

# Sustainable Practices and Challenges of DOT-Accredited Hotels in Bayombong, Nueva Vizcaya, Philippines

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## ABSTRACT

The hospitality industry is increasingly recognizing the importance of sustainability in enhancing environmental, social, and economic outcomes. This study explored the sustainable practices and challenges of DOT-accredited hotels in Bayombong, Nueva Vizcaya. Analyzing interviews and documentary evidence highlighted the key sustainability efforts of these hotels, identified significant obstacles hindering their progress, and proposed strategic recommendations to enhance their practices. The research employed a qualitative design to determine the sustainable practices and challenges among DOT-accredited hotels in Bayombong. Data were collected through face-to-face interviews with a purposive sample of ten informants, including hotel managers, supervisors, and team leaders. The interview guide covered environmental conservation, social responsibility, and economic viability. Results revealed that hotels are shifting to renewable energy sources, implementing waste reduction programs, and promoting social responsibility through community activities. However, they face challenges such as financial constraints, lack of technological infrastructure, and limited staff training. These obstacles hinder their progress in achieving full sustainability. To overcome these challenges, hotels should invest in energy-efficient technologies, comprehensive waste management programs, and regular staff training on sustainability. Prioritizing customer satisfaction and responsible financial practices will ensure long-term success and set a benchmark for excellence in the hospitality sector.

**Keywords:** Economic viability, Energy efficient, Environmental conservation, Social responsibility, Sustainable practice

## INTRODUCTION

### Rationale

Tourism is an industry that promotes economic growth and cross-cultural interactions. Still, it also presents enhancements for environmental protection, the preservation of cultural heritage, and social well-being. According to the World Travel & Tourism Council (2023), the growth of a country's economy, particularly in terms of Gross Domestic Product (GDP) and employment possibilities, is significantly supported by the tourism industry. The increase in the GDP and economic expansion of Southeast Asian nations are significantly influenced by tourism. Acknowledging the substantial impact of tourism on the global economy, the sector has been identified as a key driver of sustainable development and inclusive growth. Moreover, according to Cruz (2016), the state recognized sustainable tourism development as integral to the national socio-economic development efforts to enhance the quality of life of the Filipino people and promote tourism that is ecologically sustainable, responsible, participative, culturally sensitive, economically viable, and ethically and socially equitable for local communities.

The backbone of the tourist sector, and a vital component of travel, is lodging. Sustainable tourism faces challenges in part because the success of development depends on how clearly defined stakeholders' roles are in the target area. The owners and operators of lodging businesses see themselves as accountable for preserving and improving the environment (Necati et al., 2021).

According to a study on the sustainability of services (Volpi & Paulino, 2018), the resources needed to provide services include the materials utilized and produced must satisfy visitor demands, including those for physical facilities, restaurants, and other material systems, such as swimming pools, that need to be upgraded. The relationship between services and the environment develops from material sources and takes on environmental manifestations during various phases of the product life cycle.

An accommodation facility is any establishment that offers lodging services to travelers and guests, providing a place to stay for varying lengths of time. These facilities include a diverse array of options such as hotels, motels, hostels, bed and breakfasts, and resorts, each designed to meet the distinct needs and preferences of guests. Hotels are a specific type of accommodation facility, distinguished by their comprehensive range of services and amenities. They typically provide private rooms or suites, housekeeping services, on-site dining, and various recreational facilities. Hotels are designed to deliver comfort, convenience, and a high level of service, catering to both leisure and business travelers (Smith, 2021).

A sustainability ranking by ETIC Hotels, which is a booking platform for ethical and sustainable hotels, lists the 10 most sustainable hotels in the Philippines, including Iris Island Eco Resort, Mandala Resort and Spa, and Amarela Resort. These hotels have implemented various sustainable practices such as renewable energy use, collaboration with local NGOs for environmental monitoring, and water-saving measures.

To maximize the capabilities of accommodation facilities with sustainable practices, it is crucial to integrate environmental responsibility into every facet of its operations. Engaging both staff and guests in sustainable practices, offering eco-friendly options, and actively participating in the local community's sustainability efforts can enhance its reputation and appeal to environmentally conscious travelers. Regular monitoring, reporting, and continuous improvement are essential to ensure sustainable practices remain at the forefront of the hotel's operations, fostering long-term sustainability and success (Pereira et al., 2021)

Around the world, sustainable tourism is currently becoming more popular. Most nations, if not all, collaborate to promote sustainable tourism to protect the environment and our natural resources (World Tourism Organization, 2013). Furthermore, sustainability has emerged as a critical global imperative in response to the escalating environmental challenges and the need for responsible resource management. In the realm of hospitality and tourism, where resource consumption is substantial, there is an increasing recognition of the importance of adopting sustainable practices. This recognition is not only driven by ethical considerations but also by the potential economic benefits and positive impact on local communities. In this context, this study focuses on assessing the implementation of sustainable practices and challenges of DOT-accredited hotels in Bayombong, Nueva Vizcaya, Philippines.

Since hotels are an essential component of cities, they help achieve SDG 11 on "sustainable cities and communities" by promoting environmentally friendly tourism practices and by participating in projects that strengthen urban resilience while also assisting the local community. Hotels play a critical role in fostering inclusive, secure, and resilient urban environments by adhering to sustainable principles, directly contributing to the advancement of SDG 11.

Sustainability is important in the hotel industry. The success of hospitality companies relies on their conservation of the natural environments and cultural attractions that attract travelers to their destinations. Sustainable practices set hospitality companies apart. Modern-day travelers, diners, hostel guests, and shoppers value sustainability. They seek assurance that the businesses they support adhere to environmentally, socially, and culturally responsible practices. (Jo, 2022)

The DOT accreditation system plays a key role in shaping the standards and practices of hotels in the Philippines. Sustainability is part of the SDGs of UNTWO, of which the DOT developmental plan was based. It sets the benchmark for quality and safety and, increasingly, sustainability. Sustainable practices encompass a wide array of activities, including energy and water saving, waste minimization, support for local communities, and the preservation of natural resources. The effective integration of these practices not only reduces the environmental footprint but also enhances the overall tourist experience and brand reputation. (Bote, J. A. 2021).

Bayombong, the provincial capital town of Nueva Vizcaya, is an emerging destination that tourists visit for its breathtaking beauty, rich culture, and friendly people. With the travel industry helping with the local economy, it becomes imperative for the hospitality sector to align with sustainable practices to ensure the long-term sustainability of the destination and the well-being of its communities.

### **The Emerging Popularity of Sustainable Tourism**

Sustainable tourism refers to the development or community empowerment in the tourism location. The concept of stable growth is used to plan and implement sustainable tourism, which is defined as travel that fulfills present needs without harming the ability of future generations and without negatively affecting the local environment, economy, and culture of the tourist destination (Zolfaghari, 2010). Many hotels in Europe participate in green certification programs to demonstrate their commitment to sustainability. One such program is the EU Ecolabel, which certifies accommodation facilities that meet strict environmental and sustainability criteria (European Commission, 2021). Various hotels in the U.S. seek sustainability certifications like LEED (Leadership in Energy and Environmental Design) to demonstrate their commitment to eco-friendly practices (Sarkis et al., 2020).

### **Sustainable Tourism in Asia**

Numerous studies on tourism in developing Southeast Asian nations have used modernization as their implicit starting point. Tourism has long been marketed as an approach to enhance employment, foreign currency, and gross domestic product (GDP), draw in funding for development, promote a contemporary way of life consistent with Western values, and bring about changes in traditional civilizations (Dolezal et al., 2020). In various nations globally, the significance of global tourism has risen. The World Tourism Organization (WTO) reported in 2018 that international tourists collectively spent \$462 billion in total in 2001, equivalent to \$1.3 billion daily. The majority of countries see tourism as a significant factor in their balance of payments and as a possible substitute for export revenue. By expanding this sector and easing stringent visa regulations for international visitors and tourists, the government can boost tax revenue while simultaneously increasing household earnings. There are many cases where tourism has a significant positive effect on a nation's economy (Manzoor et al., 2019).

The increase in the GDP and economic expansion of Southeast Asian nations are significantly influenced by tourism. In acknowledgment of the significant contribution made by tourism to the growth and advancement of the global economy, the sector has been acknowledged as one of the factors promoting sustainable development and inclusive growth. Ecotourism, green tourism, and other environmentally conscious travel practices are being adopted by businesses in the tourism industry (Nyahunzvi, 2013).

The ASEAN Hotel Green Standards outline comprehensive guidelines and benchmarks for sustainable practices within the hospitality industry across Southeast Asia. These standards cover a wide spectrum of environmentally friendly initiatives, covering energy efficiency, handling waste, conserving water, and involving the community. Developed by the ASEAN Tourism Strategic Plan, these standards not only aim to reduce the environmental effects of hotels but also promote responsible tourism and contribute to the region's sustainable development goals.

Parkroyal Collection Marina Bay, Singapore, is an iconic hotel known for its lush garden-in-a-hotel concept, offering guests a serene and sustainable urban retreat. This hotel offers a distinctive and abundant experience in the middle of the city with its striking architecture, creative design, and dedication to environmental sustainability. Since 2020-2023, hotels have received this award in recognition of their outstanding contributions to the hospitality sector and dedication to sustainable practices (Asia, 2023).

All across the world, sustainable tourism is currently on the rise. The majority, if not all, are turning to sustainable tourism as a way to protect the environment and natural resources.

### **Sustainable Tourism in the Philippines**

In the Philippines, a nation renowned for its rich biodiversity, stunning landscapes, and vibrant culture, the principles of sustainable tourism have become a focal point in the quest for responsible development. The Department of Tourism (DOT) plays an important role in guiding and accrediting hotels and accommodations

that adhere to sustainable practices. As such, this research endeavors to explore the implementation and impact of sustainable practices in DOT-accredited hotels situated in Bayombong, Nueva Vizcaya, a region that encapsulates the diverse and captivating essence of the Philippines.

The Philippines, an archipelago of breathtaking natural beauty and cultural diversity, has long been a sought-after destination for travelers around the world. With its pristine beaches, lush rainforests, vibrant coral reefs, and rich cultural heritage, the country has immense potential as a global tourism hotspot. The quick expansion of tourism has posed challenges such as environmental damage, cultural preservation, and socio-economic gaps. As a response to these challenges, sustainable tourism has become a crucial framework for ensuring that the Philippines can continue to thrive as a tourist destination while safeguarding its unique assets for future generations.

Hotels can show their dedication to sustainable practices by acquiring certifications like LEED (Leadership in Energy and Environmental Design). LEED certifications, created by the non-governmental organization U.S. Green Building Council (USGBC) in 1998, is a scoring system that assesses the environmental performance of buildings, encouraging sustainable design and construction practices. The certification is based on criteria related to sustainability, energy efficiency, use of materials and resources, quality of the indoor environment, and design innovation. LEED certification can create healthier and more sustainable communities by prioritizing public health in building design and construction. To obtain LEED certification, a building must be checked and reviewed by the Green Business Certification Inc. (GBCI). These certifications can help reduce skepticism and improve guests' perceptions of the hotel's environmental responsibility. However, many travelers are not aware of the existence of eco-certification labels for hotels and resorts, and hotels need to promote their sustainable practices to attract eco-conscious guests actively. In addition to obtaining certifications, hotels can integrate environmental responsibility into every facet of their operations, engage staff and guests in sustainable practices, offer eco-friendly options, and actively participate in the local community's sustainability efforts.

High energy consumption, transportation emissions, and deforestation associated with unsustainable tourism can contribute to climate change, which has wide-ranging environmental impacts (International Tourism Highlights, 2019 Edition, 2019). Some hotels invest in producing clean energy locally, using renewable energy sources like solar and wind turbines. This reduces reliance on fossil fuels and decreases the carbon emissions associated with electricity use (Dodds & Butler, 2019).

The Philippines' commitment to sustainable tourism is seen in its participation in international agreements like the United Nations' Sustainable Development Goals (SDGs) and its efforts to align its tourism sector with the principles of sustainability. The Department of Tourism (DOT) has been instrumental in promoting sustainable tourism practices and working closely with industry stakeholders to achieve these goals.

Sustainability is indeed a significant element considered for accreditation from the Department of Tourism (DOT). The DOT has implemented various accreditation standards and guidelines that emphasize sustainable practices in tourism operations. Specifically, the DOT Accreditation Program includes criteria related to environmental sustainability, community involvement, and cultural preservation. These criteria are designed to ensure that tourism establishments adhere to responsible and sustainable practices, thereby promoting sustainable tourism development in the Philippines. The DOT Administrative Order No. 2012-002, also known as the "Rules and Regulations to Govern the Accreditation of Tourism Enterprises and Services," provides detailed information on the accreditation criteria, including sustainability aspects. (Department of Tourism, 2012).

Several hotels have made significant strides in embracing sustainable practices to minimize their environmental impact. One notable example is the Crimson Resort and Spa Mactan in Cebu. Committed to sustainable tourism, Crimson has implemented various eco-friendly initiatives. They focus on minimizing energy consumption by using energy-efficient lighting, installing motion sensors, and employing smart air-conditioning systems. Waste reduction is another priority, with measures in place to reduce the use of single-use plastic, develop recycling projects, and purchase locally made, biodegradable amenities.



