

SUSTAINABLE PRACTICES OF SELECTED RESORTS IN DASMARIÑAS CITY, CAVITE**Deniel M. Barias¹, Jennifer Mae P. Dayacap² and Kyla Marie A. Malabanan³**^{1,2,3,4} De La Salle University - Dasmariñas, Dasmariñas, Philippines¹bariasdeniel@gmail.com, ²dayacapjennifer13@gmail.com and ³kmmlbnn14@gmail.com**ABSTRACT**

Sustainable tourism entails traveling in a manner that takes into account its impact on the economy, society, and the environment, not just in the present but also for the future. In recent years, there has been an increasing emphasis on reducing the environmental impact in the sustainability efforts of Philippine businesses, particularly among large companies involved in significant manufacturing activities that could harm natural resources. Therefore, this research aims to assess whether two resorts in Dasmariñas, Cavite – Tubigan Garden Resort and Coco Valley Richnez Waterpark – have implemented sustainable practices related to saving energy, managing water, and handling waste. The study follows a qualitative approach, using a literature review method, and includes interviews with five managers or employees conducted in a semi-structured manner. The findings indicate that both Tubigan Garden Resort and Coco Valley Richnez Waterpark demonstrate effective and economical practices by using renewable energy, managing waste, and collaborating with local tourism authorities. They prioritize reducing waste and saving energy by employing methods like recycling, waste separation, and utilizing renewable energy sources such as solar power. Communication and networking play essential roles in sharing knowledge and learning about sustainable practices. Policies targeting energy and water conservation engage both guests and employees. Despite challenges such as limited funding and staffing shortages, these initiatives highlight a comprehensive approach to sustainability in the hospitality sector.

Index Terms – Sustainable Practices, Resorts, Sustainable Tourism

INTRODUCTION

Sustainable tourism involves traveling in a manner that considers its effects on the economy, society, and the environment, not only at present but also for the future. The United Nations World Tourism Organization (UNWTO) is actively advocating for tourism that prioritizes the well-being of local communities, the environment, and the economy in equal measure. To make this happen, it requires strong leadership, involvement from everyone, and continuous efforts to monitor and address any negative effects. Sustainable tourism also aims to educate travelers about sustainability and ensure they have a positive and meaningful experience.

Focusing on minimizing environmental impact has become a common trend in Philippine corporate sustainability during the past ten years, particularly among conglomerates and firms whose activities involve large-scale manufacturing that could be destructive to natural resources. Lately, there has been a shift in the practices of smaller enterprises towards embracing business sustainability, as they explore evolving solutions available to them. (YCP Solidiance, 2022)

In the current global landscape, the adoption of sustainable management is increasingly common (Igbinkhase, 2018). Destinations worldwide are proactively developing regulations to align tourism with environmental concerns, reflecting the widespread embrace of sustainability in the face of pressing environmental challenges. Incorporating sustainability and environmentally friendly practices into strategies and daily operations has become commonplace for most businesses today, including those in the tourism industry (Alipoour et al., 2019). The value of the environment has long been acknowledged in the tourism sector. Understanding the significance of the environment is fantastic when taking a vacation in a serene, environmentally friendly location. You can find these eco-resorts in they all have the responsibility of safeguarding the natural environment, whether they are on a beach, in a spring resort, or deep within a forest resources in an effortless manner. The practice of sustainable management is currently considered to be standard globally (Igbinkhase, 2017). As the problem of sustainability and environmental concerns becomes an academic reality, places are getting ready to adopt new legislation in

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order to bring tourism into alignment with the environment via the use of environmentally friendly approaches. The majority of contemporary businesses routinely integrate environmental awareness and "green" policies and practices into their operational plans and processes. This regulation does not provide any exceptions for the tourism business (Alipoour et al., 2019).

The top five environmental issues caused by hotel and resort activities at the moment are as follows: another significant current environmental issues is depletion, which is caused by the release of greenhouse gases, which are to blame for climate change and global warming. Waste disposal: the overuse of waste is being transferred as the result of asset and plastics formation. Developed countries are notorious for providing an over the top less developed and those with the highest level of rubbish or waste dumping in the oceans. Fast food, plastic, wrapping and appropriate electronic waste endanger people's health. One of the current ecological problems is waste transfer. Acknowledgment of the significance of sustainable tourism development is growing within the industry. Nonetheless, numerous organizations have encountered difficulties in effectively incorporating sustainability principles into their management and operational frameworks within the tourism sector. (SolimarInt, November 28, 2018).

RESEARCH GAP

The study aims to investigate whether two resorts in Dasmariñas, Cavite – Tubigan Garden Resort and Coco Valley Richnez Waterpark – have adhered to sustainable practices concerning energy conservation, water conservation, and waste management. This assessment will provide insight into the efficacy of such practices within the tourism sector.

This study aims to determine what type of sustainable practices could enhance the operations of, Tubigan Garden Resort and Coco Valley Richnez Waterpark in Dasmariñas City, Cavite. To understand and analyze how sustainability contributes not just to the establishment background but also to the area that it is located. Environmental relation is the study's objective, to provide sustainable practices that could effectively develop other tourism establishments and share an idea on how and why it is important to have sustainable practices in the developing tourism industry. Hence, this limits the establishments impact to the environmental sector, as they operate with the use of natural sources where they are located, and the impact of those actions to the environment.

