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Navigating Sustainable Features: A Comparative Analysis of Sustainable Tourism in Santorini, Mykonos, and Paros

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Abstract

The islands of the Cyclades (located in the South Aegean Sea in Greece) are one of the most famous summer destinations worldwide. Every year, millions of Greek and foreign travelers visit the Cyclades to enjoy the islands' dazzling light and beautiful crystal blue waters. The substantial increase in tourist arrivals has presented significant challenges to the islands, notably regarding sustainable infrastructure and consumer practices. Limited resources, especially water and energy, coupled with waste management issues, pose considerable pressure on the environment and local communities. This research paper investigates the facilities that promote the Cyclades islands (such as Mykonos, Santorini, and Paros) as an ecologically viable destination, analyzing the problems that arise during the adoption of sustainability. Data were retrieved from academic databases and publicly accessible sources, covering initiatives implemented between 2019 and 2025. The comparative analysis reveals distinct sustainability approaches: Santorini employs regulatory, infrastructure-heavy solutions, including cruise visitor caps (8000/day) and desalination capacity expansion; Mykonos relies predominantly on private sector initiatives despite experiencing a 5.8% decline in international arrivals; Paros demonstrates community-driven approaches, leading plastic reduction efforts through the "Clean Blue Paros" initiative. Key challenges persist across all islands, including water consumption doubling since 2020, waste increases of 350% during peak season, and tensions between economic growth and cultural preservation. The findings indicate no single blueprint for sustainable tourism development, emphasizing the need for destination-specific strategies combining policy intervention, technological innovation, and community engagement.

Keywords: sustainability; preservation; Cyclades Islands; tourism industry

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1. Introduction

The global tourism industry is a giant economic machine that mobilizes growth, nurturing cultural imbibing and creating dream meccas for venturing and unwinding across the globe's various landscapes (Belias & Koustelios, 2024; Vasiliadis et al., 2016; Gössling et al., 2022; Higgins-Desbiolles, 2020; Ruggieri & Platania, 2024). The whole world has been using the uniqueness of places to lure tourists from crowded cities to peaceful natural wonders. Visitors' contributions significantly influence national GDPs and local livelihoods (Tsiotas et al., 2019; Skagias et al., 2021; UNWTO, 2023; Dwyer & Forsyth, 2023; Vasiliadis et al., 2016). Greece is a prime example of this worldwide phenomenon (Kyriakou

& Belias, 2017; Rossidis et al., 2019; Papatheodorou et al., 2021; Andriotis, 2018); after all, it is no secret that the country is renowned for its rich mythological past (Vasiliadis & Belias, 2020), stunningly blue seas, and hospitable locals who have never failed to impress amid the influx of international and domestic travelers. The Cyclades islands, including Santorini, Mykonos, and Paros, have not only epitomized the beauty of the Aegean Sea but have also become the most popular vacation spots for the summer season (Lagarias et al., 2023; Petrou et al., 2021). Their beauty has been described by many as the "brightest on Earth", with "turquoise blues", and "unusual island architecture" being the words that sum up the allure of these islands (Visiting Greece, 2025). This continuous success is a testament to the tourism sector's immense influence as a promoter of wealth and international understanding (Hall & Page, 2022; Sharpley, 2020; R. W. Butler & Dodds, 2022).

Nevertheless, the same success that is driving economic prosperity also presents a complex and rapidly growing set of problems, especially for environmentally fragile and resource-poor areas, such as the Cycladic islands (Milano et al., 2019; Koens et al., 2018; Perkumienė & Pranskūnienė, 2019). The huge surge in tourist numbers, while economically profitable, has put a heavy and often unsustainable strain on the islands' fragile ecosystems and local communities (Seraphin et al., 2018; Postma et al., 2017). This situation, however, is usually referred to as "overtourism" (Dodds & Butler, 2019; Capocchi et al., 2019). Among other things, the situation will worsen with the increased generation of waste, the depletion of natural resources, and, most importantly, the erosion of local culture and the deterioration of the community's well-being (Nunkoo & Gursoy, 2012; García-Hernández et al., 2017; Phi, 2020). The paradox is that the features that make those places so attractive are the ones that are most susceptible to damage when they are overwhelmed by tourists (R. Butler, 2020; Mihalic, 2020).

The consequences of this unbalance are profoundly extensive and very distributive (Gössling, 2018; Bramwell & Lane, 2011). The scarce natural resources, especially freshwater and energy, are nearing their limits; therefore, the only option is to employ energy-intensive technologies such as desalination (Paranychianakis et al., 2019; Zorpas & Voukkali, 2017). Although this is a short-term solution to the problem, it turns out to be the main reason for the increase in environmental footprint (March & Saurí, 2010; Gössling et al., 2012). The waste systems designed for smaller populations work well, but when the population increases suddenly due to seasonality, these systems become ineffective, polluting the environment and creating an undesirable appearance (Mateu-Sbert et al., 2013; Zeppel & Beaumont, 2013). Furthermore, the social dimension of sustainability is increasingly compromised as local communities experience rising living costs, displacement, and a perceived erosion of their traditional way of life, leading to friction between residents and visitors (Nunkoo & Smith, 2013; Choi & Murray, 2010; Jordan et al., 2018). The chances of those favorite places being open to tourism for a long time and the condition of the tourist's experience will be largely compromised if such negative pressures, which are unrealistically going to be grave, remain unchallenged and continue (Saarinen, 2006; Torres-Delgado & Saarinen, 2014). Without proactive and integrated interventions, it is indeed very probable that what is considered to be "paradise" for millions of people will lose its natural character forever (Honey & Krantz, 2007; Weaver, 2006).