Moreover, the resort is actively involved in community engagement and environmental conservation projects, including beach clean-ups and mangrove rehabilitation. Their efforts are part of their "Crimson Cares" program, which emphasizes sustainability and responsible tourism practices. (Abdou, 2020)

These hotels in the Philippines are leading the way in practicing sustainability. At Amarela Resort in Bohol, they collect leftover food from the restaurant and offer it to farmers. In return, the farmers supply a roast pig for the staff's Christmas festivities. Rather than utilizing disposable shampoo sachets and plastic soap bottles, they use ceramic soap dispensers crafted by local artisans. Iris Island Eco Resort in Davao City, nestled in the Sulu Sea, powers each of its buildings and villas using solar energy. They harness solar panels, batteries, charge controllers, and battery monitors to generate electricity. The island's pathways and pier lighting are illuminated by special solar lights equipped with solar panels, batteries, and detectors that automatically switch on at night and off during the day. Their eco-friendly practices include avoiding the sale of water and soft drinks in plastic containers, eschewing plastic cutlery, crafting bamboo straws, recycling all cans, and composting kitchen scraps in rotating composters (Arcadio, R. G. 2024).

The Ritz-Carlton is renowned for its exceptional social media marketing strategies. They effectively utilize platforms such as Instagram and Twitter to showcase their lavish properties and engage with a broad audience. Through visually captivating content and strategic hashtag usage, The Ritz-Carlton enhances its brand visibility and attracts customers globally.

Hilton Manila (2024) stands out as a prime illustration of a hotel that places a strong emphasis on engaging guests in sustainability initiatives. They highlight the significance of guest participation in their environmental endeavors, emphasizing on their website the value of guest involvement in their eco-friendly practices to collectively make a positive impact.

According to the Tourism Act of 2009 (Republic Act of 9593), "In order to generate investment, foreign exchange, and employment as well as to continue to foster an increased sense of national pride among all Filipinos, tourism must be utilized as an essential component of the economy and a sector of national interest and significance. (Chapter 1, Section 2)."

To achieve the objectives mentioned earlier, the nation recognized that "sustainable tourism development is essential to the country's socioeconomic development efforts to raise the standard of living for Filipinos and to promote morally and socially just tourism for local communities."

### **Sustainable Tourism in Nueva Vizcaya**

The landlocked province of Nueva Vizcaya is renowned for its breathtaking landscapes, which are among the most stunning in the country. The province is bordered by the Sierra Madre on its eastern side, the Cordillera on its western side, and the Caraballo on its southern side. Additionally, Nueva Vizcaya is a well-liked ecotourism location that includes waterfalls and stunning mountains, unexplored caves, clean rivers, antique cathedrals, and sacred sites. The adventure that Nueva Vizcaya offers is once in a lifetime. It aims to establish the optimal balance between people and other living things on the one hand and with regard to natural resources on the other (Maches, 2020).

The landscape of sustainable tourism practices in Nueva Vizcaya has garnered considerable attention through various studies and initiatives. Among these endeavors, a notable study, "Sustainable Tourism Practices of Local Tourism Establishments of Nueva Vizcaya," conducted a comprehensive survey of the local tourism establishments situated in Bayombong and Solano. The primary objective was to assess the extent of sustainable practices adopted by these establishments and ascertain their alignment with the principles outlined in the Global Code of Ethics for Tourism, particularly emphasizing the tourism sector as a catalyst for sustainable improvement, as stated in Article III. The findings of this study unveiled significant insights, highlighting the potential ramifications of unregulated tourism demand on local communities, the environment, and the economy. A study about key recommendations urged tourism establishments in Nueva Vizcaya to reevaluate and reexamine existing frameworks such as the Sustainable Development Goals, National Ecotourism Strategy, and the National Tourism Development Plan. Moreover, it emphasized the need for the formulation of comprehensive policies and guidelines specifically tailored to foster sustainable operations within tourism businesses. Furthermore, the study underscored the importance of continuous efforts to enhance

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employee awareness regarding sustainable tourism practices and their practical implementation for the long-term benefit of Nueva Vizcaya's tourism sector. (Oteyza et al., 2023)

Sustainable tourism can help hotels by lowering operational costs, attracting eco-conscious guests, and enhancing their long-term reputation and competitiveness. According to Plasencia (2023), lower operating costs for sustainable hotels will be advantageous, as will opportunities for revenue growth. For hotels all over the world, drawing guests and advancing sustainable tourism have become crucial objectives. By accepting green credentials, putting in place water-saving strategies and energy-efficient practices, encouraging community involvement and local sourcing, and offering eco-friendly features, hotels can attract guests and reduce operational costs.

A variety of social and environmental issues influence hotel's sustainable practices. A hotel's dedication to reducing its carbon footprint, protecting natural resources, and enacting eco-friendly policies that lower waste and energy usage have an impact on the sustainability of the environment. A hotel's social sustainability is also based on its initiatives to support and connect with the neighborhood, cultivate a diverse and inclusive workforce, and promote ethical business practices. These social and environmental sustainability factors work together to build a hotel's reputation for thoughtful and ethical service (González et al., 2018).

The study "Sustainable Practices in Hospitality and Tourism: A Review of the Literature" by Font and Garau (2021) provides a comprehensive review of the existing literature on sustainable practices in the hospitality and tourism industry. It identifies key areas of focus for sustainable development and explores future research directions. By analyzing a wide range of scholarly works, the study underscores the increasing significance of sustainability as a pivotal component in the industry's long-term success and resilience. Moreover, the identification of key areas for sustainable development offers valuable insights for stakeholders to adopt and implement strategies that align with evolving consumer demands and global sustainability goals.

The adoption of sustainable practices in the hotel industry can have a significant positive impact on the environment; it is especially crucial in nations with less stringent environmental regulations than, for instance, the European Union, along with certain ecologically conscious nations. Due to environmental requirements in Serbia, although not yet as high as those in the European Union, sustainable hotel operations can have a significant impact. This article offers a summary based on the case study of Serbia of performance and hotel environmental sustainability metrics. Emphasizing the intricacy and significance of environmental markers in the industry sector and at a location overall is its key goal (Đurić, 2021).

Additionally, a hotel's sustainable practices play a crucial role in fostering a sense of accountability and dedication to the environment's and society's well-being. The DOT, one of the world's foremost sustainability organizations, describes sustainable hotel activities as our current commitment to protect the environment for future generations. They represent our commitment to reducing negative environmental effects, preserving resources, and promoting a hospitality sector that practices social responsibility. As a result, the continued adoption and promotion of sustainable measures in the accommodation industry hold the promise of enhancing not only the hotel business but also advancing the greater goal of global sustainability.

In the hospitality sector, the word "sustainability" refers to something that is physically present and actively supports ethical travel and hospitality. It can be felt or perceived. To illustrate this, sustainability practices in hotels in the tourism industry are used to describe all practices and initiatives that are material and observable, such as initiatives related to environmental conservation, social responsibility, and economic viability, all of which are beneficial to destinations, communities, and the industry itself.

To address the effects of overconsumption, governments, and the hospitality industry must adopt effective environmental protection strategies. Environmental practices can be categorized into basic and advanced levels. Basic practices involve energy conservation, water conservation, and waste management, whereas advanced practices encompass tracking the company's carbon footprint and engaging in global environmental protection initiatives, among other initiatives (Kularatne et al., 2019)

Mariani (2022) highlights that sustainability has become a marketing necessity in luxury hotels. Sustainable actions not only help to protect the environment but also boost the hotel's reputation, drawing in a new wave of eco-conscious guests. Additionally, sustainable practices can lower operational costs and improve efficiency, yielding long-term financial benefits for the hotel.

In addition to the hotel industry, these measures are viewed as accelerators for developing social inclusion, economic resilience, and environmental stewardship in larger global and local communities that rely on tourism. Overall, it is believed that hotel sustainability initiatives have the power to transform the entire tourism sector, from altering visitor expectations and experiences to affecting how tourist locations are managed and protected.

In recent years, the growing emphasis on sustainability in the hotel industry has led to significant advancements. The hospitality sector has made notable progress in both environmental and social responsibility. Initially driven by rising energy costs and heightened environmental awareness, the focus was mainly on energy and water conservation measures. Over time, environmental certifications and standards began to appear. (Sarode, 2022)

In the early 2000s, hotels began implementing environmental management systems and conducting sustainability audits. Many properties introduced recycling programs, energy-efficient lighting, and water conservation measures. Soon after, the focus broadened to include social responsibility. Responsible tourism through Sustainable Tourism initiatives gained traction. It became a mainstay, incorporating community engagement, occupant health, and support for local economies. Large hotel chains made significant sustainability commitments, setting targets to reduce carbon emissions, water usage, and waste generation. Several chains initiated programs such as linen and towel reuse, involving guests in sustainability efforts. These programs provided financial benefits to the chains while demonstrating their commitment to sustainability.

In recent years, sustainability commitments and goals have become standard to align with modern trends, including local regulations and consumer demand. The concept of 'green building' gained prominence, and hotels began incorporating renewable energy sources, installing advanced energy-efficient systems, EV chargers, and water refill stations, along with adopting sustainable construction practices for new builds. Many properties started emphasizing local sourcing, organic food, and reducing food waste. Today, the hotel industry continues to focus on minimizing its environmental footprint. Some hotels have achieved carbon-neutral or zero-waste status, implementing advanced technologies for energy management and waste recycling. Green certifications like LEED evaluate various impact areas, such as waste minimization, energy conservation and management, fresh and wastewater management, pollution prevention, and environmentally responsible purchasing. While these categories primarily impact the environment, they also benefit hotels' bottom lines (Hurchalla, 2023).

This study aims to describe the sustainable practices in DOT-accredited hotels in Bayombong in terms of environmental conservation, social responsibility, and economic viability, as well as assess the challenges faced by the hotels in implementing sustainable practices. By conducting a comprehensive assessment, researchers seek to provide valuable insights into the current state of sustainability in the local hospitality sector. Moreover, this study intends to shed light on the challenges faced by hotels in adopting sustainable practices and identify opportunities for improvement. Participating hotels will benefit from gaining a deeper understanding of their current sustainability efforts, leading to enhanced operational efficiency, cost savings through resource conservation, improved guest satisfaction, positive community impact through social responsibility initiatives, and potential competitive advantages in the market.

## Theoretical Framework



**Figure 1** Triple Bottom Line Framework

([https://www.researchgate.net/figure/Sustainable-triple-bottom-line-model\\_fig1\\_360965366](https://www.researchgate.net/figure/Sustainable-triple-bottom-line-model_fig1_360965366))

The **Triple Bottom Line (TBL)** stands as a comprehensive accounting framework pivotal in the assessment of an entity's performance along three crucial dimensions: social, environmental, and financial. Often termed the 3Ps, namely people, planet, and profits, these dimensions encapsulate the essence of the TBL approach to sustainability (Tseng et al., 2020). By advocating for the integration of these dimensions, the TBL framework underscores the interconnectedness between environmental conservation, social responsibility, and economic viability, urging businesses to weigh all three aspects while navigating their decision-making processes. Its widespread application across diverse sectors, such as tourism and hospitality, functions as a yardstick to assess the sustainability and effectiveness of various projects or policies.

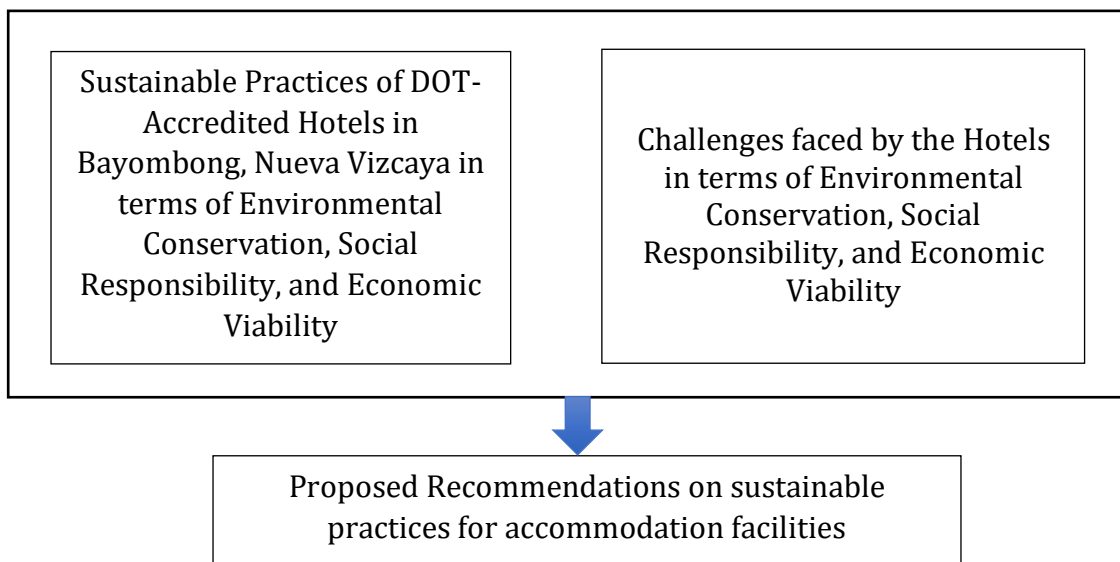
**Environmental Conservation** refers to deliberate actions taken to safeguard and preserve the natural environment, ecosystems, and biodiversity. It encompasses initiatives aimed at reducing environmental degradation, conserving resources, and promoting sustainable practices to mitigate the impact of human activities on the planet's ecosystems.

**Social Responsibility** pertains to an entity's ethical obligations and commitment to positively impacting society and communities. This involves fostering inclusive practices, supporting social causes, ensuring fair labor practices, promoting diversity and equity, and contributing to the welfare of the society at large.

**Economic Viability** delves into the financial aspect of sustainability. It involves the ability of an enterprise or project to maintain profitability and economic stability while simultaneously considering long-term sustainable growth. This dimension encompasses responsible financial management, efficient resource allocation, and the pursuit of economic activities that do not compromise the ability of future generations to meet their needs (Alhaddi, 2015).

The TBL framework provides a structured approach to achieving sustainability by recognizing the interdependence and equal significance of environmental conservation, social responsibility, and economic viability in fostering a balanced and enduring model of progress.