STATEMENT OF THE PROBLEM

This study aims to identify if the two selected resort's in Dasmariñas, Cavite namely the Tubigan Garden Resort and Coco Valley Richnez Waterpark followed the sustainable practices in terms of Energy Conservation, Water Conservation, and Waste Management.

- 1) What practices to conserve water, waste and energy do Tubigan Garden Resort and Coco Valley Richnez Waterpark regularly practice?
- 2) What are the rules and regulations implemented by the establishments to support conservation of water, waste and energy in their property?
- 3) What are the challenges that two selected resorts encountered in implementing sustainable practices?

The study is important to the two resorts, which are the Tubigan Garden Resort and Coco Valley Richnez Waterpark in order for them to understand the significance of sustainable practices in their particular resort and to be aware of the fact that such measures will boost the resort's effectiveness and reduce it's running cost. The research is crucial for the visitor's understanding of the value of their own social responsibility to sustainable development as well as their ability to apply sustainability practices in the hospitality sector.

SETTING OF THE STUDY

The setting of this study is two resorts, which are the Tubigan Garden Resort and Coco Vallet Richnez Waterpark. The resort's are located in Dasmariñas City, Cavite. The said resorts are well known in Dasmariñas City, Cavite because of their amenities and both of the resorts are DOT accredited. Since the researchers are from Dasmariñas

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City, Cavite they chose these resorts because the location of the resorts are in Dasmariñas City, Cavite as well. Also, they are often visiting the resorts for leisure purposes.

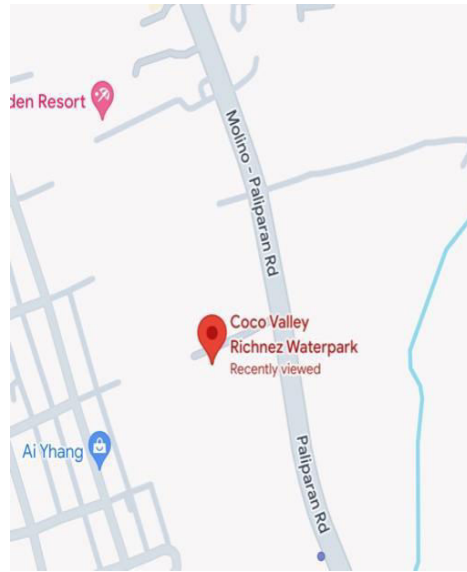


Figure 1. Coco Valley Richnez Waterpark

Coco Valley Richnez Waterpark (Themed Resort) is located at 315 Paliparan 3, Dasmariñas Ciy 4114 Cavite it is open 24 hours and was established in 2014. The Coco Valley Richnez Waterpark is surrounded by local farms which makes the resort a nature destination. The rate for day swimming Monday-Friday is 8 am to 5 pm is 150 pesos and for night swimming from 7 pm to 4:00. Saturday-Sunday is 8 am to 5 pm is 150 pesos and for night swimming from 7 pm to 4:00 am and for Holidays for both day and night swimming the price is 200 persons. The prices may be subject to change without prior notice. They also offer 20% discounts on seniors and PWD. Children below 3ft are free of charge. The resort features a variety of nicely furnished rooms and cottages with sophisticated designs, guaranteeing a pleasant and satisfying experience for visitors. It provides a sizable swimming pool for guests to enjoy a refreshing swim or unwind by the water's edge. Furthermore, there are expansive gardens and outdoor areas ideal for leisurely walks or organizing gatherings and special occasions.



Figure 2. Tubigan Garden Resort

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The Tubigan Garden Resort is in Paliparan III Dasmarinas Cavite and was established on 2015. The Tubigan Garden Resort was well-known. Because of the resort's low prices, it is popular in Dasmarinas. The rates for day swimming were 200 pesos for weekdays from 8:00am to 5:00pm and for weekends and holidays are 250 pesos. The rates for night swimming were 200 pesos for Monday to Thursday and Sunday and 250 pesos for Friday to Saturday and holiday. Adults that are below 3ft are free for the entrance fee. People who have disabilities and seniors have a 20% discount. For the accommodations of the Tubigan Garden Resort they offer a 1,000 pesos cottage to 9,000 pesos for an air conditioned function room that is good for 72 pax.

LITERATURE REVIEW

The findings of this literature review will contribute to the understanding of the current state of sustainable practices within the resort sector in Dasmariñas City. Furthermore, the review will highlight gaps in the existing literature and provide recommendations for future research and practical applications. The ultimate goal is to provide valuable insights that can inform policymakers, resort operators, and other stakeholders in their efforts to promote sustainable and responsible tourism development in Dasmariñas City, Cavite.

Table 1.