With full acknowledgment of the critical environmental situation, there has been a rapid rise in the growing need for sustainable tourism models that are in harmony with the environment and social justice, while still maintaining their economic viability (Bramwell & Lane, 2011; Saarinen, 2006; Honey & Krantz, 2007). In this article, the authors conduct an extensive investigation of the present infrastructure and various projects carried out in the Cycladic islands, particularly in Santorini, Mykonos, and Paros, with the aim of making them more ecologically friendly and comfortable places for visitors (Liu, 2003; Buckley,

2012). The analysis covers initiatives implemented between 2019 and 2025, with a particular focus on projects launched or significantly developed during the post-COVID recovery period (2022–2025) (Gössling et al., 2021; Higgins-Desbiolles et al., 2019). This timeframe coincides with Greece's national commitment to achieve carbon neutrality by 2050, the implementation of the National Climate and Energy Plan (2021–2030), and specific legislative measures such as the mandated electrification of taxi fleets by 2025 and complete vehicle fleet electrification by 2030, providing a policy framework within which local sustainability initiatives operate (Hellenic Republic, 2019; Ministry of Environment and Energy, 2021). The investigation follows the outlined methods by looking at the activities/ecosystem in the different main topical categories such as overtourism management and visitor flow control, waste management and circular economy initiatives, water resource management and conservation strategies, the landscape of sustainable accommodation and certification, the development of sustainable transportation options and infrastructure, and efforts in cultural heritage preservation and local community engagement (Font & McCabe, 2017; Bramwell & Lane, 2011). The research methodology specifically examines how local island initiatives align with or diverge from national sustainability directives, analyzing the degree to which national policy frameworks facilitate or constrain the island-level implementation of sustainable tourism practices (Hall, 2008; Bramwell, 2011). Thus, through an examination of their various strategies and the problems encountered along the way in their mission of sustainability, this work helps provide the reader with a comparative picture of their progress and the difficulties they still face within the broader context of Greece's national sustainability transformation (Saarinen, 2006; Torres-Delgado & Saarinen, 2014).

This investigation makes an important contribution to the academic community on sustainable tourism, presenting a detailed and comprehensive comparative study of three well-known island destinations that share similar challenges with sustainable development, but express them differently. The paper, by integrating information from academic databases (such as Scopus and Web of Science) and publicly accessible sources (such as touristic sites like Santorini.gr and Greeka), presents a newly updated overview of innovative projects and policy changes underway. The results reveal various ways—from Santorini's focus on regulating and infrastructure-heavy solutions to Mykonos's dependence on the private sector and NGOs, and Paros's community-based and data-driven approaches. The primary objective of this inquiry is to inspire more research into the sustainability of other island locations worldwide and thus to be a rich source of reflections and potential good practices for decision-makers, those in the industry, and local communities who are endeavoring to preserve their unique natural environments and cultures for the next generations of travelers.

In other words, the purpose of this study is threefold: first, to provide a comprehensive comparative analysis of sustainability initiatives across three distinct Cycladic destinations that represent different tourism development models and sustainability approaches; second, to identify the effectiveness of various sustainability strategies in addressing overtourism challenges within the specific context of Greek island tourism; and third, to evaluate the alignment between local sustainability efforts and national policy frameworks in the post-COVID recovery period (Hall & Page, 2022; Bramwell & Lane, 2011). This research makes several innovative contributions to both academic knowledge and practical applications in sustainable tourism development. From an academic perspective, this study fills a critical gap in comparative sustainability research by providing the first systematic analysis of multidimensional sustainability initiatives across the three most visited Cycladic islands, employing a novel framework that integrates overtourism management, circular economy principles, resource conservation, and cultural preservation (Milano et al., 2019; Koens et al., 2018). Unlike previous studies that focus on single aspects of sustainability or individual

destinations, this research adopts a holistic approach that examines the interconnections between environmental, social, and economic sustainability dimensions within the specific context of small island developing economies (Sharpley, 2020; Weaver, 2006). For practitioners, this study provides evidence-based insights into which sustainability strategies prove most effective under different tourism pressure scenarios, offering a practical roadmap for destination managers, policymakers, and tourism operators seeking to implement sustainable practices (Font & McCabe, 2017; Bramwell, 2011). The necessity of this research is underscored by the urgent need for actionable solutions to overtourism challenges that have intensified in popular Mediterranean destinations post-COVID, particularly as tourism volumes rebound and climate change accelerates resource scarcity pressures (Gössling et al., 2021; Higgins-Desbiolles et al., 2019). Furthermore, this study's timing is critical as it captures sustainability initiatives implemented during a unique window of opportunity when destinations could reassess their tourism models during the pandemic-induced pause, providing insights into how crisis periods can catalyze sustainable transformation (Hall et al., 2020; Ioannides & Gyimóthy, 2020). The findings contribute to theoretical understanding of sustainable tourism transitions while offering practical guidance for similar island destinations worldwide facing comparable overtourism and resource management challenges (R. Butler, 2020; Mihalic, 2020).

Hence, this study aims to answer the following research questions:

- RQ1: What are the key differences in sustainability strategy implementation between Santorini's regulatory approach, Mykonos's private sector-driven model, and Paros's community-based initiatives in addressing overtourism challenges?
- RQ2: How effectively do the waste management, water conservation, and visitor flow control measures implemented across the three islands address the environmental pressures of seasonal tourism influxes?
- RQ3: To what extent do the sustainability initiatives in Santorini, Mykonos, and Paros successfully integrate environmental protection with cultural heritage preservation and local community engagement?
- RQ4: Which sustainability practices and policy interventions demonstrate the greatest potential for replication in other small Mediterranean island destinations facing similar tourism-related environmental and social pressures?