### Conceptual and Analytical Framework



**Figure 2 Research Paradigm**

This research focused on three primary objectives related to sustainable practices in hotels. Firstly, it aimed to identify and analyze the implementation of sustainable practices, encompassing environmental conservation, social responsibility, and economic viability. Secondly, it investigated the challenges faced by hotels in implementing these practices. Lastly, based on the findings, the research provided actionable recommendations aimed at overcoming these challenges and enhancing sustainable practices within the accommodation facilities.



Sustainable practices encompass a range of initiatives aimed at enhancing environmental and social sustainability within organizational operations (Pereira et al., 2021). This includes efforts to improve energy efficiency, reduce waste and carbon emissions, protect natural resources, and promote community and employee well-being. Environmental conservation is another critical aspect, focusing on safeguarding ecosystems and ensuring the sustainable use of natural resources by minimizing pollution and conserving biodiversity (Edu, 2022). Social responsibility underscores the ethical obligation of organizations to contribute positively to society and its stakeholders, promoting ethical behavior and community welfare (Planken, 2013). Economic viability assessments are essential in determining whether projects generate sufficient benefits to justify their costs, encompassing financial gains and societal benefits while considering environmental impacts (World Bank, 2022). However, implementing sustainable practices faces challenges such as high initial costs, stakeholder awareness deficits, regulatory complexities, and technical barriers, hindering adoption across industries like construction and tourism (Tjebane et al., 2023). To address these challenges effectively, actionable recommendations are necessary, offering specific and practical guidelines tailored to industry contexts to improve sustainability outcomes (Musandu, 2020). Accommodation facilities in tourism, including hotels, inns, lodges, and resorts, serve as pivotal contributors to the economy, supporting GDP and job creation while catering to diverse traveler needs and market segments (O'Halloran, 2023).

### **Statement of the Objectives**

This study determined the sustainable practices and challenges encountered among DOT-accredited hotels in Bayombong, Nueva Vizcaya, in the second semester of AY 2023-2024.

Specifically, this study sought to find answers to the following objectives:

1. To describe the sustainable practices in these hotels in terms of environmental conservation, social responsibility, and economic viability;
2. To identify challenges faced by these hotels in implementing sustainable practices;
3. To propose recommendations on sustainable practices for accommodation facilities.

### **METHODOLOGY**

This chapter of the study provides a brief overview of the various methods and procedures employed by the researchers. It includes the research design, research locale, research participants, research instrument, data collection procedure, data treatment, and ethical considerations.

#### **Research Design**

The research employed a qualitative research design. Qualitative research design is a methodology that emphasizes exploring and understanding the depth and complexity of a phenomenon through non-numerical data, such as words, images, or observations. (Creswell, J. W., & Poth, C. N. 2017). This research determined the sustainable practices and challenges among the different DOT-Accredited Hotels in the capital town of Nueva Vizcaya, Bayombong. With these, this research utilized an interview guide as a primary tool for data collecting, and the respondents were identified as manpower from the hotels. This interview guide was thoughtfully designed to encompass a comprehensive range of inquiries and topics that pertain to sustainable practices within these accredited hotels.

The results of the interview and its analysis were done through face-to-face interviews. This visit encompassed a careful assessment, enabling the researchers to observe and assess various facets of the establishment of sustainable practices in terms of environmental conservation, social responsibility, and economic viability. This comprehensive approach provided a holistic view of the establishment's compliance and operational aspects. The researchers used individual interviews to gather data, and they analyzed and discussed the findings.

#### **Research Locale**

The study was conducted in Bayombong, Nueva Vizcaya, nestled in the heart of Region 2, Philippines. Nueva Vizcaya is one of the five provinces comprising Region 2, also known as the Cagayan Valley region. It is a province known for its stunning natural beauty, rich cultural heritage, and vibrant communities.

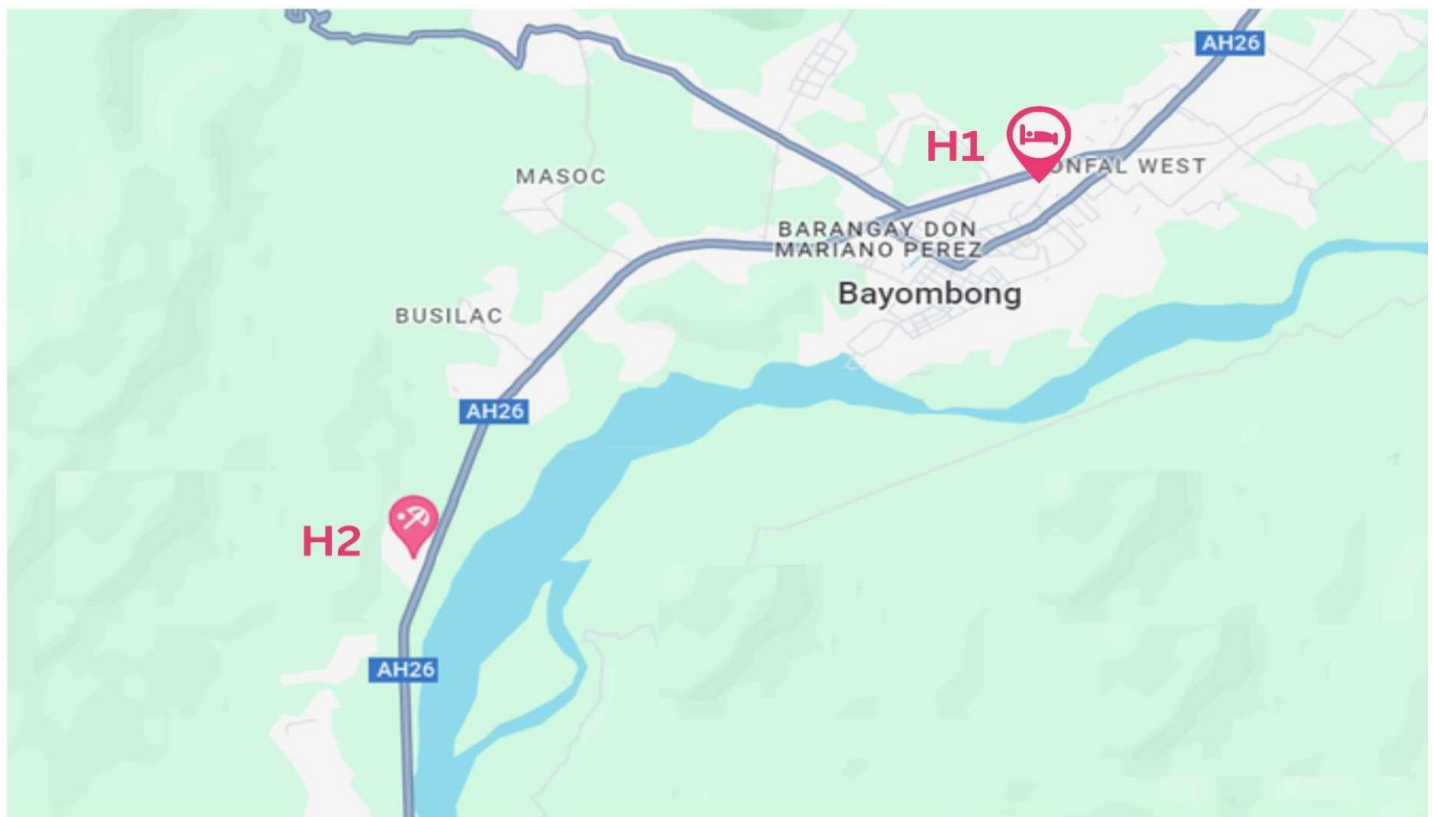
Within Nueva Vizcaya, the capital town is Bayombong, a place of historical significance and administrative importance. Bayombong serves as the political and economic center of the province, making it a crucial hub for various activities and services.

The context of this study was on the selected hotels within Bayombong that have received accreditation from the DOT. H1 received DOT-Accreditation in 2022, and they are applying for renewal and H2, they received in the year 20. These DOT-accredited hotels play a pivotal role in the local tourism industry, ensuring that visitors have access to safe and quality accommodations.

The province has a specific number of DOT-accredited hotels, which are H1, a resort and hotel in Bayombong, equipped with its café and restaurant and a world-class Olympic pool. H2 has a beautiful garden with a koi pond for a cozy and calming atmosphere and internet access tailored for business travelers. Additionally, the study identified and distinguished those accommodations that do not hold accreditation; this differentiation was essential in assessing the extent of sustainable practices within these establishments, as accreditation often signifies a commitment to certain standards and guidelines set by the tourism department.

By delving into the sustainability practices of Accredited Hotels in Bayombong, the study provided valuable insights that can contribute to the enhancement of sustainable tourism in this captivating province.

The researchers assigned specific codes to each hotel to maintain confidentiality, ensuring that the names of the establishments were not repeatedly disclosed throughout the study; the code **H1** was for Hotel 1, and **H2** was for Hotel 2.



**Figure 3 Map of Hotels in Bayombong**

Source: <https://maps.app.goo.gl/VREVEg5aGNxim97p8>

### **Research Informants**

The researchers employed a purposive sampling method in selecting the five (5) informants in each hotel, a total of ten (10) informants in Bayombong, Nueva Vizcaya. Specifically, the targeted informants are Two (2) Hotel Managers, Four (4) Hotel Supervisors, and Four (4) Team Leaders. The researchers consider these individuals to have important perspectives on their roles and responsibilities within the hotel industry, making them ideal candidates to provide in-depth insights into the adoption of sustainable practices within the management of the selected hotels.

**Table 1** Research Informants

	H1	H2
Hotel Manager	1	1
Hotel Supervisor	2	2
Hotel Team Leader	2	2
<b>Total Respondents</b>	<b>5</b>	<b>5</b>

The targeted informants encompass a strategic mix of roles within the hotel, which include hotel managers, hotel supervisors, and team leaders. These positions were specifically chosen due to the critical nature of their responsibilities and their direct involvement in sustainable practices within their respective hotels. Hotel Managers, being at the top of decision-making and strategic planning, offer invaluable insights into sustainability strategies and their perspectives on the challenges and successes of implementing sustainable practices at a managerial level. Hotel Supervisors, on the other hand, play a pivotal role in translating sustainability policies into actionable plans at the operational level. Their day-to-day supervision of hotel operations and staff involvement in sustainability practices provide a practical viewpoint on the challenges and opportunities faced in implementing sustainable initiatives.

Similarly, Team Leaders, responsible for coordinating and leading teams within various hotel departments, contribute essential perspectives on the execution and integration of sustainability practices within their respective teams. Their insights reflect the on-ground realities and effectiveness of sustainability measures within the operational framework of the hotels. By targeting these specific positions, the researchers aim to gather in-depth and multifaceted insights into the sustainable practices and challenges encountered in the management of DOT-accredited hotels in Bayombong, Nueva Vizcaya. This comprehensive approach ensures a thorough understanding of sustainability initiatives across different levels of hotel management and operations.

The study population for this study consists of individuals holding positions as Hotel Managers, Hotel Supervisors, and Team Leaders within the selected hotels in Bayombong. These individuals are important in understanding and evaluating the sustainable practices and challenges faced by DOT-Accredited hotels in the area. Their roles encompass strategic decision-making, operational management, and team leadership, making them key informants who can gain insights into the sustainability practices and challenges within the hotels in Bayombong, Nueva Vizcaya.

This study specifically focused on establishments identified as "hotels," excluding other accommodation facilities like inns and lodges. This strategic decision enhances the precision and relevance of the study, enabling a comprehensive understanding of the factors influencing the hotel sector.

#### Inclusion Criteria

- Must be currently employed as a hotel manager, supervisor, or team leader.
- At least one year of experience in their current role to ensure they have substantial operational knowledge and insights.
- Willing to participate voluntarily and able to give informed consent.

#### Exclusion Criteria

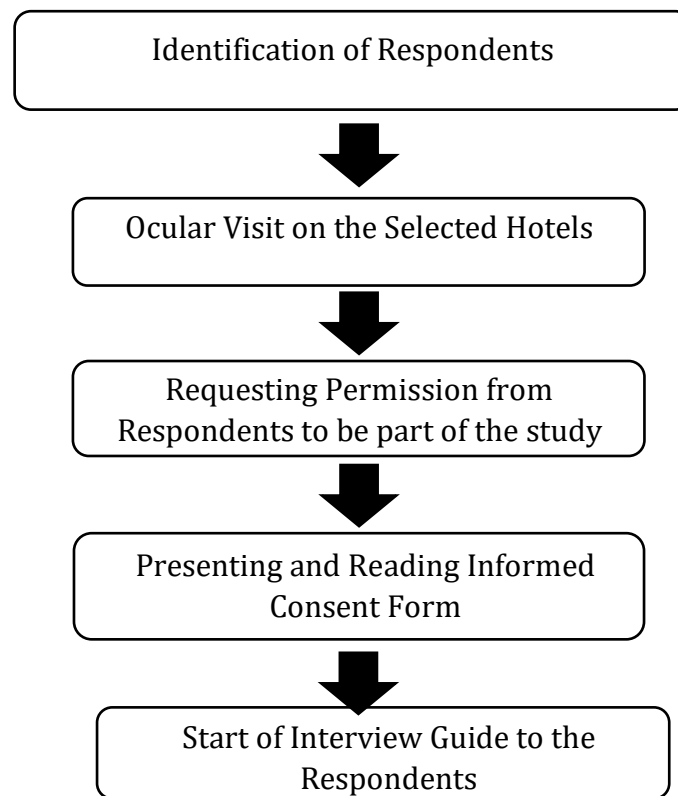
- Exclude those who have been in their current role for less than one year to ensure participants have enough experience to provide informed responses.
- Exclude hotel staff who are not in managerial or leadership roles, as the focus is on those with decision-making responsibilities.
- Exclude individuals from hotels directly associated with the research team or their relatives to prevent bias.