Author(s) & Year	Journal	Scope	Main Findings
Alipour, H., Safaeimanesh F., and Soosan, A. (2019)	Investigating Sustainable Practices in Hotel Industry-from Employees' Perspective: Evidence from a Mediterranean Island	The study aims to investigate sustainable practices through Global Sustainable Tourism Council (GSTC) to aim Zero-energy Hotel in Mediterranean Island.	The employees has a big factor in achieving sustainability, the efforts of implementing action of best practices to achieve zero-energy of the hotels in Mediterranean Island.
Abdou, A.H., Hassan, T., and El Dief, M.M. (2020)	A Description of Green Hotel Practices and their role in achieving Sustainable Development International Journal MDPI	The research will examine the viewpoints of environmental management representatives on the degree to which green hotel initiatives contribute to the attainment of sustainable development goals (SDGs) related to the environment.	Hotel operators must effectively integrate green hotel practices into their operational strategies to accomplish the sustainable development goals (SDGs) pertaining to the environment.
Renna, P. and Materi S. (2021)	A literature of Energy efficiency and Sustainability in Manufacturing Systems	The study aims to analyze the CO2 Emission and effects of pollution on the environment. Also focuses on energy efficiency and renewable sources to lessen the cause of global warming.	To lessen the effect or the impact of the CO2 emission, manufacturing system must have an energy efficient approaches to develop energy efficiency and finding renewable sources.

Energy Conservation

The endeavor to decrease inefficient energy usage by utilizing fewer energy resources. This may involve optimizing energy use or modifying behavior to reduce energy consumption.

Water Conservation

Efficient utilization of water resources to minimize unnecessary water consumption. Fresh Water Watch emphasizes the significance of water conservation due to the limited availability and high cost of clean, freshwater resources.

Waste Management

The comprehensive management of waste from its creation to its ultimate disposal. This encompasses various processes and measures aimed at effectively managing waste throughout its lifecycle.

Table 2. This table explains practices that have been implemented by other countries and cities in the Philippines. Strategies that provide an outcome that supports sustainability by doing specific sustainable practices, these results can be used as references of the researchers as they analyze and finalize the respondent's answers.

Author(s) & Year	Journal	Scope	Main Findings
Manalo, J. (2022)	Green Technology and Policies towards Sustainability among selected institutions in the Philippines	The study aims to promote utilization of zero carbon technologies among selected institution in the Philippines.	Companies in the Philippines adopt green practices by implementing the 3R ways Reduce, Reuse, and Recycle which led to promoting sustainability and alternative approach.
Alameeri, A., Ajmal, M., Hussan M., and Helo, P. (2018)	Sustainable Management Practices in UAE Hotels	The study focuses on developing framework for the identification of sustainable management practices in the hotel industry sector.	The employee and government management are the top priority in the criteria for the sustainable management practices. The conclusion of the scope is that the hotels in UAE focuses on economic sustainability.
Asi, L.M. (2019)	Environmental Sustainability plan for resort hotels in CALABARZON, Philippines	The study aims to determine what type of solid waste disposal methods and practices in terms of preservation, conservation, and environmental sanitation. To know the result and differences of solid waste management practices and solid waste management between employees and guests.	Both solid waste management practices of employees according to its type and of guests and employees are significant in environmental sustainability.

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Table 3. This table focuses on different cities in the Philippines that already implements best practices or strategies that support sustainability programs. the purpose of every study helps the researchers to analyze the findings and results of the review-related literature and referring the results in the process of finding the outcome of the paper.

Author(s) & Year	Journal	Scope	Main Findings
Mina, J., Barlis, P., Vega, N., and Subia, G. (2019)	Corporate Social Responsibilities of selected resorts in Cabanatuan City, Nueva Ecija, Philippines	The study aims to test aspects of Corporate Social Responsibility to simply determine what problem that causes resorts in Cabanatuan doing their CSR.	Lack of time and technology advancement that limits the operation of resorts in Cabanatuan, hence it affects the social, ecological and economical aspect. Resorts are recommended to extend its CSR activities.
Malacapay, M. (2020)	The Green Technology Practices and Investments of Sipalay City Beach-Resorts	The study aims to acquire sustainable ecotourism to support green technology Practices and Investment. Managing waste, energy, and water resources	The resort opts for stainless steel utensils as their alternative products to promote eco-friendly practices. Consequently, other initiatives such as water conservation and energy efficiency are overlooked. Thus, the study focuses on the resort's financial investments and returns, as well as the behavior of guests regarding accommodation.
Arcadio, R. G. (2024)	19 Best Eco-Friendly Resorts in the Philippines: sustainable hotels, beach resorts, farm stays	The study aims to asses the best eco friendly resorts in the philippines Practices in which developed beach resorts sustainability and Benefits environment.	Some of the hotels and resorts in the philippines are implementing sustainable practices and programs where tourist and guests are involve. it benefits the beach resorts and specially maintaining the quality of the environment.
Barrios, S., and Yu. (2019)	Paraisong Nawala: Exploring Sustainable Ecotourism in the Philippines	The study examined three destination in the Philippines and its ecotourism aspects to determine how the Philippines benefits for implementing sustainable ecotourism strategies.	The study implies that the Philippines face problems economically and environmentally. Corruption and inhibit places that affect the environmental sector.

CONCEPTUAL FRAMEWORK**Figure1.** Conceptual Framework

The figure above shows the conceptual framework used in the study. The idea begins with sustainable practices, where energy conservation is a strategy that focuses on how to lower a resort's energy use. Water conservation focuses on reducing waste, increasing productivity, and offering further water-saving strategies. Waste management is concerned with lowering the amount of waste produced by hotels and resorts.