2. The Case of the Cyclades Islands

2.1. General Characteristics of the Cyclades Islands

The Cyclades islands comprise approximately 220 islands situated in the South Aegean Sea, of which 23 are major inhabited islands (Visiting Greece, 2025; Conti & Perelli, 2007). The most popular destinations are Mykonos, Santorini, and Paros, which have attracted a large number of tourists during the summer period (Lagarias et al., 2023; Buhalis, 2000). The origin of the name is the Greek word "cyclos" (meaning "circle"), referring to their configuration around the sacred island of Delos (Cyclades Chamber of Commerce, 2025; Rackham & Moody, 1996).

The Early Cycladic culture developed between 3000 and 2000 BCE due to contact with Minoan Crete (Cyclades Chamber of Commerce, 2025; Barber, 1987; Doumas, 1977). After being part of the Byzantine Empire and under the rule of the Turks (1500 CE), the islands became a member of the Greek State in 1830 (Slot, 1982; Kitromilides & Tsoukalas, 2019).

The origin of the Cyclades is a result of the sinking of the Aegean mountains about 5 million years ago, together with intense volcanic activities, among which the biggest Santorini eruption (16th–17th century B.C.) can be mentioned, that created the present landscape (Greeka, 2025a; Fytikas et al., 1990; Friedrich et al., 2006; Visiting Greece, 2025). The islands have a typical Mediterranean climate, characterized by mild winters (10–16 °C) and hot summers (24–30 °C). The term "Meltemia" refers to the strong winds that occur from July to September (Maheras et al., 2006; Repapis et al., 2007).

Traditional Cycladic houses are built from natural materials found locally, such as white marble, slate, and granite, which results in the unique whitewashed appearance of the buildings that have been widely used as an inspiration in contemporary architecture (Greek National Tourism Organization, 2016; Philippides, 1984; Doumanis, 2013). Besides these materials, there are unique architectural differences among the islands, such as underground dwellings, towers, and traditional "syrmata" (Greek National Tourism Organization, 2016; Oliver, 2003; Travlos, 1988).

Diversity in tourism encompasses various forms, including agro-tourism, sea, sports, conference, religious, eco-, geo-, and spiritual tourism (Greek National Tourism Organization, 2016; Andriotis, 2002; Komilis, 2001). Santorini tops the list with 2,165,283 foreign tourists and 199,271 Greek visitors for the year 2023, according to SETE figures; Mykonos and Paros follow in second and third place (SETE, 2025). More details about the Cyclades islands are provided in Table 1 and Figures 1 and 2.

Table 1. Overnight stays of international and domestic tourists in the Cyclades islands in 2023 (Source: SETE, 2025—edited by the authors).

Cyclades Islands	Stays	Visitors
Syros	Overnight stays of international tourists Overnight stays of domestic tourists	95,634 115,124
Andros	Overnight stays of international tourists Overnight stays of domestic tourists	37,454 55,796
Santorini	Overnight stays of international tourists Overnight stays of domestic tourists	2,165,283 199,271
Kea and Kythnos	Overnight stays of international tourists Overnight stays of domestic tourists	19,048 25,654
Milos	Overnight stays of international tourists Overnight stays of domestic tourists	136,623 52,307
Mykonos	Overnight stays of international tourists Overnight stays of domestic tourists	2,051,848 130,233
Naxos	Overnight stays of international tourists Overnight stays of domestic tourists	512,496 130,592
Paros	Overnight stays of international tourists Overnight stays of domestic tourists	560,622 140,209
Tinos	Overnight stays of international tourists Overnight stays of domestic tourists	34,120 118,136

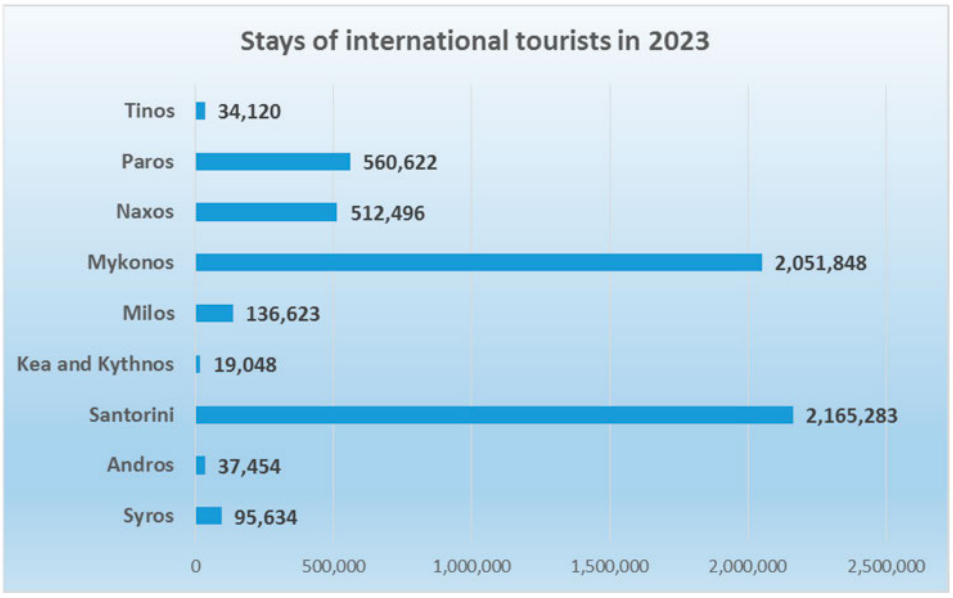

Figure 1. Overnight stays of international tourists in 2023 (Source: SETE, 2025—edited by the authors).