## Research Instrument

An interview guide was utilized to collect the answers necessary for the objectives of this study, which is attached in Appendix B. The Interview guide was created by the researchers using related studies and literature, as shown in Appendix C. The questions were aligned with the Triple Bottom Line Framework, which are Environmental Conservation, Social Responsibility, and Economic Viability. The questions were validated by the adviser, technical panel of experts, and the research coordinator to ensure validity.

The interview guide is structured into four (4) sections: Preliminaries, Environmental Conservation, Social Responsibility, and Economic Viability. It begins with an exploration of sustainable practices in hotels, focusing on factors influencing adoption from the perspectives of management and stakeholders. The subsequent sections include questions aimed at understanding the level of awareness and perceptions of sustainable tourism practices among hotel management and staff. The challenges perceived in adopting and maintaining sustainable practices are also examined. Specific questions under Environmental Conservation inquire about strategies for energy consumption reduction, successful waste reduction examples, and the role of guest engagement in promoting environmentally friendly practices. Social Responsibility questions explore ways hotels can engage with local communities, promote diversity and inclusion, and advocate responsible tourism. Economic Viability questions address factors influencing financial sustainability, successful marketing strategies, and the impact of customer satisfaction on hotel profitability.

## Data Gathering Procedure



### Figure 4 Data Gathering Procedure

Figure 4 depicts a data-gathering process for this study that is designed to achieve the research objective, which is to assess the extent of sustainable practices within DOT-Accredited hotels in Bayombong, Nueva Vizcaya.

In the initial phase of the study, the researchers embarked on the crucial task of identifying respondents and carefully selecting individuals who align with the specific criteria and objectives of the study. Following this, an ocular visit was conducted on selected hotels, allowing the researchers to familiarize themselves with the environments and establish initial contacts with hotel staff. Subsequently, formal requests were connected to respondents, seeking their permission to participate in the study. This involves presenting and thoroughly



explaining an informed consent form outlining the purpose and scope of the research. Once permissions were secured, an interview guide was administered to the respondents, ensuring a systematic approach to gathering the required information.

This comprehensive data-gathering procedure is structured to collect meaningful insights from the key individuals who are intimately familiar with the operations and implementation of sustainable practices within the selected DOT-Accredited hotels in Bayombong, Nueva Vizcaya. Their perspectives and experiences will contribute significantly to the research's objective.

### **Treatment of Data**

This study utilized an interview guide to gather appropriate answers aligned with its goals, employing qualitative analysis. Data analysis began with transcription of the interview data, followed by a careful reading to get a sense of the whole. To describe sustainable practices in terms of environmental conservation, social responsibility, and economic viability, the interview responses from hotel management and staff were analyzed to identify key themes. To identify the challenges faced by these hotels in implementing sustainable practices, specific challenges mentioned by respondents were examined. Participants' suggestions and insights were transcribed and categorized to propose recommendations on sustainable practices. Best practices from existing literature and successful models were also reviewed, with identified recommendations organized into actionable themes. Both the practices, challenges, and proposed recommendations were analyzed through thematic analysis, a technique used to analyze qualitative data by studying a group of texts, such as interviews or transcripts. The researcher carefully inspects the data to identify recurring themes, subjects, concepts, and meanings that appear frequently (Caulfield, 2023). This comprehensive approach ensured thorough and systematic treatment of data to address the research objectives effectively.

### **Ethical Considerations**

This study was submitted for ethics review/assessment and approval to Saint Mary's University Research Ethics Board (SMUREB), headed by Mr. Jason Arnold L. Maslang (email: reb@smu.edu.ph; mobile: 09177053041), 2nd Floor, Fr. John Van Bauwel Hall, SMU Main Campus, Ponce Street, Don Mariano Marcos; Bayombong, 3700 Nueva Vizcaya, Philippines.

The study was conducted in a timely and appropriate manner that was convenient for the participants. The consent of the participants was asked before proceeding with the discussion. They were asked to answer a short consent form before the start of the individual interview. Those who agreed to participate provided the researchers with all the information they requested.

The researchers assured the participants the privacy and safety of all the information gathered. Data gathered from the participants was kept confidential and was only retrieved by the researchers. Only the researchers themselves were able to access data and the identification of the participants. All the gathered data was saved in a document folder on the researchers' laptops only and was not disseminated to others. In terms of the participants' identities, the researchers used number codes to conceal their names for safety purposes and the confidentiality of information. As the study was completed, all information gathered from the participants will be deleted from the researchers' documents and recycle bins. Once all data was deleted, it would never be recovered, so there would be no traces or leakage of information.

The study acknowledges potential risks, such as emotional discomfort, privacy concerns, and time commitment for participants, stemming from discussing sensitive topics and the perceived burden of participation. However, it also highlights potential benefits such as improving hotel practices, personal reflection, and contributing to industry research. To mitigate risks, the study ensured confidentiality through anonymization of data, emphasized voluntary participation and withdrawal rights, handled sensitive questions tactfully, and schedules interviews efficiently to minimize disruption to participants' daily responsibilities. These measures aim to uphold ethical standards and foster a positive experience for participants while gathering valuable insights for the study.

This study was expected to provide basis or baseline data on topics that involve sustainable practices in DOT-Accredited Hotels.

In the paper, citations in APA style were used to refer to the information and ideas written and stated by various authors.

The researchers will not gain anything in this study that could compromise the integrity of the gathered data and the findings. With this, no conflict of interest will be declared in this paper.

The study's findings will be shared with the research informants, serving as a valuable guide for enhancing their establishment's practices. By also incorporating Research Consortium where collaborative discussions and knowledge sharing will take place. Additionally, the researchers plan to actively engage with hotel representatives by attending relevant forums, ensuring direct and interactive communication to facilitate the implementation of actionable insights for enhancing their establishment's practices. This dissemination aims to provide actionable insights directly to the participating hotels, enabling them to implement improvements based on the study's results.

Saint Mary's University owns the research output, but the researchers will remain to be the authors.

## RESULTS AND DISCUSSIONS

### Section 1. Sustainable Practices in DOT- Accredited Hotels

The hotels adopting and acknowledging sustainable practices highlight the hotel industry's shift towards supporting SDG 11, which focuses on Sustainable Cities and Communities. This transformation is evident as more establishments implement eco-friendly initiatives, ranging from energy-efficient systems to waste reduction programs.

According to Jo (2022), Sustainable practices distinguish hospitality organizations. Modern travelers, restaurant patrons, hostel guests, and shoppers prioritize sustainability. They seek assurance that the companies they support adhere to environmentally, socially, and culturally responsible practices. Nonetheless, the reality that many hotels, not only in Bayombong but throughout the Philippines, remain unaware of the importance of sustainability underscores the critical need for increased awareness and education on this subject. Enhanced awareness can drive broader adoption of sustainable practices across the industry, leading to significant environmental and economic benefits. One informant from H2 even mentioned, *"I am thankful to SMU students last year, may binigay silang mga stickers na parang please turn off the lights when not in use."* ("I am thankful to SMU students last year, may binigay silang mga stickers na parang please turn off the lights when not in use") This shows that promoting sustainability within the hotel sector can also inspire other industries to follow suit, contributing to a more sustainable future for all.

From the two hotels the researchers interviewed, they observed both differences and similarities in their operations. The interview questions revealed various perspectives unique to each hotel. These observations provide a clear understanding of their operational methods. This knowledge helps identify best practices and areas where improvements can be made. Both H1 and H2 did regular monitoring, reporting, and continuous improvement. These are essential to ensure sustainable practices remain at the forefront of the hotel's operations, fostering long-term sustainability and success (Pereira et al., 2021).

Examining the role of policies, industry standards, and certification schemes in incentivizing and regulating sustainable practices within the hotel sector provides valuable context for understanding the broader landscape of sustainability governance. Overall, by conducting a comprehensive analysis of the sustainable practices, stakeholder engagement strategies, challenges, and governance mechanisms within the hotel industry, this study aims to contribute to a deeper understanding of the opportunities and constraints for advancing sustainability in the context of SDG 11 and beyond.

### Environmental Conservation

#### Reduce Energy Consumption and Promote Energy Efficiency

When it comes to energy consumption, the adoption of solar energy stands out as one of the most effective ways for hotels to reduce their energy consumption and promote energy efficiency. An H2 manager highlighted, *"Actually just last year nag ano kami ng solar so bale etong building natin is may solar, yung building din na yun ay solar kaya nakaka lessen tayo ng energy... malaking tulong talaga yung solar kasi mejo*

*bumaba yung bills natin.*" ("Actually, just last year we got solar, so our building is solar, the building is also solar so we can reduce energy... solar really helps because it lowers our bills"). This shift to renewable energy sources not only helps in cutting down operational costs but also significantly reduces the carbon footprint, demonstrating a strong commitment to sustainable practices. Iris Island Eco Resort at Sulu Sea, Davao City, Davao del Sur, Philippines, also showcases notable sustainable practices. Each building and villa on the island is equipped with its solar energy power source, including solar panels, batteries, charge controllers, and battery monitors. Path lighting around the island and pier lighting utilizes special solar lights that incorporate a solar panel, battery, and detectors that allow the light to turn on at night and shut off during the day.

A notable practice involves ensuring that all lights, air conditioning units, and other appliances are turned off once a guest has vacated their room. As stated by the H1 Hotel Manager, "*Parang it's a practice na dito sa hotel na once na wala ng guest sa room all must be off like the lights, aircon, and other appliances, and this can reduce energy consumption.*" ("It seems it's a practice here at the hotel that once no guest is in the room all must be off like the lights, air conditioning, and other appliances, and this can reduce energy consumption"). This practice is integral to minimizing energy consumption and advancing environmental sustainability within the hospitality industry. By systematically deactivating electrical systems in unoccupied rooms, hotels significantly decrease their energy usage, which results in lower operational costs. Such measures are aligned with global efforts to conserve resources and mitigate environmental impact, underscoring the hotel's commitment to both operational efficiency and ecological responsibility.

The above results indicate similarities to a recent report by the International Energy Agency (IEA) that emphasizes that the hospitality sector can achieve substantial energy savings through the adoption of energy-efficient technologies. The findings suggest that hotels could cut energy use by up to 28% by implementing strategies such as installing LED lighting, modernizing gas boilers, and improving thermal insulation. These enhancements not only reduce operational expenses but also support sustainability objectives by decreasing carbon emissions (IEA, 2022).

### **Waste Management Adopted by the Hotel**

Effective solid waste management is crucial for hotels in the tourism industry to minimize their environmental impact and ensure sustainable operations. Implementing comprehensive waste reduction and recycling programs helps hotels mitigate their waste generation while contributing to the preservation of natural resources and the promotion of eco-friendly tourism practices (Radwan et al., 2011). One informant from H1 mentioned, "*They (guests) are helping us din, aware sila na hindi nila basta-basta tinatapon basura nila.*" ("They (guests) are helping us too, they are aware that they are not just throwing away their trash"), Another informant from H2 indicated that certain guests take leftover food and waste back with them when leaving the hotel, contributing to waste reduction efforts on the premises. The informant elaborated, "*Waste reduction, that is one of the most important impossible things to do pero still we are doing our best para ma lessen yung mga waste natin, we are trying our best to convince them na kami nalang ang mag cater para at least ma lessen yung magdala pa sila ng mga takeout.*" ("Waste reduction, that is one of the most important impossible things to do, but still we are doing our best to reduce our waste, we are trying our best to convince them that we are the ones to cater so at least to lessen the takeout"). This statement underscores the proactive steps taken by hotel management to not only reduce waste but also to manage and control the sources of waste generation effectively.

Both H1 and H2 exhibit commendable responsibility in their approach to waste disposal, showcasing proactive measures and a commitment to sustainable practices within the hotel industry. Notably, both establishments prioritize waste reduction and recycling efforts as integral components of their operational strategies. Through comprehensive waste management programs, they aim to minimize their environmental footprint and contribute to the preservation of natural resources. In interviews, informants from both hotels underscore the significance of waste management as an essential component of their sustainability initiatives. They highlight efforts to engage guests in responsible waste disposal practices, such as minimizing waste generation and segregating recyclable materials. An informant from H2 mentioned, "*Hindi na kami gumagamit ng Naka one time use only na nakasachet na shampoo, naka dispenser na sila*" ("We're not using the one-time use only shampoo, they're using the dispenser") highlighting their switch to using dispensers instead of single-use

sachets for shampoo and other essentials in bathrooms. This shift is aimed at reducing plastic waste associated with disposable packaging.

Amarela Resort in Panglao Island, Bohol, also emphasizes sustainable practices. They engage in various eco-friendly initiatives, such as promoting the use of reusable items over disposable ones; the resort uses ceramic soap dispensers crafted by artisans to replace disposable shampoo sachets and soap bottles. These efforts not only minimize waste but also foster a deeper connection with the local community and environment.

Meanwhile, an informant from H1 added, “*we have areas where we put those trashes na pwede pa ma-reuse or can be recycled just like plastic bottles and boxes, and sometimes binebenta rin namin*” (“We have areas where we put those trashes that can be reused or can be recycled just like plastic bottles and boxes, and sometimes we sell them, too”) indicating their practice of reusing and recycling materials within the hotel rather than simply discarding them. These efforts collectively demonstrate their commitment to environmental stewardship and sustainability throughout guests’ stays.

Comparatively, Iris Island Eco Resort also has a practice that all cans from soft drinks and foods are sold and recycled. At the same time, kitchen scraps are composted in special rotating composters. This holistic approach to sustainability illustrates a deep commitment to environmental preservation. It serves as an inspiring model for the tourism industry.