METHODOLOGY

This chapter delineates the approach taken by the researchers in acquiring the requisite data and information for the entire study. It outlines the profile of the respondents who form the focal point of the research and elucidates the tools utilized for data collection.

Research Design

The study, titled "Sustainable Practices of Selected Resorts in Dasmariñas City, Cavite," uses a qualitative approach. Qualitative research, as explained by Busetto, Wick, and Gumbinge (2020), focuses on understanding the nature of phenomena. It's particularly useful for exploring why certain things happen or don't happen, evaluating complex interventions, and improving interventions.

Furthermore, the study follows a case study format, defined by Cherry (2020) as a detailed examination of an individual, group, or event. Case studies are used in various fields like psychology, medicine, education, anthropology, political science, and social work.

Research Participants and Sampling Method

The population of interest for this study are the managers and employees of "Tubigan Garden Resort and Coco Valley Richnez Waterpark". The number of participants the researchers aim to interview is five (5) which will give them ample information and relevant data for them to acquire good results. The chosen respondents are from the manager and employees of "Tubigan Garden Resort and Coco Valley Richnez Waterpark" in Dasmariñas City, Cavite.

Data Gathering Instrument

The researchers will employ a semi-structured interview format, incorporating a predefined set of open-ended questions along with the flexibility for interviewees to delve deeper into specific themes or responses. This approach enables researchers to gain a nuanced understanding and generate meaningful outcomes. The researchers will also be using a voice recorder or video in order to avoid missing the smallest detail that is valid and important to the study. With the use of this, the researchers will give the study concrete. After we get the important information for the study we will transcribe everything that our respondents said and all information shared during the research interview, including personal experiences, opinions, and any other sensitive data, shall be treated with the utmost confidentiality and will only be used for educational purposes to achieve the paper's purpose. Lastly, it will also act as an evidence that the study once existed and was done.

Data Gathering Procedure

The researchers yield to find sources that would answer all the problems that the study is facing. In order to array that the sources and information needed is vivid and accurate, the researchers have prepared set of questions to be evaluated by our adviser. The researchers will do a one-on-one interview with their respondents because it is more efficient and convenient to the chosen respondents. The questionnaire will orally ask during the interview and the

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researchers will use a voice recorder or video recording in order for them to meet the needs for the interview and acquire good results. After recording the interview process, we will transcribe the output so we do not miss a piece of detailed information about the respondent's answers. This is expected to have a promising, veracious, and precise result. The resorts behind its success, particularly the owner, along with the managers and employees, were asked to answer the questions the researchers prepared.

Ethical Consideration

The researchers emailed a letter to the two resorts which are the Tubigan Garden Resort and Coco Valley Richnez Waterpark and asked their permission in conducting a study with their resort with a research title of "Sustainable Practices of Selected Resorts in Dasmariñas Cavite". In the letter, it is stated there that all the gathered information will be for educational purposes only and all answers will be treated with confidentiality.

RESULTS AND DISCUSSION

The first table of the study discusses the practices to conserve water, waste and energy in the two selected resorts "Tubigan Garden Resort and Coco Valley Richnez Waterpark. Second table is the rules and regulations implemented and third table is the challenges that two selected resorts encountered in implementing sustainable practices to conserve water, waste and energy.

Table 1.

Practices to Conserve Water, Waste and Energy Tubigan Garden Resort and Coco Valley Richnez Waterpark

Table 1 shows the practices of Tubigan Garden Resort and Coco Valley Richnez Waterpark to conserve water and energy. Accordingly, the Tubigan Garden Resort and Coco Valley Richnez Waterpark practice efficiency and cost reduction practices by using renewable source of energy, waste segregation, and recycling as stated by the sample responses. Moreso, the resorts communicate and collaborate with the local tourism office and other establishments on updates and good practices on conservation of water and energy. Also, self-directed learning thru online sources was conducted to be updated on innovative practices on water and energy conservation.

As to Efficiency and Cost Reduction, the resorts prioritize measures to improve efficiency and lower costs associated with energy consumption and waste management. Subthemes include the use of renewable energy, as well as waste segregation and recycling. Sample responses indicate the use of practices such as solar-powered and LED lights, as well as waste separation for recycling purposes. These practices seek to reduce environmental impact while optimizing operational costs.

Moreover, as to Communication and Networking, the resorts recognize the importance of communication and networking in staying informed about sustainable practices and industry updates. Subthemes include networking and collaboration, as well as self-directed learning. Sample responses show efforts such as coordinating with city tourism departments for updates, networking with other businesses, and self-directed learning via internet research to stay current on sustainable practices and industry trends.

Major Theme	Subthemes	Sample Responses
Efficiency and Cost Reduction	Use of Renewable Energy	"The sustainable practices that the company is doing is using solar powered lights in some areas, and switching LED lights..." "... saving on energy consumption etc."
Communication	Networking	"... we coordinate

and Networking	and Collaboration Self-Directed Learning	with the city tourism department for updates."; By surfing the internet and also observing other establishments that are implementing sustainable practices..."
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Water parks should prioritize implementing best and sustainable water and energy conservation practices in their resorts because they require abundant amounts of water for attractions, pools, and other amenities. Water conservation measures can help parks reduce their environmental impact, put less strain on local water resources, and demonstrate responsible stewardship of this valuable resource. Also, water parks can use a lot of energy, especially to heat the water and power the attractions. By implementing energy-efficient technologies and practices, parks can reduce operational costs, increase profitability, and contribute to larger efforts to combat climate change (Energy Your Ways, 2023).