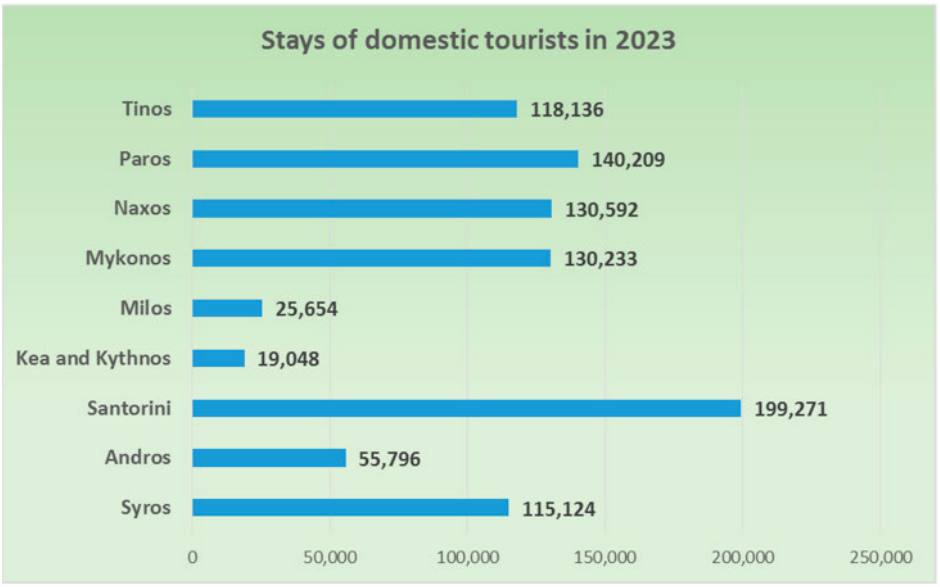

Figure 2. Overnight stays of domestic tourists in 2023 (Source: SETE, 2025—edited by the authors).

2.1.1. General Characteristics of Santorini (Thira) Island

Santorini is a 73 km^2 island with 15,480 permanent residents (2021 census) located 200 km southeast of mainland Greece (Blue Municipalities, 2024; Druitt et al., 1999). The area has a Mediterranean climate, which allows for hot summers, with the busiest days of tourism in July and August. Spring, on the other hand, is a season with milder weather, still suitable for walking (Discover Greece, 2025; Daliakopoulos et al., 2017).

Being part of the Aegean Volcanic Arc, the island's volcanic geology comprises a diverse range of earth materials, including limestone, shale, and volcanic materials (Thira, 2025; Vougioukalakis et al., 2019; Pyle & Elliott, 2006). The dry and sunny weather, along with the mild climate, has led to the development of some quite unusual agricultural practices (Stavrakakis et al., 2019; Psomiadis et al., 2020; Santorini.gr, 2025).

Fira, the capital, is situated on the Caldera rim, 260 m above sea level, and, alongside well-known villages such as Oia, Imerovigli, and Firostefani, it offers stunning views (Santorini.gr, 2025; Sigurdsson et al., 2006; Visiting Greece Santorini, 2025). The island's fame as

a lovers' destination is primarily due to its spectacular caldera views, unforgettable sunset experiences, and the variety of beaches featuring white, red, and black sand (Papadopoulos & Chalkias, 2017; Vougioukalakis, 2021).

2.1.2. General Characteristics of Mykonos Island

Mykonos, the "island of winds," has an area of 105.5 km^2, an 89 km coastline, and 9802 permanent residents (population census 2021), which is a 3.3% reduction that reflects a tourism-driven economy characterized by seasonal fluctuation (Municipality of Mykonos, 2023; Andriotis & Vaughan, 2003). The dominant northerly (38.2%) and northeasterly (16.3%) winds between 2 and 6 Beaufort not only make the island a popular destination for water sports but also encourage local agriculture, which is the main source of the island's economy during the long summer drought (Nastos et al., 2013; Balafoutis et al., 2018; Skagias et al., 2023).

The island offers luxurious tourism services that provide travelers with the opportunity to discover the typical Cycladic architecture, the area's religious and cultural sites, and a wide variety of shopping options, ranging from local crafts to luxury brands (Skagias et al., 2024; Ioannides & Holcomb, 2001). The most important sites are the Panagia Paraportiani Church, the Archeological Museum, the Aegean Maritime Museum, the old windmills, Little Venice, and the UNESCO World Heritage site of Delos (Zaphiropoulou, 2003; Koutsouris, 2009; Visiting Greece Mykonos, 2023).

2.1.3. General Characteristics of Paros Island

With an area of 193.3 km^2, a coastline of 168 km, and a population of 14,520 inhabitants (2021 census), Paros is the third most visited island of the Cyclades (Lagarias et al., 2023; Hellenic Statistical Authority, 2024; Evelpidou et al., 2021; Imagine Paros, 2025). Known as the source of "Parian marble," the most famous marble used in ancient Greek sculptures, such as the Hermes of Praxiteles and the Venus de Milo, the island still retains a remarkable cultural heritage (Maniatis et al., 1988; Korres, 1995; Visiting Greece Paros, 2025).

An elliptical island, it is the location of two major ports (Paroikia and Naoussa) and has been described as having a mixture of both contemporary and traditional features (Lagarias et al., 2023; D. Prokopiou et al., 2019). The tour on the island combines rest with a variety of activities. Paroikia and Naoussa are perceived as places where the past and the future meet, having in common not only traditional tavernas but also the latest trends in restaurants and bars (Komilis, 2008). The vintage style villages of Lefkes and Marpissa have started their comeback and are gradually becoming places where one can escape from the noise of the fast-paced city life, whereas beaches like Santa Maria, Golden Beach, and Kolymbithres are still hotspots for the crowd that seeks sun and sea in a different way (Evelpidou et al., 2021; Koutsouris, 2012; Paros.gr, 2025; Friends of Paros & Antiparos, 2024).

2.1.4. General Characteristics of Sustainable Tourism in the Cyclades Islands

Greece is one of the most touristic countries in the world. According to INSETE analysis (INSETE, 2023), 27.8 million international tourists visited Greece in 2022. As a result, Greece's GDP gained 23.9 billion euro, which corresponds to 11.5 percent of the country's GDP. Tourism is a principal pillar of the economy of several areas in Greece, including the islands and mountainous areas. To some extent, this characteristic reflects the national economy of Greece as a whole.