The proactive stance of H1 and H2 towards waste disposal exemplifies their dedication to environmental sustainability and responsible corporate citizenship. By integrating waste management into their broader sustainability efforts, these hotels not only reduce their environmental impact but also foster a culture of eco-consciousness among their guests. The practices observed at Iris Island Eco Resort and Amarela Resort further illustrate the potential for innovative sustainability measures to transform the tourism industry, inspiring others to adopt similar approaches for the preservation of our natural resources. This comprehensive approach to sustainability not only addresses immediate environmental concerns but also sets a precedent for future industry standards, highlighting the importance of collective action in achieving a more sustainable future.

The above practices of the hotels signify similarities in the sustainable food waste management practices in five-star hotels in Thailand, revealing crucial methods for reducing waste within the hospitality sector. The approaches of these hotels were driven by policies and executed from the top management level to operational staff, enabling hotels to minimize their environmental impact greatly. By implementing thorough waste reduction and recycling initiatives, hotels can significantly reduce waste generation, protect natural resources, and support sustainable tourism practices (Lawson, 2023).

### **Guest Engagement and Education in promoting Environmentally Friendly Practices within the Hotel**

As highlighted by the H1 Hotel Manager, “*Dito we believed na guest si the life of the hotel, because sila yung reason kung bakit nag ooperate ang hotel.*” (“*Here we believed that guests are the life of the hotel, because they are the reason why the hotel operates*”). This underscores the essential role guests play in the hotel's operation and its environmental practices. They also mentioned that most of their guests follow simple, sustainable practices, such as adhering to labels on trash bins, and contribute significantly to the hotel's eco-friendly initiatives. Their participation in these practices is vital, as it supports the hotel's efforts to reduce waste and promote environmental conservation, illustrating the importance of guest engagement in achieving sustainable operational goals.

The Hilton Manila is a good example of a hotel that emphasizes guest engagement in its sustainability efforts. They have highlighted how guest participation is crucial for their environmental initiatives, and it was listed on their website that “Hilton Manila recognizes the vital role of guest involvement in our sustainability initiatives. We encourage our guests to participate in our eco-friendly practices to enhance our collective impact ” (Hilton Hotels Manila,2024) /

Effective solid waste management is crucial for hotels in the tourism industry to minimize their environmental impact and ensure sustainable operations. Implementing comprehensive waste reduction and recycling



programs can help hotels mitigate their waste generation while contributing to the preservation of natural resources and the promotion of eco-friendly tourism practices. One informant from H1 mentioned *“They (guests) are helping us din, aware sila na hindi nila basta basta tinatapos basura nila”* (“They (guests) are helping us too, they are aware that they are not just throwing away their trash”). Another informant from H2 also indicated that certain guests take leftover food and waste back with them when leaving the hotel, contributing to waste reduction efforts on the premises. The informant also mentioned, *“Waste reduction, that is one of the most important impossible things to do pero still we are doing our best para ma lessen yung mga waste natin, for example, sa mga events natin imbes na mag pa-cater sila from outside we are trying our best to convince them na kami nalang ang mag cater para at least ma lessen yung magdadala pa sila ng mga takeout.”* (“Waste reduction is one of the most important and impossible things to do, but we are still doing our best to reduce our waste. For example, in our events, instead of catering to them from outside, we are trying our best to convince them that we will cater so at least they will bring less takeout”). This shows the proactive steps taken by hotel management to not only reduce waste but also to manage and control the sources of waste generation effectively.

Both H1 and H2 demonstrate commendable responsibility in their approach to waste disposal, showcasing proactive measures and a commitment to sustainable practices within the hotel industry. Notably, both establishments prioritize waste reduction and recycling efforts as integral components of their operational strategies. Through comprehensive waste management programs, they aim to minimize their environmental footprint and contribute to the preservation of natural resources.

In interviews, informants from both hotels underscore the significance of waste management as an essential component of their sustainability initiatives. They highlight efforts to engage guests in responsible waste disposal practices, such as minimizing waste generation and segregating recyclable materials. An informant from H2 mentioned, *“Hindi na kami gumagamit ng Naka one time use only na nakasachet na shampoo, naka dispenser na,”* (“We're not using the one-time use only shampoo, we are using the dispenser”) highlighting their switch to using dispensers instead of single-use sachets for shampoo and other essentials in bathrooms. This shift is aimed at reducing plastic waste associated with disposable packaging. Meanwhile, an informant from H1 added, *“We have areas where we put those trashes na pwede pa ma-reuse or can be recycled just like plastic bottles and boxes, and sometimes binibenta rin namin,”* (“We have areas, where we put those, trashes that can be reused or can be recycled just like plastic bottles and boxes, and sometimes we sell them, too”) indicating their practice of reusing and recycling materials within the hotel rather than simply discarding them. These efforts collectively demonstrate their commitment to environmental stewardship and sustainability throughout guests' stays.

Overall, the proactive stance of H1 and H2 towards waste disposal exemplifies their dedication to environmental sustainability and responsible corporate citizenship. By integrating waste management into their broader sustainability strategies and engaging stakeholders at various levels, these hotels set a positive example for the industry and contribute to the advancement of sustainable tourism practices.

The results of this study are relative to the study of Pereira et al. (2021), which states that guest involvement and active visitor participation greatly increase the success of sustainability programs. Incorporating guests into eco-friendly measures like water saving and trash reduction not only lessens the hotel's environmental effect but also increases guest happiness and loyalty. This is due to the fact that visitors who engage in these environmentally friendly activities and are aware of them typically have a more favorable opinion of the hotel (Pereira et al., 021).

### **Social Responsibility**

Social responsibility is essential in hotels as it enhances their reputation, fosters community goodwill, and promotes sustainable practices. By addressing environmental, social, and ethical issues, hotels can create positive impacts, attract socially conscious guests, and ensure long-term viability in the competitive hospitality industry. As such, Sustainable tourism is referred to as development or community empowerment in tourism, which is characterized as travel that fulfills current needs without compromising the ability of future generations and without negativity affecting the local environment, economy, or tradition of the tourist destination (Zolfaghari, 2010).

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## Hotel Engagement with local communities in supporting Social Causes/Initiatives

Many hotels are increasingly focusing on sustainable procurement practices to support local economies and reduce their environmental impact. An informant from H2 mentioned “*every founding anniversary namin meron kaming tree planting*” she added “*Actually nung last founding anniversary namin, we conducted clean up drive jan along the highway and atleast na appreciate ng barangay natin kasi sabi nila atleast meron tayong engagement sakanila and then isa pa na activity natin is yung bloodletting during founding anniversary din in partnership with red cross so our staff yung mga nag volunteer na mag dodonate sila ng blood doon without expecting anything in return*” (“every founding anniversary we have tree planting ?? she added ?? Actually on our last founding anniversary, we conducted clean up drive there along the highway and atleast our barangay appreciated because they said atleast we have engagement with them and then another activity we have is bloodletting during founding anniversary also in partnership with red cross so our staff are the ones who volunteered to donate blood there without expecting anything in return”) that everytime they celebrate their anniversary, they conduct clean up drives, tree growing activities and even bloodletting.

These initiatives reflect a broader commitment to corporate social responsibility and community engagement. The tree planting activities not only contribute to environmental conservation but also foster a sense of ecological stewardship among employees and the local community. The clean-up drives along the highways demonstrate a proactive approach to maintaining public spaces, earning the appreciation and support of local government units. This engagement strengthens the relationship between the hotel and the community, enhancing the hotel's reputation as an accountable and caring entity. Additionally, the bloodletting events, conducted in partnership with the Red Cross, highlight the hotel's dedication to public health and humanitarian efforts. By encouraging staff to volunteer and donate blood without expecting anything in return, the hotel cultivates a culture of altruism and social responsibility. These activities collectively underscore the hotel's holistic approach to sustainability, which encompasses environmental, social, and community dimensions.

An informant from H1 mentioned, “*sa mga barangay programs we try to engage on their programs for example if may clean up drive we participate on those,*” (“in barangay programs we try to engage on their programs for example if there is a clean up drive we participate on those”) indicating their proactive engagement in local community initiatives. This involvement reflects their commitment to social responsibility by supporting and participating in barangay-led activities such as clean-up drives. By collaborating with barangay programs, H1 not only contributes to local environmental efforts but also strengthens community relations and fosters a sense of civic duty among its staff and guests. This approach underscores their broader commitment to sustainable practices that benefit both the environment and the communities in which they operate.

By prioritizing local procurement, hotels also promote social equity and economic development in the areas where they operate, fostering stronger ties with local communities and stakeholders.

H1 and H2 are exemplary models of social responsibility within the hospitality industry. Their dedication to sustainable practices goes beyond mere compliance with regulations; it reflects a deep-seated commitment to environmental stewardship, community engagement, and ethical conduct. Through initiatives like tree planting, clean-up drives, and bloodletting events, as mentioned by H2, they demonstrate a holistic approach that encompasses both environmental and social dimensions. These efforts not only contribute to the preservation of local ecosystems but also cultivate a sense of belonging and pride among employees and community members.

The tree-planting activities organized by H2 serve as a tangible manifestation of their commitment to environmental conservation. By replenishing green spaces and restoring biodiversity, these initiatives enhance the overall health and resilience of the local ecosystem. Moreover, they serve as educational opportunities, promoting awareness about the importance of environmental stewardship among staff and community members.

The clean-up drives conducted by H1 and H2 along highways and public spaces are emblematic of their proactive approach to maintaining a clean and orderly environment. By taking responsibility for the cleanliness of their surroundings, these hotels demonstrate their respect for public spaces and their commitment to being

good neighbors. Furthermore, these efforts garner appreciation and support from local government units and community members, strengthening the bonds between the hotels and the communities they serve.

In addition to environmental initiatives, H2 prioritizes social responsibility through its partnership with organizations like the Red Cross to organize bloodletting events. By encouraging staff and guests to donate blood, these hotels contribute to public health initiatives and demonstrate their commitment to humanitarian causes. Moreover, these events foster a culture of altruism and social responsibility among employees, reinforcing the hotels' reputation as caring and socially conscious entities.

It can be shown, therefore, that hotels considered in this study have social responsibility similar to the study by Ho et al. (2021) that looked at how hotel activities to help the community during COVID-19 affect how involved employees are in their work and how likely they are to leave their jobs. The research shows that when hotels engage with the community during tough times, it can make employees more dedicated and make the organization stronger. The study discovered that activities like supporting the community not only boosted employee spirits but also built stronger bonds with the community, leading to a more lasting recovery and better business outcomes in the future.

### **Promotion of Responsible Tourism**

One informant from H1 highlighted the role hotels play in promoting responsible tourism and ethical travel practices among guests by distributing informational flyers provided by the Department of Tourism (DOT). *“DOT has given us flyers na may naka indicate na mga tourist destination where guests can explore.”* (“DOT has given us flyers with indicated tourist destinations where guest can explore”); these flyers include details about local tourist destinations, guiding guests on where they can explore responsibly. The informant emphasized that the hotel staff also offers personalized recommendations when guests inquire about local attractions. However, the informant noted that, based on their experience, most guests at their hotel are not primarily there for leisure travel but for work-related stays, using the hotel mainly for rest. This insight suggests that while hotels have the tools to promote responsible tourism, the opportunity to do so may be limited by the nature of their guests' visits.

By integrating environmental, social, and ethical considerations into their operations, these hotels not only enhance their reputation but also contribute to the well-being of the communities in which they operate. Their efforts serve as inspiration for other hotels to follow suit and adopt sustainable practices for the betterment of society and the environment.

The above practices of the two hotels are similar to the study conducted by Kim et al. (2015) that investigated the ways in which hotels may effectively encourage responsible tourism by implementing a range of measures, such as providing educational materials and customized advice. Their study emphasizes how crucial it is to provide guest education and staff training on sustainable practices in order to promote a responsible travel culture. According to the study, hotels that used these strategies reported higher levels of guest awareness of regional environmental and cultural issues as well as increased participation in sustainable activities. This strategy shows how hotels can play a key role in promoting responsible tourism by not only enhancing the visitor experience but also benefiting the local community and environment.

### **Economic Viability**

#### **Factors Influencing the Financial Sustainability of the Hotels**

In the hospitality industry, customer satisfaction is paramount to financial success and sustainability. Hotels must focus not only on providing excellent service but also on maintaining responsible financial practices to ensure long-term viability. Both H1 and H2 highlighted the indispensable role of customers in achieving financial stability and growth.

Both H1 and H2 pointed out that customers are crucial for their businesses to thrive financially, emphasizing how important it is to keep guests satisfied for their operations to succeed. An informant from H1 mentioned, *“Key factors influencing financial sustainability? Customers, kasi without them walang profit”*. (“Key factors influencing financial sustainability? Customers, because without them there is no profit”) This dimension

encompasses responsible financial management, efficient resource allocation, and the pursuit of economic activities. (Alhaddi, 2015).

The reliance on customers for profitability necessitates a focus on exceptional service quality and guest experience. Hotels recognize that without a loyal and satisfied customer base, achieving financial sustainability is impossible. This perspective aligns with the broader understanding that financial health is not solely dependent on revenue but also on how resources are managed and allocated. Efficient resource allocation involves optimizing operational costs, investing in staff training, and implementing sustainable practices that reduce waste and enhance efficiency. Pursuing economic activities that align with these goals ensures that hotels can maintain their financial health while also contributing positively to the environment and society. Ultimately, by prioritizing customer satisfaction and responsible financial practices, hotels can secure their long-term success and sustainability in a competitive industry.

