt sustainable practices has been mainly driven by our personal belief and the opportunities for economic incentives. We've never felt the need for certifications.

We must consider that for a business like ours, with limited resources, the process of obtaining these certifications might be challenging in terms of time and cost. For us, what we do so far is more of a spontaneous choice than a necessity to adhere to a formal program.

Do you think collaboration with other businesses, industry associations, or local governments could help improve sustainability? If so, how?

I believe so, but for us, it's important to have more information on how these collaborations work, what opportunities exist, and how we can participate. If there were programs or initiatives to join, it would be helpful to have clear guidance on how to integrate them into our business.

Final thoughts: Is there anything else you would like to share about sustainability in your business or the hospitality sector in general?

I am particularly "happy" when I see hospitality businesses paying attention to sustainability. It's encouraging to see more and more businesses in the sector making a real commitment to reducing their environmental impact. I believe the hospitality sector has a great potential to promote a model of responsible tourism, which not only respects the environment but also local communities and natural resources.

As for our business, we will continue doing what we can with the resources we have to promote sustainability, and we hope other businesses follow the same path.

Italy - interview 3

Could you briefly describe your business? For example, how many rooms, how many employees, and what type of guests do you usually have?

My B&B has two rooms. I don't need employees as I personally manage all daily activities. The guests vary depending on the season, ranging from simple tourists to those traveling for work or to visit relatives.

What is your role in managing the business?

Owner.

What sustainability practices does your business currently use? For example, energy efficiency, water conservation, waste management, or the use of local suppliers.

Currently, my business adopts some sustainability practices, with a particular focus on energy savings. I have installed photovoltaic panels to generate renewable energy on-site.

What motivated the adoption of these practices? Were they driven by customer demand, cost savings, regulations, or personal values?

The main motivation for adopting these practices was cost savings. Installing photovoltaic panels was a strategic choice to reduce electricity costs, which are one of the highest expenses in managing a hospitality business.

How do you involve your staff in sustainability efforts? Are there policies, training, or specific initiatives to encourage their participation?

Since I don't have employees, there are no specific policies or initiatives to involve staff in sustainability. However, I try to adopt responsible behaviors in daily management and raise awareness among my guests to do the same, such as encouraging them to turn off lights and devices when they are not needed.

Does your business have specific sustainability goals? If so, what are they, and how do you monitor progress?

No.

What are the main challenges your business faces in adopting or improving sustainability practices? For example, financial costs, lack of time, or limited access to suppliers or information.

The main challenge we face is definitely the cost. Implementing sustainability requires an initial investment, which unfortunately is not always feasible for a small business like mine. For example, even the purchase and installation of photovoltaic panels was a significant financial commitment. Often, one has to balance improving sustainability with the economic sustainability of the business itself.

Are there areas where you feel you or your team lack the knowledge or skills necessary to improve sustainability?

I'm not sure, but I think there are definitely areas where I could improve.

What type of support would help your business become more sustainable? For example, financial incentives, training, or better access to resources?

I often find myself looking for resources, but it's not always clear what the best options are or how to proceed. Concrete support in this area, both financial and informational, would make a big difference in making the business more sustainable.

Have you considered obtaining sustainability certifications, such as Green Key or EU Ecolabel? If not, what has held you back?

I haven't considered certifications at the moment, as I don't see an urgent need for my business. Also, I haven't perceived a strong demand for them from my customers.

Do you think certifications or programs like these are valuable for businesses like yours? Why or why not?

I don't perceive a strong interest from customers regarding these certifications, so I don't think they would bring significant benefits. Right now, my focus is mainly on daily management and operational efficiency, rather than formal certifications.

Do you think collaborating with other businesses, industry associations, or local governments could help improve sustainability? If so, how?

Yes, I think it could be useful for improving sustainability. If they helped us find sustainable products that aren't too expensive, it would be a step forward. Working together could also simplify things by sharing experiences and resources.

Final thoughts:**Is there anything else you would like to share about sustainability in your business or in the hospitality sector in general?**

I'm not sure.

Austria - interview 1

Michelin-starred restaurant with vegetarian options, and a bistro with 40% vegetarian and vegan options – both are part of the hotel.

Could you tell me a bit about your role in the company? What are your main responsibilities?

Sustainability and Quality Manager. Sustainability includes certifications, but also employee training, waste separation, and implementing green business operations – it affects all departments.

With a background in food & beverage, food waste is especially important to him. They have established a waste baseline and aim to reduce waste by 10% by 2025. The goal is to stay below 100g of waste per person at the breakfast buffet. Measures include smaller plates and containers, clear signage – and they are working in several rounds of improvements.