Regarding the development of sustainable tourism in the Cyclades, two Non-Profit Organizations have been established. The first Non-Profit Organization, Network for Sustainable Cyclades, was created in 2023 in the Cycladic island Sifnos. During the past two years, this organization has organized several actions (such as lectures, talks/discussions, workshops, environmental programs, and formal letters to the Government and Municipal

Councils to take care of sustainable issues) (Sustainable Cyclades, 2024). The second Non-Profit Organization, Cyclades Preservation Fund, was established seven years ago. Over the past seven years, the Cyclades Preservation Fund has provided more than 70 grants to communities, has invested more than 600,000 euros locally, and has supported environmental conservation and sustainability in the Cycladic islands. Moreover, with the support of local authorities and businesses, this organization has succeeded in building an active community that is committed to the preservation of the natural beauty of the Cycladic islands (Cyclades Preservation Fund, 2025d).

3. Literature Review

The Cyclades islands are among the most popular tourist destinations in Greece and have attracted attention as a sustainability case study in the Mediterranean basin. This review examines the existing academic research on the Cyclades islands, focusing on sustainability, the initiatives implemented, and the challenges encountered. This study primarily focuses on the three islands of Santorini, Mykonos, and Paros, which are geographically close and have the greatest number of visitors, which serves as the basis for this comparative analysis.

Understanding the concept of sustainability in the Cyclades should begin with recognizing them as the most critical economic pillars for Greece. This group of islands is the most popular destination in Greece and one of the most popular worldwide, with the South Aegean archipelago attracting more than six million visitors each year, which accounts for roughly 27% of all tourist arrivals in Greece (D. G. Prokopiou et al., 2018). Such a high level of tourism development has changed the area from a handful of impoverished rural and fishing communities to one with the second-highest income per capita in Greece, with over 32,000 people employed in the tourism sector, which is more than 25% of the total number of workers in the region (D. G. Prokopiou et al., 2018). However, this dramatic transformation has created complex sustainability challenges that require comprehensive analysis across multiple dimensions.

Studies on the carrying capacity of the Cyclades, in general, cast the main islands of the Cyclades in a negative light because they find that they are beyond the limit of essential sustainable parameters. D. G. Prokopiou et al. (2018) measured 24 quantitative indicators in line with the Prokopiou–Tselentis model to assess the territorial, economic, environmental, and social aspects of tourism development across all of the Cyclades islands. Their results reveal that both Mykonos and Thira (Santorini) are beyond the limits of the indicator scale and, therefore, are confronted with the problem of overcrowding. Moreover, they have stated that for both islands, the number of beds per square kilometer is above 100 and that there are more than 2 beds per inhabitant (D. G. Prokopiou et al., 2018). This study presents numerical data indicating that these locations have exceeded the limits of tourism carrying capacity for sustainability, making them potential targets for immediate policy intervention to mitigate ongoing environmental and social degradation. Apart from traditional accommodations, this research shows that the demand for rental homes for tourists, brought about by Airbnb, is a good example of how precarious tourism pressure on these islands is.

One of the benefits of cultural sustainability research in the Cyclades is that it can provide insights into community opinion and stakeholder experiences with tourism growth. Sarantakou and Terkenli (2021) conducted extensive fieldwork not only in Syros but also in Santorini and Andros. Sarantakou and Terkenli (2021) noted that, compared to the two exceptions of Mykonos and Santorini, which have undergone significant changes to become destinations for mass package tourism, the other Cyclades islands are still characterized by small- and medium-sized tourism rather than ‘industrial tourism’. The study indicated that

41% of businesses dealt with gastronomy and wine, 39% with cultural heritage products and services, and 37% with folklore and local traditions, thus demonstrating the rich utilization of cultural resources in tourism. Nevertheless, research has also shown that tourism development and cultural preservation are in conflict, especially when overtourism issues are at the forefront, such as the concerns about traffic congestion in Santorini and Syros (Sarantakou & Terkenli, 2021).

Water resource management is the top sustainability issue that the Cyclades must address. The Water Region of the Cyclades islands is an area of 2553 km^2, spanning 24 inhabited islands, each with distinct climatological, hydrological, and geomorphological parameters, resulting in fragmentation into smaller units (Environ.chemeng.ntua.gr, n.d.). The islands are confined to small rivers, which are almost nonexistent, while surface water is barely available; therefore, they rely on other water sources, such as desalination plants and water transport by tankers from the mainland (Environ.chemeng.ntua.gr, n.d.). A study carried out by Atay et al. (2024), covering the period 2009–2020 and focusing on water quality and tourism sustainability during crisis periods, reveals that the heavy dependence on tourism revenues, combined with the lack of emphasis on water quality regulations, has led to the creation of complex management challenges. Their study of the perceptions of hospitality stakeholders in Mykonos and Santorini highlights the impact of water crisis events between 2012 and 2024 on changes in tourism destination management. However, the stakeholders were found to be unprepared in terms of adopting comprehensive strategies for water resource management (Atay et al., 2024).

The water management history of the Cyclades illustrates the excessive reliance on non-local water sources that they had. There is evidence that in the 1960s, drinking water was brought in large quantities by the mainland to Syros Island, and the cost of water was raised from 7.78 EUR/m^3 in 2002 to 8.32 EUR/m^3 in 2009, with a total amount of 429,075 cubic meters transported to the Cyclades islands (Aquatechtrade.com, 2024). Greece is currently estimated to have a daily desalination capacity of approximately 200,000 m^3/day. Mykonos is equipped with four reverse osmosis desalination plants, constructed between 1980 and 2008, with capacities ranging from 500 m^3/day to 4500 m^3/day (Aquatechtrade.com, 2024). Consequently, the problem of water shortage is very acute; moreover, the situation over the past few years has been such that it has been very close to necessitating an emergency decree for the faster granting of permits for new desalination installations.