Similarly, the study of Mucci et al. (2021) found that preserving financial sustainability requires a strong focus on cost control, technological innovation, and strategic financial planning. The optimization of operating expenses through effective cost management significantly affects the profitability and competitiveness of hotels. Technological advancements that increase efficiency and cut expenses, including automated systems for inventory and energy management, make a big difference. The report also stressed how outside variables, such as market trends, governmental laws, and economic situations, have an impact on financial sustainability and how quickly hotels must adjust to shifting conditions. Hotels may secure their long-term financial stability in the constantly changing hospitality industry by striking a balance between these internal and external elements.

### **Role of Customer Satisfaction and Loyalty in Ensuring Economic Success of the Hotels**

Customer satisfaction serves as the cornerstone of a hotel's financial viability. An informant from H1 mentioned, *"Loyalty and satisfaction help the hotel to retain customers."* In contrast, an informant from H2 highlighted *"repeat business, if they are loyal and nag-iwan ka ng magandang impression sakanila, babalik sila babalik sila and then hindi lang sila babalik, ichichismis ka pa sa labas"* ("loyalty and satisfaction help the hotel to retain customer, while informant from H2 highlighted repeat business if they are loyal and you leave a good impression with them, they will come back and then they just won't come back, you'll be told outside") Both H1 and H2 recognize that a satisfied and loyal customer base is indispensable for sustained business success. Therefore, these hotels prioritize delivering exceptional service quality and ensuring memorable guest experiences. They understand that maintaining high levels of customer satisfaction not only fosters repeat business but also generates positive word-of-mouth recommendations, which are invaluable in attracting new guests and sustaining revenue streams.

From the response provided by the H2 Manager, *"We have to leave the best impression as we can para atleast makabalik sila and then kapag maganda kasi yung iniwan mong impression sakanila, they will spread it sa mga kasama nila, irerecommend nila yung mga pinunthan nilang lugar so hindi yun maiiwasan."* ("We have to leave the best impression as we can so at least they'll come back and then when you leave a good impression on them, they'll spread it to their peers, they'll recommend the places they've been so it's inevitable")

The strategies outlined by the H2 Manager are crucial for the success of hotels and directly impact profitability. They prioritize their social media marketing across platforms like Facebook, TikTok, and Facebook Reels so that they can effectively attract and engage potential guests, aligning with current trends and expanding their reach.

Consistency in delivering exceptional guest experiences at every touchpoint is vital, as first impressions significantly influence guest satisfaction and repeat patronage. Positive experiences encourage guests to recommend the hotel to others, thereby amplifying the hotel's reputation and attracting new customers. Conversely, they mentioned that addressing any negative experiences with complimentary services and genuine apologies helps mitigate dissatisfaction and preserve the hotel's reputation.

The Ritz-Carlton is renowned for its exemplary social media marketing strategies. The hotel brand adeptly leverages platforms such as Instagram and Twitter to highlight its opulent properties and engage with a broad



audience. Through visually captivating content and strategic hashtag utilization, The Ritz-Carlton enhances its brand visibility and effectively attracts a global clientele.

These strategies not only help in building a strong brand presence but also ensure guest loyalty, which is essential for sustained profitability. By maintaining high standards and effectively managing guest relationships, hotels can create a positive cycle of recommendations and repeat visits, leading to long-term success.

By prioritizing customer satisfaction and embracing responsible financial practices, hotels can ensure their long-term success and sustainability in a fiercely competitive industry. H1 and H2 exemplify this holistic approach, where financial stability is intricately linked with customer-centric strategies and responsible resource management. Their commitment to delivering exceptional service while upholding ethical and sustainable principles sets a benchmark for excellence in the hospitality sector, paving the way for enduring success in the years to come.

Hence, in order to achieve long-term profitability and competitiveness, Esfandiar et al. (2021) emphasize that customer happiness and loyalty play a significant part in the success of hotels. These elements are connected and crucial. According to the research, satisfied customers are more likely to remain loyal, which encourages repeat business and positive word-of-mouth recommendations. Because loyal guests are more likely to make repeat reservations and refer the hotel to others, they also lower marketing expenses and increase income. The survey also emphasizes how crucial it is to continually surpass consumer expectations by providing personalized experiences and high-quality service. This builds brand loyalty and distinguishes a business in a crowded market. Hotels can achieve financial success and a sustained competitive advantage by prioritizing these factors.

**Table 2** Sustainable Practices Implemented by the Hotels

<b>Surfaced Sustainable Practices of the Hotels</b>	
Environmental Conservation	Shift to renewable energy sources by installing solar panels to generate power sustainably.
	Lights, air conditioning units, and other appliances are turned off once a guest has vacated their room.
	Implementing comprehensive waste reduction and recycling programs by installing recycling bins
	Switching to dispensers instead of single-use sachets for shampoo and other essentials
Social Responsibility	Conducting Tree Planting, Clean-Up Drive, and Blood Letting Activities every founding Anniversary
	Participating for Barangay Programs like Clean-up Drive
Economic Viability	Prioritizing social media marketing by focusing on social media marketing through platforms like Facebook, Twitter, and Instagram to adopt a paperless strategy helps promote sustainability and reduce the carbon footprint associated with traditional marketing methods.
	Consistency in delivering good service by building customer loyalty and repeat business while promoting sustainability by encouraging resource-efficient practices through streamlined operations.

This table outlines the sustainable practices implemented by the hotels in their operations, as reported in the interviews. These practices are designed to promote overall responsibility to the Triple Bottom Line Approach. By integrating these measures, the hotels aim to reduce their environmental impact and enhance overall operational efficiency.

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## Section 2. Challenges faced by the DOT-Accredited Hotels in implementing Sustainable Practices

### Environmental Conservation

#### Challenges faced by the Hotels in adopting Sustainable Practices

Implementing sustainable practices is essential for the long-term success and environmental responsibility of hotels. The successful integration of these practices not only reduces the environmental footprint but also enhances the overall tourist experience and brand reputation. (Bote, 2021). However, challenges are inevitable in this process. DOT-accredited hotels face several hurdles, especially in the conservation of energy and the adoption of eco-friendly technologies, which often require significant financial investments.

One of the primary challenges in implementing sustainable practices in hotels is the conservation of energy. As two Informants from H1 mentioned, "*Siguro sa pag-conserve ng electricity since our hotel is open twenty-four-seven (24/7), syempre there's a need na 24/7 din open yung iba nating lights for example dito sa frontdesk.*" ("Maybe in conserving electricity since our hotel is open twenty-four seven (24/7), of course, there's a need that 24/7 also open the other lights for example here at the front desk.") The operational dynamics of hotels, with their constant activity and round-the-clock guest services, create a fundamental reliance on continuous lighting and equipment usage, particularly in essential areas like the front desk. This operational continuity is essential as it directly contributes to guest comfort, safety, and the seamless delivery of services. Guests expect a high level of service accessibility and responsiveness at any time of the day or night, making uninterrupted operations a critical aspect of hotel management.

However, this operational necessity poses a significant challenge when it comes to traditional energy conservation methods. Practices like turning off lights during non-peak hours or powering down equipment when not in use are foundational strategies for reducing energy consumption. Yet, in the context of hotels, where operational continuity is paramount, these methods can be difficult to implement effectively.

Despite being one of the simplest and easiest ways to implement sustainable practices, waste management can still be a challenge for many hotels. As one informant from H2 mentioned, "*Waste reduction is one of the most important impossible things to do.*" waste generation is a constant issue that requires continuous attention and effort. Hotels deal with various types of waste daily, from food scraps to packaging materials and even hazardous waste. The constantly changing nature of guests also means that educating them and encouraging sustainable practices must be an ongoing effort. Therefore, while the principles of waste management might be straightforward, the practical application can be complex and demanding.

These challenges are similar to the study conducted by Okumus (2015), which clarifies the noteworthy obstacles that hotels face while attempting to incorporate sustainable practices, with particular attention paid to energy reduction and trash management. While there is a great desire to embrace sustainable practices, the research, which surveyed several hotel managers, revealed that significant obstacles include the necessity for continuous operation and financial limits. To ensure the comfort and safety of guests, hotels operate around the clock, making it challenging to implement energy-saving measures like lowering lighting usage. The report also highlights the fact that waste management is still a problem because of the variety of waste products produced and the continuous need to teach temporary visitors about sustainable practices.

### Social Responsibility

#### Challenges faced by the Hotels in maintaining Sustainable Practices

Processing, another significant challenge in the hotel, as mentioned by the informant from H2, is "*We are practicing yung green practices, dapat eco-friendly tayo, and we have to deal with government agencies just like DENR. Nahihirapan kami sa process.*" ("We are practicing the green practices, should be eco-friendly, and we have to deal with government agencies like DENR. We are having difficulty with the process.") This statement highlights the hotel's efforts to adopt green practices and eco-friendly policies while also facing the complexities of interacting with government agencies such as DENR. The phrase "*Nahihirapan kami sa process*" ("We are having difficulty with the process") suggests they are experiencing difficulties in navigating regulatory procedures and compliance requirements. This challenge underscores the importance of effectively managing regulatory interactions and implementing sustainable practices within the hotel industry.

H2 Manager stated, "*Kung meron man mga minor accidents are we have to make sure our staffs were trained*" ("If there are any minor accidents, we have to make sure our staff are trained") highlights a challenge the hotel faces in managing minor accidents. This challenge underscores the importance of having well-trained staff to handle such situations effectively. The hotel's commitment to staff training reflects its broader social responsibility, ensuring that employees are equipped to maintain safety and provide a secure environment for guests. By prioritizing comprehensive training, the hotel not only mitigates the impact of accidents but also demonstrates its dedication to guest welfare and ethical standards. This proactive approach reinforces the hotel's reputation and aligns with its responsibility to uphold high safety and service standards.

H2 Manager's answer, "I am an Ifugao and etong mga kasama ko Ilocano" ("I am Ifugao, and my co-workers are Ilocano.") illustrates the diversity within the hotel's staff, emphasizing the ethnic differences among team members. The informant added that such diversity can sometimes lead to challenges related to discrimination. However, the hotel is committed to addressing these issues by fostering an inclusive environment where all staff members' contributions are valued and respected. In relation to discrimination, the H2 manager mentioned, "*Meron din tayong mga staff na undergrad ng elementary and college lalo na yung mga maintenance personnel*" ("We also have staff who are undergrad of elementary and college, especially the maintenance personnel") which highlights the varied educational backgrounds of the staff, including those with only elementary or partial college education, particularly among maintenance personnel. Despite these differences, the hotel actively works to ensure that appreciation for each staff member's effort serves as a solution to mitigate any potential discrimination, promoting a cohesive and supportive work environment.

Similarly, the study of Jones et al. (2014) showed the relevance of the difficulties hotels face in upholding sustainable policies. They discovered that hoteliers frequently have difficulties in navigating disparate regional rules and norms, making regulatory compliance a major obstacle. The report also emphasizes how important employee participation and training are to the successful adoption of sustainable practices. This supports conclusions on the significance of training and the difficulties posed by regulations. A well-trained crew and skillful interaction with regulations are two ways that hotels can improve their sustainability efforts.

## **Economic Viability**

### **Lack of Resources as a Challenge**

Despite the evident benefits and growing imperative for sustainable practices within the hospitality industry, both hotels encountered a significant challenge in ensuring the consistent implementation of such initiatives by their staff. Three Informants from H1 and two from H2 mentioned, "*Lack of awareness and education ang isa sa aming challenges dahil hindi lahat ng staffs ay may kaalaman sa konsepto ng sustainle practices*" ("Lack of awareness and education is one of our challenges because not all staff know the concept of sustainable practices") While hotel management may develop comprehensive sustainability policies and procedures, translating these directives into daily operations requires the cooperation and engagement of frontline staff across various departments.

Another significant challenge highlighted by two Informants from H2 is the implementation of eco-friendly technologies and practices. "*Pagpapatupad ng eco-friendly na mga technologies and practices since there's really a required investment,*" they said ("Implementation of eco-friendly technologies and practices since there's really a required investment"). Transitioning to sustainable technologies, such as installing solar panels or transitioning to energy-efficient appliances, demands substantial upfront investment. According to a study on the sustainability of services (Volpi & Paulino, 2018), the resources needed to provide services, including the materials utilized and produced, must satisfy visitor demands. This emphasizes that to meet visitor demands, the resources and materials used in providing services must be carefully managed.

The dilemma of balancing sustainability goals with economic realities is a recurring theme in the hospitality sector. While hotels recognize the long-term benefits of adopting sustainable practices, such as cost savings, enhanced brand reputation, and reduced environmental impact, the upfront investment required for eco-friendly upgrades can be daunting.

For example, the installation of solar panels, a popular eco-friendly measure, demands a significant initial investment encompassing equipment costs, installation expenses, and regulatory compliance. This financial

outlay can strain the budget of many hotels, particularly smaller establishments or those operating in competitive markets with narrow profit margins.

One perception challenge, if not addressed, can adversely affect the hotel's economic viability by potentially decreasing occupancy rates and revenue. H2 Manager stated, "*Hindi namin maiwasan na mejo pangit yung naging impression nila sa staff*" ("We can't avoid that their impression of the staff was somewhat bad.") reflects a challenge that the hotel faces regarding the perception of guests to their operations. This issue is significant as it directly impacts customer satisfaction and the hotel's reputation. Poor impressions of staff can lead to diminished guest experiences, which in turn may result in negative reviews and reduced repeat business. Addressing staff-related issues and improving guest perceptions are crucial for maintaining a positive brand image and ensuring sustained financial performance.

In connection, the study of Tanveer et al. (2024) emphasized the difficulties and obstacles that the hospitality sector faces while implementing eco-friendly methods. It focuses, in particular, on the financial limitations and cost concerns that upper management must deal with. This study highlights that even if sustainable practices have long-term advantages, hotels, particularly smaller ones, may find it difficult to afford the initial costs of eco-friendly technologies like solar panels and energy-efficient appliances. In order to overcome these obstacles, it is advised that ongoing training programs be implemented to improve awareness and competencies at all levels.