Sustainability also means supporting the community. For example, they collaborate with Cosmos, provide rooms to Austrian women's shelters, and work with Lebenshilfe – in December, they produced scented bowls as gifts for guests and staff. They also support Pink Ribbon for breast cancer awareness – last year, they raised funds in March and October.

They cooperate with the Konzerthaus and organize tours for hotel guests.

Governance:

- The team includes many nationalities
- Diverse leadership team
- No gender pay gap
- Leadership team is 45% women

How important is sustainability for the operation, in your opinion?

It's central to the hotel's identity. He wants to position the hotel as a sustainable business, also in coordination with the Austrian Hotel Association (ÖHV). The hotel has multiple sustainability certifications.

A sustainability report is also in the works – he has been with the company for six months. While it's not mandatory yet, the first report will be produced this year in preparation for the 2026 legal requirements.

How does sustainability show up in daily operations?

He jokes that it may be why some colleagues "hate" him – he points out when someone forgets to turn off the lights. He communicates daily, posts on the intranet, and even uses stickers to engage both staff and guests. Humor is key to increasing participation.

In the kitchen, hardly anything is thrown away – the goal is to cook with minimal waste.

They work with Orbisk, a food waste tracker – employees are very diligent in using it.

There's an in-house Green Team, with at least one member from each department. They meet about once a quarter to discuss areas for improvement. Quarterly onboarding training includes sustainability topics.

What challenges do you face in implementing sustainable practices in your role?

He would like to green the hotel façade, but future government funding cuts could be a challenge.

Accessibility is difficult in historic Viennese buildings – new regulations come into effect on June 28.

Digitizing the booking website is also on the agenda – but exact requirements are unclear.

There's also a quality vs. sustainability dilemma: The hotel is in the luxury segment, and guests don't always understand why their spa products come in sustainable packaging – it doesn't always look high-end. He emphasizes the need to "educate the masses" – why isn't everything wrapped in plastic?

Guest interaction:

They use the TrustYou survey tool – after check-out, guests are asked about check-in/out, food, and sustainability measures. There's no specific question about "willingness to pay," but that's okay for now.

They offer the option to receive points instead of daily housekeeping – but the offer needs to be more attractive.

Do you feel you have enough knowledge to achieve your sustainability goals?

The building itself is old – which makes it hard to find technical solutions to increase sustainability. They already use energy recovery systems, but it's unclear what more could be done or what subsidies exist.

The team is very diverse – age range is broad, and there's an age and knowledge gap. Some have never heard of sustainability practices, others find it too modern or unfamiliar. Among younger staff, the passion for the topic is not yet fully developed. He sees himself as a bridge for raising awareness.

Not everyone is passionate about it – but small examples and consistency help it spill into people's personal lives (e.g. switching to Ecosia browser at home).

A challenge: The sustainability report and understanding CSRD/ESRS requirements – access often requires purchasing books or hiring a consultancy. He'd prefer to do it himself, but that's not easy.

He refers to the leadership team as “Green Warriors” – it's extremely important to them and they lead by example, which makes his job easier.

Are there measures that would make it easier for other staff members to implement sustainable practices?

(Implicitly yes – though not specified in detail.)

Do guests ever ask about the hotel's sustainability practices? If so, how do you respond?

Yes – and they appreciate it. Guests notice sustainable efforts and sometimes mention them in reviews.

What would most motivate you to prioritize sustainability in your company?

- Cost savings (but not the main reason)
- There is no alternative – sustainability is the only way forward
- Accor offers online training
- Accor's CEO is actively engaged
- Increasing customer demand for sustainable practices
- Compliance with upcoming regulations
- A genuine desire to protect the environment and support communities
- Positive brand reputation
- Skepticism about ****greenwashing**** – for example, Booking.com's statements about single-use plastics feel disconnected from reality

- Guest reviews confirm that they notice the hotel's efforts

Support needed:

What kind of support would help you or the business improve sustainability?

Financial support – especially for solar panels (PV), where KPC subsidies are helpful.

There's always room for improvement – they need more momentum.

He attended a Zero Emission City event, where a representative from Wien Energie mentioned that only 0.2% of Vienna's rooftops currently have solar panels – more incentives for businesses are needed.

Final thoughts: Would you like to share anything else about your experience with sustainability in your role or the company in general?

> Quality and sustainability can go hand in hand – the real challenge is the mindset.