Environmental sustainability research throughout the Cyclades has revealed the heavy exploitation of natural resources and that the environment is under significant stress. D. G. Prokopiou et al. (2018) report that out of the 24 inhabited islands of the Cyclades, only 10 are going to be able to keep their Blue Flag beach certifications, while Paros, Antiparos, and Syros are three islands that are becoming heavily crowded by the illegal construction of buildings. The environmental indicators they have provided indicate a lack of municipal waste collection systems in some small communities, which, in turn, is causing increased environmental pressures (D. G. Prokopiou et al., 2018). According to the Cyclades Preservation Fund, environmental problems have been uncovered that are very serious, such as water scarcity, which causes a chain of negative environmental effects such as freshwater shortages, soil degradation, loss of vegetation, coastal erosion, saltwater intrusion, disruptions to marine ecosystems, increased wildfires, and biodiversity loss (Cycladespreservationfund.org). The unfolding of environmental destruction highlights the close connection between the eco-challenges of the entire archipelago.

Locally driven community-based sustainable initiatives in the Cyclades islands are indicative of the increased awareness of the environmental crises and the need for a coordinated response. In 2023, the Network for Sustainable Cyclades was established on the island of Sifnos, with the aim of organizing lectures, discussions, workshops, and environ-

mental programs, as well as establishing formal communication channels with government and municipal councils regarding ecological issues (Friends of Paros & Antiparos, 2024). Paros has therefore followed the path of urbanization of Mykonos and Santorini and is now confronted with the threat of transforming its tranquil and genuine landscape into a coastal urban suburb, with building permit issuance reaching nearly 1200 permits per year in 2023 (Friends of Paros & Antiparos, 2024). The founding of these grassroots organizations represents community acknowledgment that the prevailing developmental models are unsustainable and must be halted without delay.

Sarantakou et al. (2024) conducted research on the shifts in cultural tourism during the pandemic, discovering that the spread of COVID-19 provided the tourism sector in the Cyclades with an opportunity to rethink and plan more sustainable tourism models. In their study, they found that tourists who came to the Cyclades in the summer of 2020 had a higher average expenditure, as they wanted to "invest in the crisis," while the period of the pandemic was indicated as tending to fewer problems of overtourism, which were raised during previous years (Sarantakou et al., 2024). According to Santorini's Deputy Mayor of Culture, the break from tourism expansion was not only an opportunity to address the deficiencies in the culture and cultural tourism sectors, but also to work on the digitalization sector (Sarantakou et al., 2024).

Research on mining and the landscape in the Cyclades provides additional background information about environmental pressures that are not directly related to tourism. Local studies of the exploitation of minerals, especially on Milos Island, and the extraction of bentonite, perlite, and pozzolan, have revealed quite complicated "footprints" (i.e., the imprints of the pollutants on the environment) of these activities that may even affect public health and sustainable development (D. Prokopiou et al., 2021). The research indicates that the sustainability problems in the Cyclades are not only related to tourism but also to the presence of extractive industries competing for the island's land, which causes environmental pressures.

Sustainable development in the Cyclades remains a significant research gap, as indicated by a review of the academic literature. Most studies are fragmented, focusing on the islands' carrying capacity, water management, cultural tourism, or environmental degradation, but very few provide a deep and thorough investigation of the interplay between these themes that also reveals the destination's overall sustainability. According to D. G. Prokopiou et al. (2018), research on tourism carrying capacity in Greece has been limited, despite its critical importance for the sustainable management of tourist destinations. The gap is quite large considering the various sustainability issues that have been found to be interconnected on the different islands of the archipelago.

Methodologies to assess the sustainability of the Cyclades have evolved to demonstrate that researchers are working on more holistic frameworks. D. G. Prokopiou et al. (2018) describe the Prokopiou–Tselentis model as an exemplary, comprehensive environmental management and impact estimation system that encompasses a range of new, diverse indicators spanning territories, the economy, the environment, and society. The use of the triple bottom line framework, based on Elkington's (1998) theory, serves as a starting point for striking a balance among the three spheres of sustainable tourism development: economic, social, and environmental. Meanwhile, according to the current tourism application, the model reveals that the leading pattern of tourism in the selected Cyclades destinations continues to have an adverse impact on achieving sustainability goals across these dimensions.

The main issue addressed in research on the sustainability of the Cyclades is the need for intervention without delay in order to tackle the influence of overtourism properly. According to D. G. Prokopiou et al. (2018), policymakers, as well as the local authorities

of the areas concerned, must take the necessary steps to stop the detrimental effects of overtourism and draw up a plan of action to revitalize the period of sustainability of the planet and upgrade the competitiveness of the tours in Mykonos and Santorini in particular. The study reveals that, in the absence of a coordinated policy, the influx of tourists will continue to have a negative impact on the environment and social sustainability in the archipelago. The water management research by Atay et al. (2024) aligns with this. It reveals that the failures in the relationships between the main stakeholders in water management have led to complex problems that necessitate integrated policy solutions to be found.

Currently, sustainable actions, as represented in research, indicate that the need for harmonized measures is becoming increasingly acknowledged. The Cyclades Preservation Fund has been a contributor to more than 70 community grants. The Fund has invested over EUR 600,000 in local areas and co-funded various projects for environmental conservation and sustainability in the entire Cycladic archipelago (Cyclades Preservation Fund, 2024a). Projects like "The Voice of Water" on Kea Island not only raise awareness but also actively involve local communities through various learning activities that focus on water and conservation techniques, combining the power of documentary filmmaking with environmental education to spread their sustainability messages both across the Cyclades and internationally (Cyclades Preservation Fund, 2024b). These kinds of initiatives signify the adoption of a bottom–up approach to sustainability that aligns with policy-level interventions.