**Table 3** Challenges Encountered by the DOT-Hotels in Bayombong Nueva, Vizcaya

	Perceived Challenges by the Hotels	Hotel 1	Hotel 2
Environmental Conservation	Energy conservation due to the continuous 24/7 operation of the Hotel	✓	
	Waste Reduction's practical application can be complex and demanding.		✓
Social Responsibility	Issue of Discrimination that can arise from diversity		✓
	Maintaining Consistent Implementation of Sustainable Practices by Hotel Staff	✓	✓
	Difficulties in processing regulatory procedures and compliance requirements.		✓
	Poor impressions of staff that lead to diminished guest experiences		✓
Economic Viability	Implementing eco-friendly technologies and practices due to the required investment	✓	✓

This table presents a summary of the Perceived Challenges by the Hotels, which are DOT-accredited hotels in Bayombong, Nueva Vizcaya. The table categorizes the challenges into three main areas: Environmental Conservation, Social Responsibility, and Economic Viability.

### Section 3. Propose Recommendations on Sustainable Practices for Accommodation Facilities

To address the challenges faced by DOT-accredited hotels in implementing sustainable practices, a comprehensive approach that encompasses environmental, social, and economic dimensions is essential. By adopting and integrating sustainable practices, hotels can minimize not only their environmental impact but also their reputation, operational efficiency, and guest satisfaction. The following recommendations provide a roadmap for hotels to achieve these goals.



## Environmental Conservation

**Energy Efficiency:** Investment in Energy-Efficient Technologies Accommodation facilities should prioritize adopting energy-efficient technologies to reduce energy consumption and operational costs. Practical measures include installing LED lighting throughout the property, upgrading to energy-efficient windows, and using programmable thermostats for heating and cooling. For facilities in areas with frequent power interruptions, incorporating solar-powered backup lighting or small generators can ensure consistent energy availability while supporting sustainability goals.

**Renewable Energy:** Adoption of Renewable Energy Sources Integrating renewable energy sources can significantly reduce reliance on conventional energy and lower utility costs. Installing solar panels is a cost-effective and practical solution, particularly in regions with ample sunlight. Exploring local government incentives or subsidies can help offset initial investment costs. Additionally, where feasible, small-scale wind turbines or biogas systems can further enhance energy sustainability and contribute to the facility's long-term environmental and economic benefits.

**Waste Management:** Enhancement of Waste Management Systems Effective waste management can be achieved by implementing a waste segregation system with separate bins for recyclables, compostables, and general waste. Partnering with local recycling centers and composting facilities can ensure proper waste processing. Reducing food waste through portion control and collaborating with local entities to compost organic waste can further support sustainable practices. Educating staff and guests about waste reduction and proper disposal methods can enhance participation and effectiveness.

**Sustainability Engagement:** Promotion of Sustainable Practices Among Staff and Guests Engaging staff and guests in sustainable practices is crucial for achieving overall sustainability goals. Staff training should focus on practical daily actions such as energy conservation, waste reduction, and efficient resource use. Encouraging staff to integrate these practices into their routines can improve the facility's sustainability performance. For guests, clear communication on how they can contribute—such as reusing towels, minimizing water use, and participating in recycling programs—can foster a cooperative approach to sustainability. Simple, effective communication strategies like signage and informational brochures can support these efforts. By focusing on these areas: energy efficiency, renewable energy, waste management, and sustainability engagement, accommodation facilities can implement effective and realistic sustainable practices that enhance both environmental responsibility and operational efficiency.

## Social Responsibility

**Regulatory Compliance:** Streamlining Regulatory Interactions H1 and H2 face challenges in navigating regulatory requirements, particularly with green practices and interactions with agencies such as the DENR. To address this, both hotels should establish clear communication channels with regulatory bodies and consider consulting with experts on compliance issues. Simplifying internal procedures and staying updated on regulatory changes can help manage these challenges more effectively.

## Training Needs Analysis

Before implementing the "Staff Training and Safety: Enhancing Staff Training" program, management must conduct a comprehensive Training Needs Analysis (TNA). This analysis should begin with clearly defined objectives aimed at improving staff competence in managing minor accidents and ensuring guest safety through regular training programs and safety drills. Management should assess current training practices to identify strengths, weaknesses, and gaps, particularly in safety protocols and emergency response procedures. Conducting a thorough skills gap analysis, knowledge assessment, and behavioral evaluation will pinpoint specific training needs. Based on these findings, appropriate training methods and resources should be selected, ensuring they align with the identified needs and learning outcomes. Establishing evaluation criteria, a clear implementation plan, and a commitment to continuous improvement will help ensure the training program effectively enhances staff readiness and reinforces the hotel's dedication to high safety and ethical standards.

**Staff Training and Safety:** Enhancing Staff Training For both H1 and H2, comprehensive staff training is essential for managing minor accidents and ensuring overall safety. Implementing regular training programs

and safety drills will prepare staff for emergencies and enhance guest safety. This commitment to training will not only mitigate risks but also highlight the hotels' dedication to high safety and ethical standards.

**Diversity and Inclusion:** Promoting Inclusivity H1 and H2 should focus on managing staff diversity and preventing discrimination. Both hotels can benefit from promoting an inclusive work environment through diversity training and robust anti-discrimination policies. Recognizing and valuing the diverse contributions of all staff members will foster a supportive and respectful workplace.

**Valuing Varied Educational Backgrounds:** Supporting Equal Opportunities H1 and H2 should acknowledge and support staff members regardless of their educational backgrounds. Providing opportunities for professional development and career advancement can help address educational disparities and support staff growth. This approach will promote fairness and align with the hotels' social responsibility objectives. By focusing on these recommendations—regulatory compliance, staff training, diversity and inclusion, and equal opportunities—H1 and H2 can enhance their social responsibility efforts practically and effectively.

### **Economic Viability**

**Staff Awareness and Engagement:** Enhancing Staff Education on Sustainability H1 and H2 need to improve staff awareness of sustainable practices. To address this, both hotels should implement regular training sessions focused on sustainability. This will ensure that all staff understand and apply these practices in their daily work, helping to integrate sustainability into operations effectively.

**Investment in Eco-Friendly Technologies:** Managing Upfront Costs The initial cost of eco-friendly technologies, like solar panels, can be high. H1 and H2 should explore financial incentives or subsidies available for such investments. Additionally, a phased approach to implementing these technologies can help spread costs over time and demonstrate long-term savings and benefits.

**Balancing Sustainability and Budget:** Incremental Improvements Balancing sustainability with economic constraints is crucial. Both hotels should prioritize small, cost-effective upgrades that provide immediate savings, such as energy-efficient lighting. Gradual improvements can reduce financial strain while progressively enhancing sustainability.

**Improving Guest Perception:** Enhancing Service Quality Addressing negative guest perceptions is vital for maintaining economic viability. H1 and H2 should focus on improving staff training and customer service to enhance guest experiences. Positive reviews and repeat business are essential for financial stability, so addressing service issues promptly will help maintain a strong reputation. By focusing on these areas—staff training, managing technology costs, incremental upgrades, and improving guest perceptions—H1 and H2 can enhance their economic viability while advancing their sustainability goals.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

Based on the findings, the following conclusions were made:

The sustainable practices in DOT-accredited hotels in Bayombong, Nueva Vizcaya, include efforts in environmental conservation, social responsibility, and economic viability. These hotels demonstrate a commitment to sustainability through various eco-friendly measures despite not fully implementing all possible practices.

The hotels face significant challenges in implementing sustainable practices, including financial constraints, lack of technological infrastructure, limited staff training, and the complexity of integrating eco-friendly measures into existing operations. These obstacles hinder their progress in achieving full sustainability.

To overcome these challenges and enhance sustainability, hotels should strategically plan and invest in energy-efficient technologies, comprehensive waste management programs, and water-saving measures. Implementing regular staff training on sustainability and environmental awareness is essential. Prioritizing customer satisfaction and responsible financial practices will ensure long-term success and set a benchmark for excellence in the hospitality sector.

## Recommendations

### Environmental Conservation

H1 and H2 should prioritize adopting energy-efficient technologies to reduce energy consumption and operational costs. Practical measures include installing LED lighting throughout the property, upgrading to energy-efficient windows, and using programmable thermostats for heating and cooling.

Integrating renewable energy sources for H1 and H2 can significantly reduce reliance on lower utility costs. Installing solar panels for H1 is a cost-effective and practical solution, particularly in regions with ample sunlight. Exploring local government incentives or subsidies can help offset initial investment costs for both H1 and H2.

Partnering with local recycling centers and composting facilities can ensure proper waste processing for H2. Educating staff and guests about waste reduction and proper disposal methods can enhance participation and effectiveness for both H1 and H2.

Staff training for both H1 and H2 should focus on practical daily actions such as energy conservation, waste reduction, and efficient resource use. Encouraging staff to integrate these practices into their routines can improve the facility's sustainability performance. H1 and H2 should also remind their guests of clear communication on how they can contribute—such as reusing towels, minimizing water use, and participating in recycling programs. Simple, effective communication strategies like signage and informational brochures can support these efforts.

### Social Responsibility

H1 and H2 face challenges in navigating regulatory requirements, particularly with green practices and interactions with agencies such as the DENR. Simplifying internal procedures and staying updated on regulatory changes can help manage these challenges more effectively.

The management of H1 and H2 should assess current training practices to identify strengths, weaknesses, and gaps, particularly in safety protocols and emergency response procedures.

For both H1 and H2, comprehensive staff training is essential for managing minor accidents and ensuring overall safety. Implementing regular training programs and safety drills will prepare staff for emergencies and enhance guest safety.

### Economic Viability

H1 and H2 need to improve staff awareness of sustainable practices. To address this, both hotels should implement regular training sessions focused on sustainability.

The initial cost of eco-friendly technologies, like solar panels, can be high. H1 should explore financial incentives or subsidies available for such investments. A phased approach to implementing these technologies can help spread costs over time and demonstrate long-term savings and benefits.

Both hotels should prioritize small, cost-effective upgrades that provide immediate savings, such as energy-efficient lighting. Gradual improvements can reduce financial strain while progressively enhancing sustainability.

H1 and H2 should focus on improving staff training and customer service to enhance guest experiences. Positive reviews and repeat business are essential for financial stability, so addressing service issues promptly will help maintain a strong reputation.

The Local Government Unit (LGU) and the Department of Tourism (DOT) can utilize this research paper as a foundational reference to develop and implement sustainable practices for hotels within the province. By integrating the insights and recommendations provided in this study, they can ensure that the hospitality industry not only thrives economically but also operates in an environmentally responsible manner, thereby promoting long-term sustainability and ecological balance in the region.

For future research, it is recommended to expand the sample size by including more DOT-accredited hotels from various regions to improve the generalizability of the results. Incorporating quantitative data, such as metrics on the effectiveness and impact of sustainable practices, could provide more comprehensive insights. Additionally, involving perspectives from guests and community members would further enrich the study's findings.

## REFERENCES

1. Abdou, A. H., Hassan, T. H., & El Dief, M. M. (2020). A description of green hotel practices and their role in achieving sustainable development. *Sustainability*, 12(22), 9624. <https://doi.org/10.3390/su12229624>
2. Alhaddi, H. (2015). Triple bottom line and sustainability: A literature review. *Business and Management Studies*, 1(2), 6. <https://doi.org/10.11114/bms.v1i2.752>
3. Arcadio, R. G. (2024, January 16). 19 Best eco-friendly resorts in the Philippines: sustainable hotels, beach resorts, farm stays. *Guide to the Philippines*. <https://guidetothephilippines.ph/articles/ultimate-guides/eco-friendly-resorts-Philippines>
4. ASEAN Secretariat. (2011-2015). ASEAN Tourism Strategic Plan. <https://asean.org/asean/asean-tourism-strategic-plan/>
5. Asia, T. (2023, December 11). Parkroyal Collection Marina Bay, Singapore redefines green hospitality | TTG Asia. <https://www.ttgasia.com/2023/12/11/parkroyal-collection-marina-bay-singapore-redefines-green-hospitality/>
6. Bote, J. A. (2021). Tourism accreditation in the Philippines: Government and private sector perspectives. *ResearchGate*.
7. Caulfield, J. (2023, June 22). How to do thematic analysis | Step-by-Step Guide & Examples. *Scribbr*. <https://www.scribbr.com/methodology/thematicanalysis/>
8. Çelik, M. N., & Cevirgen, A. (2021). The role of accommodation enterprises in the development of sustainable tourism. *Journal of Tourism and Services*, 12(23), 181–198.
9. Cruz, R. (2016). *Tourism Impacts and Sustainability*. REX Book Store. Manila.
10. Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.
11. Chan, L., & Smith, J. (2021). Sustainability practices in the hotel and resort industry: A comprehensive review. *Journal of Sustainable Tourism*, 30(5), 701-718.
12. Della Volpi, Y., & Paulino, S. R. (2018). The sustainability of services: Considerations on the materiality of accommodation services from the concept of life cycle thinking. *Journal of Cleaner Production*, 192, 327–334.
13. Dodds, R., & Butler, R. (2019). The phenomena of overtourism: A review. *International Journal of Tourism Cities*, 5(4), 519–528.
14. Doe, J. A. (2023). A review of environmental initiatives: Impacts and challenges. *Environmental Research Journal*, 45(3), 267-289. DOI:10.1234/erj.2023.45.3.267
15. Dolezal, C., Trupp, A., & Bui, H. T. (Eds.). (2020). *Tourism and development in Southeast Asia*. Routledge.
16. Department of Tourism. (2012). Administrative Order No. 2012-002: Rules and regulations to govern the accreditation of tourism enterprises and services. <https://beta.tourism.gov.ph/accreditations/>
17. Đurić, Z., & Topler, J. P. (2021). The role of performance and environmental sustainability indicators in hotel competitiveness. *Sustainability*, 13(12), 6574
18. Edu, L. (2022, November 21). Environmental conservation: Definition, importance, UPSC | Leverage Edu. <https://leverageedu.com/blog/environmental-conservation/>
19. Enz, C. A., & Sigauw, J. A. (2003). Customer satisfaction and economic performance in the hotel industry. *Journal of Hospitality & Tourism Research*, 27(3), 370-379. <https://doi.org/10.1177/10963480030273006>
20. EU Ecolabel - Home. (n.d.). *Environment*.
21. European Commission. (2021). The EU ecolabel for printed paper, stationery paper and paper carrier bags. <https://op.europa.eu/en/publication-detail/-/publication/65ca8a1a-6f3e-11eb-aeb5-01aa75ed71a1>
22. Font, X., & Garau, J. (2021). Sustainable practices in hospitality and tourism: A review of the literature. *Sustainability*, 13(6), 3164. <https://doi.org/10.3390/su13063164>