Table 2.

Rules and Regulations Implemented by Tubigan Garden Resort and Coco Valley Richnez Waterpark to Conserve Water, Waste and Energy

Table 2 categorizes the rules and regulations enforced by Tubigan Garden Resort and Coco Valley Richnez Waterpark into three major themes: guest engagement and responsibility, energy-efficient measures, and water conservation practices. Each major theme is further subdivided into specific subthemes, with sample responses provided to demonstrate how these rules and regulations are implemented.

As to Guest Engagement and Responsibility, the resorts emphasize the importance of guest participation and responsibility in conserving water and energy. They use practices like efficiently managing guest rooms, ensuring employee responsibility in energy conservation efforts, and promoting guest awareness and engagement by turning off lights and energy-consuming items when not in use.

Furthermore, as to Energy-Efficient Measurements, the resorts use a variety of energy-saving measures to reduce energy consumption and maximize resource efficiency. This includes increasing awareness of energy consumption patterns, actively reducing energy usage through strategies such as adjusting lighting based on guest occupancy and utilizing energy-efficient appliances and technologies, and incorporating energy-saving practices throughout their operations.

Finally, as to Water Conservation Practices, both resorts use comprehensive water conservation practices to reduce water waste and promote efficient water use. This includes performing regular leak checks, promoting energy conservation with eco-friendly products, implementing efficient water usage practices like low-flow toilet bowls and water-saving measures, and actively collecting and using rainwater for outdoor purposes.

The resorts demonstrate their commitment to sustainability and environmental responsibility by engaging guests, implementing energy-saving measures, and adopting water conservation practices. These efforts not only help to reduce environmental impact, but also improve guest experiences and operational efficiencies. Continued implementation and monitoring of these rules and regulations can help to strengthen the resorts' sustainability efforts and promote long-term environmental stewardship.

Major Theme	Subthemes	Sample Responses
Guest	Guest Room Management	" We often turn of lights as long as it is not

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Engagement and Responsibility	Employee Responsibility Guest Awareness and Engagement	use by our guests and when our guests leave early to their check out time we always check rooms and turn off all items that consumes energy."
Energy-Efficient Measures	Awareness of Energy Consumption Patterns Efforts to Reduce Energy Usage Adjusting Lighting Based on Guest Occupancy Utilizing Energy-Efficient Appliances Implementing Low-Light Solutions Utilizing Timer Switches Utilizing Energy-Efficient Technologies Implementing Energy-Saving Practices Maximizing Resource Efficiency	"... if there are few guests during the night, we limit the areas with lighting to reduce energy usage" "We conserve energy by using energy efficient appliances, use of low light for our rooms and timer switches to control the usage of energy inside the resort."
Water Conservation Practices	Regular Leak Checks and Recommendations for Guests Promoting Energy Conservation and Providing Eco-Friendly Products Efficient Water Usage Practices Low-Flow Toilet Bowls Water-Saving Practices Rainwater Collection for Outdoor Use Maintenance of Water-Using Items	"Our toilet bowls are low-flow, using three liters per flush." "We engage in water saving by repairing water leaks, use of low flow shower heads, shutting off water tanks when it is not needed." "We have here a person tasked [to collect rainwater]... maintain the pipings, faucet and shower heads to ensure all use items are working." "We often use [reuse] water in the resort, in the cr, pool area, and in our hotel. But we assure that we always check our faucet and shower heads that we provide for our customers."

Waterparks require extensive water and energy resources. Efficient plumbing and electrical systems must be installed to reduce waste and operational costs at waterparks. Hence, make efficient use of resources (Soucy Aquatik, 2023).

Incorporating water-saving fixtures, employing systems to recycle water, improving pool management, encouraging water-conserving habits, using energy-efficient lights, enhancing HVAC systems, harnessing renewable energy, employing timers and sensors, refining ride operations, and regularly maintaining and updating facilities are all effective methods for conserving water and energy in a water park environment. By adopting these measures, water parks can substantially decrease their consumption of water and energy, cut down on operational expenses, diminish their ecological footprint, and enhance their image as environmentally conscious destinations (Linkedin, 2024).

Table 3.

Challenges Encountered by Tubigan Garden Resort and Coco Valley Richnez Waterpark in Implementing Sustainable Practices To Conserve Water, Waste and Energy

Table 3 reveals the significant challenges that Tubigan Garden Resort and Coco Valley Richnez Waterpark face in implementing sustainable water and energy conservation practices. The identified challenges include financial constraints associated with the adoption of renewable energy technologies, as well as human resource constraints associated with training and implementing sustainability initiatives. These challenges highlight the complexities and multifaceted nature of sustainability efforts within the establishments.