This literature review highlights that sustainability issues in the Cyclades are at least one layer deep, are complex, and require immediate action by the authorities. Studies have shown that the most attractive places within the archipelago have exceeded their carrying capacity limits, while aspects such as water resource management, environmental protection, cultural preservation, and community engagement are at risk of losing balance due to the increase in tourism. Yet, the literature also provides detailed accounts of the growing recognition among academics, policymakers, and community organizations of the issues and the emerging initiatives that signal possible routes towards more sustainable tourism models. The COVID-19 pandemic was like a pause button, a moment for retreat, learning, and mapping the future that would hardly be the same if it were to come again. Scholarly research is clear that a holistic, integrated plan for sustainability is necessary to address the problems of the Cyclades, while also considering the economic, environmental, and social goals of the area to achieve long-term equilibrium for the destination.

4. Methodology

4.1. Research Design and Approach

This study employs a comparative case study method, utilizing a qualitative research design that examines the sustainable tourism practices of three Cycladic islands: Santorini, Mykonos, and Paros. To synthesize the initiatives related to sustainability and facilitate a comparison between cases in terms of commonalities, differences, and practices among the selected destinations, the research design employs an exploratory-descriptive framework.

The methodological approach is rooted in the interpretive research paradigm. This is an appropriate choice, as it helps to comprehend the intricate socio-cultural impact of sustainable tourism development in the local area (Creswell, 2018). This model allows for exploring different angles and understanding the ways of sustainability in their current context, while maintaining the same level of analysis rigor.

4.2. Case Selection and Justification

The selection of Santorini, Mykonos, and Paros as case studies follows a purposive sampling strategy based on several criteria:

- Geographic proximity and shared characteristics: Since the three islands are part of the Cyclades group of islands in the South Aegean Sea, they have comparable weather conditions typical of the Mediterranean region, similar types of rock, and similar cultural heritage, which gives a "controlled" setting for the comparison.
- Tourism development variations: The islands represent various stages and types of tourism development. Santorini and Mykonos are considered to be mass tourism resorts of the last stage, whereas Paros is classified as an upcoming destination with a rapidly increasing tourist flow, thus allowing for the study of viability in different phases of development.
- Data accessibility: The fact that public information, policy documents, and recorded sustainability initiatives for the three islands are accessible means that there is enough data for detailed analysis.
- Economic significance: These islands are among the top three places that people want to see in the Cyclades, and they have generated a significant amount of money from tourism. However, they have also faced environmental concerns, which means that these islands are reflective of the overall sustainability challenges faced by small island tourism economies.

4.3. Data Collection—Secondary Data and Timeframe

The research primarily relies on secondary data collection from multiple sources to ensure comprehensive coverage and triangulation:

- Academic Literature: Peer-reviewed articles from major academic databases, such as Scopus, Web of Science, and Google Scholar, were carefully examined in a systematic way. The review focused on publications from 2019 to 2025, encompassing the latest sustainability measures and post-COVID progress.
- Official Government and Municipal Sources: Policy documents, planning reports, environmental assessments, and official statements from municipality websites and official publications, Greek National Tourism Organization (GNTO) reports, Ministry of Environment and Energy publications, European Union policy documents, and funding reports.
- Tourism Industry Publications: Reports from tourism industry organizations including SETE (Association of Tourism Enterprises of Greece) statistical data, INSETE (Institute of the Association of Tourism Enterprises of Greece) research reports, and regional tourism development studies.
- Non-Governmental and Civil Society Sources: Environmental NGOs (e.g., Cyclades Preservation Fund), local community organizations and advocacy groups, and sustainability certification bodies (Green Key, Travelife).
- Media and Online Sources: News articles, travel websites, and official destination marketing resources to understand local programs and public discussions about eco-friendly measures.

The analysis primarily focuses on sustainable measures implemented between 2019 and 2025, with a particular emphasis on the recovery period following the COVID-19 pandemic (2022–2025). The following were the reasons for choosing this timeframe:

- Capture the most recent sustainability practices and policy changes;
- Align with Greece's national sustainability commitments and EU policy frameworks;
- Include initiatives developed during the pandemic-induced tourism pause;
- Ensure data relevance and currency for policy recommendations.

5. Case Study: Comparison of Sustainable Tourism Within Santorini, Mykonos, and Paros

5.1. Overtourism Management and Visitor Flow Control

Santorini has adopted an active and regulatory approach to manage its significant number of tourists. One of the first measures was to cap the number of cruise ship tourists arriving per day at 8000. This restriction aims to reduce overcrowding in the island's narrow streets and infrastructure, and foster a more balanced distribution of tourists throughout the week (Travel & Tour World, 2025b). Furthermore, the authorities of the island have implemented a scoring system to qualify cruise ships for eligibility, covering ships based on size, onboard service standards, operational reliability, and the financial standing of operations (Travel & Tour World, 2025b). For the year 2025, this system operates at 80% capacity. Its targets are to reach full capacity by 2026. Although the arrivals of the passengers (by flight and ferry) were expected to decline in 2025 (from 2.2 million to 1–1.2 million), cruise ships arrivals are expected to remain stable due to these new policies. This strategic policy is viewed by tourism officials as a move in the right direction, encouraging "fewer arrivals, better experiences" and leading to more competitive prices for luxury facilities and services, making them more accessible to more individuals (Travel & Tour World, 2025b). Furthermore, tourists on cruise ships that visit Mykonos and Santorini will have to pay a charge of 20 euros between April and October 2025, aimed particularly at alleviating pressure on local infrastructure (Travel & Tour World, 2025c).