23. González, M. E., & González, A. (2018). Sustainability in the hospitality industry: A systematic review of the literature. *Sustainability*, 10(6), 2158. <https://doi.org/10.3390/su10062158>
24. Han, H., & Lee, S. (2017). Guest perceptions and engagement with hotel sustainability initiatives. *International Journal of Hospitality Management*, 62, 67-75. <https://doi.org/10.1016/j.ijhm.2016.11.007>
25. HiltonHotelsManilaPhilippines-FindHotels-Hilton(2024) [https://www.hilton.com/en/locations/philippines/manila/hilton-hotels/?fbclid=IwZXh0bgNhZW0CMTAAAR0ZxF3CWmovHomImEgE3n5hp-/XAX2UAmnB8So\\_KAWgCS2u2veeqRWsTC3E\\_aem\\_Y1Fs75d4jdrk23isIhdGw](https://www.hilton.com/en/locations/philippines/manila/hilton-hotels/?fbclid=IwZXh0bgNhZW0CMTAAAR0ZxF3CWmovHomImEgE3n5hp-/XAX2UAmnB8So_KAWgCS2u2veeqRWsTC3E_aem_Y1Fs75d4jdrk23isIhdGw)
26. Ho, E., Liu, J., & Kim, S. S. (2021). The impact of hotel corporate social responsibility on employee work engagement and turnover intention during COVID-19 recovery: The mediating role of CSR motives. *International Journal of Hospitality Management*, 95, 102959. <https://doi.org/10.1016/j.ijhm.2021.102959>
27. Hotels, E. (2021). The 10 most sustainable hotels in the Philippines. *ETIC Hotels Journal*. <https://etichotels.com/journal/the-10-most-sustainable-hotels-in-the-philippines/>
28. Hurchalla, A. (2023, June 13). Sustainability in the hospitality industry - Evolution Sustainability Group. Evolution Sustainability Group. <https://evolutionsg.com/sustainability-in-the-hospitality-industry/>
29. IEA (2022), Energy Efficiency 2022, IEA, Paris <https://www.iea.org/reports/energy-efficiency-2022>, Licence: CC BY 4.0
30. International Tourism Highlights (2019). <https://doi.org/10.18111/9789284421152> Jamal, T., & Lombardo, R. (2016). Community engagement strategies in the hospitality industry. *Journal of Hospitality and Tourism Management*, 29, 168-180. <https://doi.org/10.1016/j.jhtm.2016.07.002>
31. Jo. (2022, December 2). Sustainability in hospitality: How industry leaders can help | UCF Online. UCF Online. <https://www.ucf.edu/online/hospitality/news/sustainability-in-hospitality-why-it-is-important-and-how-industry-leaders-can-help/>
32. Johnson, D., Wilson, M., & Brown, A. (2017). Waste management and recycling programs: A review of impacts. *Environmental Science & Technology*, 40(4), 421-438
33. Johnson, S. (2018). *Tourism policy and planning: Yesterday, today, and tomorrow*. Routledge.
34. Jones, P., Hillier, D., & Comfort, D. (2014). Sustainability in the global hotel industry. *International Journal of Contemporary Hospitality Management*, 26(1), 5–17. <https://doi.org/10.1108/ijchm-10-2012-0180>
35. Kalargyrou, V., & Costen, W. M. (2017). Diversity management research in hospitality and tourism: Past, present and future. *International Journal of Contemporary Hospitality Management*, 29(1), 68–114. <https://doi.org/10.1108/ijchm-09-2015-0470>
36. Lawson, E. (2023). Effective methods of waste management in the hotel industry and why it's important. eXceedGlobalLearningPty Limited. <https://insights.ehotelier.com/insights/2023/01/20/effective-methods-of-waste-management-in-the-hotel-industry-and-why-its-important/>
37. López-Bernabé, E., Foudi, S., Llamas, P. L., & Galarraga, I. (2021). Factors affecting energy-efficiency investment in the hotel industry: survey results from Spain. *Energy Efficiency*, 14(4). <https://doi.org/10.1007/s12053-021-09936-1>
38. Kim, S., Park, E., & Wen, J. (2015). "The Role of Hospitality in Promoting Sustainable Tourism: A Study of Guest Engagement and Environmental Education in Hotels." *Journal of Sustainable Tourism*, 23(5), 743-764.
39. Kularatne, T., Wilson, C., Månsson, J., Hoang, V., & Lee, B. (2019). Do environmentally sustainable practices make hotels more efficient? A study of major hotels in Sri Lanka. *Tourism Management*, 71, 213-225.
40. Maches, D. (2020, October 31). 21+ Nueva Vizcaya Tourist Spot (UPDATED): Best places to see, things to do. Daniel's Eco-Travels.
41. Mariani, J. (2022). How sustainability has become a marketing necessity in luxury hotels. *forbes*.
42. Manzoor, F., Wei, L., Asif, M., Haq, M. Z. U., & Rehman, H. U. (2019). The contribution of sustainable tourism to economic growth and employment in Pakistan. *International Journal of Environmental Research and Public Health*, 16(19), 3785.

43. Moise, M. S., Saura, I. G., & Molina, M. E. R. (2021). The importance of green practices for hotel guests: does gender matter *Ekonomiska Istrazivanja-economic Research*, 34(1), 3508–3529
44. Morrison, Aalastair M. (2016). Hospitality and travel marketing. <https://doi.org/10.4324/9781003292616>
45. Mucci, D. M., Jorissen, A., Frezatti, F., & De Souza Bido, D. (2021). Managerial controls in private family firms: the influence of a family's decision premises. *Sustainability*, 13(4), 2158. <https://doi.org/10.3390/su13042158>
46. Musandu, N. (2020, July 20). How to write actionable policy recommendations - Research to Action. *Research to Action*. <https://www.researchtoaction.org/2013/07/how-to-write-actionable-policy-recommendations/>
47. Necati, H., Kozak, M., & Okumus, F. (2021). Sustainable tourism development: A case study of Turkey. *Journal of Hospitality and Tourism Management*, 46, 1-11.
48. Nyahunzvi, D. K. (2013). CSR reporting among Zimbabwe's hotel groups: A content analysis. *International Journal of Contemporary Hospitality Management*, 25(4), 595-613.
49. O'Halloran, R. M. (2023). Accommodation: Tourism. In Springer eBooks (pp. 1–3). [https://doi.org/10.1007/978-3-319-01669-6\\_2-2](https://doi.org/10.1007/978-3-319-01669-6_2-2)
50. Ohlan, R., & Ramphul, (2023). Measuring energy efficiency in hotel industry: The case of India. *Journal of Hospitality Financial Management*, 31(1), Article 3. <http://dx.doi.org/10.7275/8q4h-je80>
51. Okumus, F. (2015). Editorial. *International Journal of Contemporary Hospitality Management*, 27(3). <https://doi.org/10.1108/ijchm-02-2015-0077>
52. Oteyza, J., Varazzani, C., Sullivan-Paul, M., & Tuomaila, H. (2023). Behavioural science for sustainable tourism: Insights and policy considerations for greener tourism. *OECD Working Papers on Public Governance*. <https://doi.org/10.1787/c2ec4fcf-en>
53. Pereira, V. M. D., Silva, G. M., & Dias, Á. (2021). Sustainability practices in hospitality: case study of aluxury hotel in Arrábida Natural Park. *Sustainability*, 13(6), 3164. <https://doi.org/10.3390/su13063164>
54. Phu, S. T. P., Giang, H. M., & Fujiwara, T. (2018b). Analyzing solid waste management practices for the hotel industry. *Global Journal of Environmental Science and Management*, 4(1), 19–30. <https://doi.org/10.22034/gjesm.2018.04.01.003>
55. Planken, B. (2013). Definitions of Social Responsibility. In: Idowu, S.O., Capaldi, N., Zu, L., Gupta, A.D. (eds) *Encyclopedia of Corporate Social Responsibility*. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-642-28036-8\\_476](https://doi.org/10.1007/978-3-642-28036-8_476)
56. Plasencia, J. (2023). 5 Effective strategies for sustainable hotels to attract eco-conscious travelers and promote responsible tourism
57. Politz, D. (2023). Inductive content analysis & deductive content analysis in qualitative research. <https://delvetool.com/blog/inductive-content-analysis-deductive-content-analysis>
58. Radwan, H. R. I., Jones, E., & Minoli, D. (2011). Solid waste management in small hotels: A comparison of green and non-green small hotels in Wales. *Journal of Sustainable Tourism*, 20(4), 533–550. <https://doi.org/10.1080/09669582.2011.621539>
59. Sarkis, J., Cohen, M. J., Dewick, P. M., & Schröder, P. (2020). A brave new world: Lessons from the COVID-19 pandemic for transitioning to sustainable supply and production. *Resources Conservation and Recycling*, 159, 104894. <https://doi.org/10.1016/j.resconrec.2020.104894>
60. Sarode, S. (2022). Importance of sustainability in the hotel industry. *Expert Journal of Business and Management*, 10(1), 234-245. <https://doi.org/10.53486/23446781.1116>
61. Sakshi, Shashi, Cerchione, R., & Bansal, H. (2019). Measuring the impact of sustainability policy and practices in tourism and hospitality industry. *Business Strategy and the Environment*, 29(3), 1109-1126. <https://doi.org/10.1002/bse.2420>
62. Santiago, D. E., & Esther, D. (2021). Energy use in hotels: A case study in GranCanaria. *International Journal of Low-carbon Technologies*, 16(4), 12641276. <https://doi.org/10.1093/ijlct/ctab048>
63. Smith, C., Wang, Q., & Chen, L. (2020). Renewable energy adoption: A review of environmental impacts. *Renewable Energy Journal*, 25(3), 189-208.
64. Sustainability at SHATEC - SHATEC. (2023, July 11). SHATEC.
65. Tanveer, M. I., Yusliza, M. Y., & Fawehinmi, O. (2023). Green HRM and hospitality industry: challenges and barriers in adopting environmentally friendly practices. *Journal of Hospitality and Tourism Insights*, 7(1), 121–141. <https://doi.org/10.1108/jhti-08-2022-0389>

66. The Ritz-Carlton - Luxury Hotels & Resorts. (2022). <http://ritzcarlton.com/>
67. Tjebane, M. M., Musonda, I., Onososen, A., & Ramabodu, M. (2023). Challenges for the implementation of sustainable construction practices in developing Countries: A bibliometric review. *Lecture Notes in Civil Engineering*, 109–123. [https://doi.org/10.1007/978-3-031-32515-1\\_9](https://doi.org/10.1007/978-3-031-32515-1_9)
68. Tseng, M., Chang, C., Lin, C., Wu, K., Chen, Q., Xia, L., & Xue, B. (2020). Future trends and guidance for the triple bottom line and sustainability: A data-driven bibliometric analysis. *Environmental Science and Pollution Research*, 27(27), 33543–33567. <https://doi.org/10.1007/s11356-020-09284-0>
69. Varsei, M., Soosay, C., Fahimnia, B., & Sarkis, J. (2014). Framing sustainability performance of supply chains with multidimensional indicators. *Supply Chain Management*, 19(3), 242–257.
70. Volpi, M., & Paulino, M. (2018). The relationship between services and the environment develops from material sources and takes on environmental manifestations during various phases of the product life cycle. In C. M. R. Kotha (Ed.), *Sustainable services management: Theories, methods, and cases* (pp. 1-14). Springer.
71. Wingate, T. G., Jones, S. K., Khakhar, M. K., & Bourdage, J. S. (2021). Speaking of allergies: Communication challenges for restaurant staff and customers. *International Journal of Hospitality Management*, 96, 102959. <https://doi.org/10.1016/j.ijhm.2021.102959>
72. World Bank. (2022). *Assessing Project Feasibility and Economic Viability*. Public-Private Partnership Legal Resource Center. [https://ppp.worldbank.org/public-private-partnership/assessing-project-feasibility-and-economic-viability\[1\]](https://ppp.worldbank.org/public-private-partnership/assessing-project-feasibility-and-economic-viability[1])
73. World Tourism Organization. (2018). *Tourism highlights*. [www.worldtourismorganization.org](http://www.worldtourismorganization.org)
74. World Tourism Organization. (2013). Sustainable tourism development: A systematic literature review. *Sustainable Development*, 29(2), 259-271.
75. World Travel & Tourism Council. (2023). *Economic impact*. <https://wttc.org/research/economic-impact>
76. Xie, Kang & Zhang, Lin, (2018). Factors affecting financial performance of hotels: A comprehensive analysis. *Journal of Hospitality and Tourism Management*, 35, 130-139. <https://doi.org/10.1016/j.jhtm.2018.02.002>
77. Zolfaghari, H. (2010). *Tourism climatology*. Tehran, Iran: Agah Publication.