Major Theme	Subthemes	Sample Responses
Cost of Shifting to Renewable Energy	Financial Constraints	"...the cost of shifting to using renewable energy like switching more lights to a solar powered ones..."
Training and Implementation Challenges	Human Resource Constraints	"...having a training for the employees, implementation of sustainable practices..."

According to Beach (2021), budget constraint pose challenge in implementing eco-friendly practices in any water park that affects its sustainability. However, the decision to invest in green practices has helped water park operations become more efficient and reduce operating costs.

In addition, as stated by Torres-Bagur et al. (2019), there are obstacles hindering the adoption of water-saving initiatives in water resorts and hotels. The researchers found that hotel owners lacked strong motivations to adopt such measures, facing significant challenges related to costs, technology, and a general unawareness of available solutions. Furthermore, insufficient training and awareness among staff members obstruct efforts to implement sustainable practices aimed at preserving water and energy resources.

SUSTAINABILITY MANAGEMENT PLAN

Purpose: To implement sustainable practices at Tubigan Garden Resort and Coco Valley Richnez Waterparks to save water and energy, reduce environmental impact, and promote responsible tourism.

Energy Conservation Objectives:

1. Reduce energy consumption by 20% over the next two years by implementing energy-efficient technologies and practices.
2. Augment the utilization of sustainable energy outlets, like solar panels, for the purpose of heating water and providing energy to facilities.
3. Set up a monitoring system to track energy usage and identify areas for improvement.
4. Perform routine energy audits to assess the effectiveness of energy-saving actions and discover additional opportunities for conservation.

Water Conservation Objectives:

1. Reduce water consumption by 30% over the next three years by implementing water-saving technologies and practices.
2. Implement water-saving faucets, toilets, and showerheads to lessen water usage in guest rooms and common areas.
3. Establish a rainwater collection system to gather and recycle rainwater for watering plants and other non-drinking purposes.

- Utilize signs and educational programs to inform both employees and visitors about the significance of conserving water and to promote positive changes in behavior.

Customer Satisfaction Objectives:

- Increase guest satisfaction by offering environmentally friendly amenities and experiences that demonstrate the resort's commitment to sustainability.
- Conduct regular surveys and feedback sessions to assess guest satisfaction with the resort's sustainability initiatives and identify areas for improvement.
- Recognize and reward staff members who help to ensure the successful implementation of sustainability initiatives.

Employees' Training Objectives:

- Provide ongoing training and education to staff members on sustainable practices such as energy and water conservation, waste management, and biodiversity conservation.
- Create training materials and resources to help staff learn and engage.
- Encourage staff participation in sustainability-related events and workshops to foster an environmentally conscious culture.

Scope: The scope of this Sustainability Management Plan is implementing sustainable practices at Tubigan Garden Resort and Coco Valley Richnez Waterparks in order to save water and energy, reduce environmental impact, and promote responsible tourism. This includes efforts to reduce resource consumption, waste generation, and pollution, as well as raising stakeholder awareness and encouraging collaboration for continuous improvement in sustainability performance.

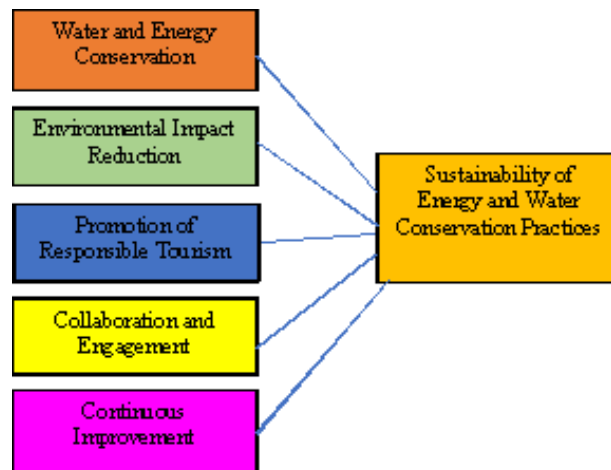


Figure 1. Sustainability Management plan

PLAN OF ACTION FOR ENERGY CONSERVATION

A. Utilizing energy-saving technologies and methods is expected to result in a 20% decrease in energy usage within the following two years.

- Perform an energy assessment to identify existing usage trends and spots of inefficiency.
- Create an energy conservation plan that includes specific measures and targets for reducing energy consumption.
- Upgrade all lighting systems in the resorts to energy-efficient LED bulbs and fixtures.

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4. Install occupancy sensors and programmable thermostats to improve heating, ventilation, and air conditioning (HVAC) systems.
5. Develop a protocol that motivates both employees and visitors to switch off lights, electronic devices, and appliances when they're not being used.
6. It is important to educate employees on methods to save energy and motivate them to get involved in activities aimed at conserving resources.

B. Promote the adoption of sustainable energy alternatives like solar panels for heating water and powering infrastructures.

1. Conduct a feasibility study to determine the potential for solar energy generation at the resorts.
2. Install solar panels on rooftops or in other suitable locations to generate electricity to power facilities.
3. Install solar water heating systems to provide hot water to guest rooms, pools, and other amenities.
4. To further reduce energy usage, you might want to think about buying renewable energy credits or joining community solar programs.

C. Develop a monitoring system to observe energy usage and pinpoint opportunities for enhancement.

1. Install energy meters and submeters to monitor electricity and gas usage throughout the resort.
2. Set up an energy management system (EMS) or software platform to collect and analyze energy data in real time.
3. Create key performance indicators (KPIs) to monitor energy consumption, identify trends, and track progress toward conservation objectives.
4. Review energy usage data on a regular basis and analyze variances to identify anomalies and opportunities for improvement.

D. Perform routine energy evaluations to evaluate the efficiency of energy-saving actions and pinpoint additional opportunities for conservation.

1. Schedule annual or biennial energy audits by qualified professionals to evaluate the resort's energy performance.
2. Review energy audit reports to identify inefficiencies, prioritize opportunities for improvement, and create action plans.
3. Implement energy audit recommendations, including equipment upgrades, operational changes, and behavioral interventions.
4. Engage employees and stakeholders in the energy audit process to gather feedback, generate ideas, build support for conservation initiative.

PLAN OF ACTION FOR WATER CONSERVATION

A. Decrease water usage by 30% within the next three years through the adoption of water-conserving technologies and methods.

1. Conduct a water audit to determine current consumption patterns and identify inefficiencies.
2. Create a water conservation plan that includes specific measures and targets for reducing water consumption.
3. Implement leak detection and repair programs to reduce water waste from plumbing leaks.
4. Optimize irrigation systems to use less water for landscaping and outdoor amenities.

B. Implement the use of water-saving faucets, toilets, and showerheads to decrease water usage in guest accommodations and common areas.

1. Retrofit existing fixtures with low-flow aerators and valves to reduce water flow rates while maintaining performance.
2. Install dual-flush toilets, which allow users to select between low- and high-volume flushing options.
3. Replace old showerheads with Water Sense-certified models that save water while providing a satisfying shower experience.
4. Educate staff and guests on the benefits of low-flow fixtures, as well as how to use and maintain them properly.

C. Establish a rainwater collection system to gather and recycle rainwater for purposes like watering plants and other non-drinking uses.

1. Evaluate the practicality of collecting rainwater at resorts by considering factors like how much it rains, the size of the roofs, and how much water can be stored.
2. Install rain barrels or cisterns to collect rainwater from roofs and other impervious surfaces.
3. Install filtration and treatment systems to ensure that collected rainwater meets quality standards for non-potable applications.
4. Reduce reliance on municipal water supplies by using harvested rainwater for landscaping irrigation, toilet flushing, and other non-potable applications.

D. Signs and informational initiatives can be instrumental in informing both employees and visitors about the significance of conserving water and motivating them to alter their behavior accordingly.

1. Develop educational resources like pamphlets, posters, and videos highlighting the significance of water conservation and offering useful suggestions for conserving water.
2. Display signage in guest rooms, public areas, and employee break rooms to remind staff and guests to conserve water.
3. Incorporate water conservation messages into employee training and orientation sessions.
4. Organize awareness campaigns and events, such as World Water Day or Water Conservation Week, to engage employees and visitors in water-saving activities.

PLAN OF ACTION FOR COSTUMERS' SATISFACTION**A. Increase guest satisfaction by offering environmentally friendly amenities and experiences that demonstrate the resort's commitment to sustainability.**

1. Incorporate eco-friendly practices into guest services, such as refillable water stations, biodegradable toiletries, and reusable towels and linens.
2. Provide environmentally themed activities and experiences, such as nature walks, eco-tours, and wildlife viewing opportunities, to educate and engage guests in sustainability.
3. Display the resorts' sustainability initiatives on signage, brochures, and digital platforms to raise awareness and promote positive guest perceptions.

B. Conduct regular surveys and feedback sessions to assess guest satisfaction with the resort's sustainability initiatives and identify areas for improvement.

1. Create survey questionnaires or feedback forms to collect guest opinions and feedback on sustainability-related topics like energy and water conservation, waste management, and environmental education.

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2. Conduct surveys or feedback sessions at key points in the guest experience, such as check-in/check-out, dining, and recreational activities.
 3. Analyze survey data and feedback to identify trends, strengths, weaknesses, and areas for improvement in sustainability performance.
 4. Use guest feedback to make informed decisions and prioritize initiatives that improve guest satisfaction and loyalty.
- C. Recognize and reward staff members who help to ensure the successful implementation of sustainability initiatives.**
1. Create a recognition program to acknowledge and reward employees who demonstrate exceptional commitment to sustainability, such as by implementing innovative conservation measures, promoting eco-friendly practices, or engaging guests in sustainability education.
 2. Recognize employee accomplishments with public announcements, awards ceremonies, and incentives like bonuses, gift cards, or extra time off.
 3. Encourage staff to participate in sustainability training and professional development opportunities to improve their environmental stewardship skills and knowledge.
 4. Foster a sustainable culture within the organization by encouraging teamwork, collaboration, and collective responsibility for achieving sustainability objectives.

PLAN OF ACTION FOR EMPLOYEES' TRAINING AND DEVELOPMENT**A. Continuously educate and train staff on sustainable methods like saving energy and water, managing waste, and protecting biodiversity.**

1. Create a comprehensive training curriculum that covers key sustainability topics important to the resorts' operations, such as energy and water conservation techniques, waste reduction strategies, and biodiversity conservation principles.
2. Schedule regular training sessions, workshops, and seminars to educate employees about sustainable practices, led by internal experts or external professionals with relevant expertise.
3. Customize training programs for different departments and job roles within the resorts to ensure that employees receive training that is specific to their responsibilities and tasks.

B. Create training materials and resources to help staff learn and engage.

1. Create training materials such as presentations, manuals, videos, and online modules to supplement in-person training sessions and give employees resources for self-directed learning.
2. Use case studies, real-life examples, and success stories to demonstrate the value of sustainability and the practical application of sustainable practices in resort operations.
3. Provide staff members with access to reference materials, websites, and online databases containing information on best practices for sustainability, regulatory requirements, and industry standards to support ongoing learning and knowledge sharing.

C. Encourage staff participation in sustainability-related events and workshops to foster an environmentally conscious culture.

1. Identify and promote opportunities for staff members to attend sustainability-related events, conferences, workshops, and webinars hosted by industry associations, government agencies, and non-profit organizations.
2. Encourage employees to participate in relevant training programs and professional development opportunities to improve their sustainability skills, knowledge, and networks.

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3. Organize internal events and activities, such as sustainability fairs, green team meetings, and volunteer outings, to engage employees in hands-on learning, team-building, and community service initiatives that promote sustainability.

CONCLUSION

The study was carried out with the goal of analyzing Sustainable Practices of Selected Resorts specifically the Tubigan Garden Resorts and Coco Valley Richnez Waterpark located at the City of Dasmarinas, Cavite. The researchers came up with the following conclusion based on the problem stated in this study.

Based on the data gathered through interview, both the Tubigan Garden Resort and Coco Valley Richnez Waterpark practices efficiency and cost reduction by utilizing the renewable source of energy, waste segregation and recycling. In addition, the resorts work together and exchange updates on energy and water conservation best practices with the nearby tourism office and other businesses. Additionally, self-directed learning using internet resources was carried out to stay current on cutting edge methods for energy and water saving.

In terms of the efficiency and cost reduction, the resorts give top priority to initiatives aimed at reducing expenses related to waste management and energy usage. Recycling and waste segregation are two subthemes, along with the usage of renewable energy. Examples of answers include the implementation of recycling-focused techniques like waste sorting and LED and solar-powered lighting. These procedures aim to optimize operating expenses while minimizing the impact on the environment.

Regarding Communication and Networking, the resorts also understand how crucial these channels are to remaining up to date on industry developments and sustainable practices. Collaboration and networking are subthemes, along with self-directed learning. Examples of response include networking with other businesses, self-directed learning online, and coordinating with city tourism departments for updates.

Separately, the two aforementioned resorts and waterparks group the policies and guidelines into three main categories: guest engagement and responsibility, which emphasized the effective administration of guest rooms; employee responsibility in energy conservation initiatives; and guest awareness and engagement. In order to minimize energy waste and increase resource efficiency, the resorts implement a range of energy-saving techniques. Finally, with regards to water conservation techniques, they both employ thorough techniques including proactive rainwater collection and routine leak detection to minimize water waste and encourage efficient water use.

Finally, the advocates have noted the difficulties, which include the lack of funds for adopting renewable energy technologies and the shortage of personnel for developing and carrying out sustainability programs. These difficulties draw attention to the intricate and varied character of the establishments' sustainability initiatives.

RECOMMENDATIONS

Energy Conservation

Solar energy has benefits that go beyond just lighting homes. As for the Tubigan and Coco Valley, since they are in an open and wide place, installing more solar panel will greatly help their business to lessen the expenses in their electric consumption. Solar panel has a longer life that may last for decades if they maximized its usefulness. Besides that, it will be such a relief for them as power interruption is unpredictable, as so they sustain their operation. They need to maintain the sustainable practices such as continuous innovation and applying energy conserving practices such as what is mentioned above.

Water Conservation

For the water conservation, the heat of summer serves as a reminder of the value of one of our most valuable resources: water. Many businesses utilize a lot of water in our quickly expanding tourism industry, whether it be for kitchen sinks, sprinkler systems, or swimming pools.

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Regarding the primary objectives of this research, a crucial element for conserving water entails the formulation or implementation of a water management strategy. To acquire a thorough understanding of your expenditures and potential cost reductions, commence with an assessment of water usage. Monitor your consumption closely. A detailed assessment can pinpoint areas of concern and furnish valuable insights into water usage trends.

WASTE MANAGEMENT

Since they offer a quick, easy, and effective option for guests to get rid of their waste, on-site collection stations are advised as the primary method of managing resort rubbish. As the quantity as the number of clients grows, so does the waste they generate. The two firms must manage the collection process on behalf of in order to guarantee that this waste is disposed of appropriately. Resorts, being cautious to ascertain the kinds of amenities that are offered and formulating procedures for handling rubbish near the resort grounds. Additionally, according to this suggestion, each resort's local government needs to have a regular and regular timetable for the removal of garbage. The local governments need to practice efficient time management and multitasking.

Lastly, it is recommended that the action plan and data crafted by the researchers be used to help the respondents to gain more knowledge about energy conservation, water conservation and proper waste management, to increase their efficiency and effectiveness as tourists.

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