Mykonos, on the contrary, has experienced a considerable decrease in international arrivals, with airline companies reserving 5.8% fewer seats in 2024 compared to the previous year, pointing toward falling demand (Travel & Tour World, 2025a). This decline is attributable to a combination of factors, including rising travel costs, Schengen visa process issues (added to by the introduction of ETIAS and EES), and the ubiquitous plague of overtourism (Travel & Tour World, 2025a). The island's infrastructure, including beaches, roads, water supply, and waste management facilities, has been under incredible strain from large visitor numbers (Travel & Tour World, 2025a). Locals have voiced high levels of discontent, viewing the island's development into a "party-focused hotspot" as draining traditional culture and a source of conflict between visitors and residents (Travel & Tour World, 2025a). In common with Santorini, Mykonos introduced a charge of 20 euros to cruise ship passengers as a countermeasure against the impacts of overtourism (Travel & Tour World, 2025c). The Mykonos Port Fund has, nonetheless, started its own pioneering efforts at capacity management through digital means to prevent overcrowding by travelers and has adopted sustainable practices in its port infrastructure.

Paros has already been addressing the physical effects of tourism pressures at the local level. The Digital Paros website employs GIS mapping to highlight critical issues such as beach lease violations, rapid urbanization, decline of agricultural land, and coastal erosion (Digital Paros, 2025). Digital Paros also demonstrates the condition of protected areas such as Natura 2000 sites, wetlands, and Posidonia meadows to raise awareness about environmental degradation (Digital Paros, 2025). The island's priority lies in maintaining its unique Cycladic character, reducing building intensity, and protecting natural beauty through aware planning and participatory resident involvement (Digital Paros, 2025). According to a Europa Nostra report, the Cycladic islands (including Paros Island) are at risk from overdevelopment and uncontrolled construction activity. This behavior enhances the need for sustainable planning strategies throughout the region (Europa Nostra, 2025). More details about overtourism in Santorini, Mykonos, and Paros are provided in Table 2.

Table 2. Overtourism management strategies for Santorini, Mykonos, and Paros.

Island	Specific Initiatives	Key Outcomes	Associated Outcomes
Santorini	Daily cruise visitor cap (8000)	Cruise ship scoring system (80% capacity in 2025)	- A 20-euro cruise passenger fee (April–October 2025). - Aims for "fewer arrivals, better experiences". - Decline in air/ferry arrivals; stable cruise numbers. - Competitive pricing for luxury services. - Managing visitor expectations for a high-volume destination.
Mykonos	A 20-euro cruise passenger fee (April–October 2025)	Mykonos Port Fund: Digital Tools for capacity management; green port practice	- Decline in international arrivals (5.8% fewer seats in 2024). - Overcrowding; strained infrastructure. - Local frustration; erosion of traditional culture. - Rising travel costs; Schengen visa complexities. - Balancing party-centric image with sustainability.
Paros	Digital Paros: GIS mapping for beach violations	Emphasis on preserving Cycladic identity and reducing building density through planning	- Community engagement for sustainable future. - Focus on addressing root causes of physical impacts. - Advocacy for sustainable planning policies. - Rapid urbanization; shrinking agricultural land; coastal erosion. - Threats of overdevelopment and unregulated construction.

5.2. Waste Management and Circular Economy Initiatives

Santorini Island is in deep crisis due to waste. However, it is taking steps to reinvent its environmental management system in order to cope with the waste problems. Santorini authorities are scheduling to build a waste treatment facility and a bio-waste treatment plant which is expected to be completed by 2026 (Travel Tomorrow, 2025). In addition, Santorini Island has established a recycling model for a plastic-free island. This program's purpose not only includes increasing infrastructure for recyclable materials but also sets a specific collection stream for disposable plastic bottles from cruise ships, restaurants, and hotels (Travel Tomorrow, 2025). To bridge the gap until the new facilities are completed, 4 million euro have been funded by the municipality for landfill rehabilitation and an intermediate waste management solution, which also includes mobile composting (Greece Is, 2022). Furthermore, Santorini Island supports the VERNE project. This project is a pilot sustainable economy impact hotel project that can turn 400 kg of kitchen waste annually into 100 kg of compost. It also includes a biogas system that can produce 2 m^3 of biogas annually from organic waste, and thus helping to meet overall energy needs (Greece Is, 2022).

Mykonos Island is essentially "struggling" to deal with waste management. Reports have highlighted overcrowded beaches, a lack of resources, and inadequate systems (Travel & Tour World, 2025a). Although there are no absolute solutions to this problem, there are some private sector initiatives that have taken action in order to try and solve these problems. The Zephyros Cliffside Sanctuaries project is designed as a "Net Zero Waste" project that aims to on-site compost and use methane digesters to convert organic waste into biogas (Urbanao, 2025). The Cyclades Preservation Fund (CPF) (Cyclades Preservation Fund, 2025d), through its "All for Blue" project, conducts school training programs and recruits volunteers for coastal and underwater clean-ups in Mykonos for the creation of

a plastic-free environment (Cyclades Preservation Fund, 2025a). The University of the Aegean conducted Summer Workshops in Mykonos (August 2024), which focused on environmental education and waste management, including practical beach clean-ups (Cyclades Preservation Fund, 2025c). Finally, the Regional Waste Management proposed the establishment of Material Recovery Facilities (MRFs) in Mykonos and Syros for the treatment of separately collected bio-waste, recyclables, and residual mixed municipal solid waste (EBRD, 2025).

Paros Island is the "protagonist" in plastic reduction efforts. Its pioneering project "Clean Blue Paros" aims to make Paros the first plastic-free island in the Mediterranean Sea (RPRA, 2019). According to the campaign of "Clean Blue Paros", the most important part of the whole project is the commitment of local businesses to reducing the use of single-use plastic, such as coffee cups, straws, disposable water bottles, food packaging, and plastic bags. The businesses have agreed to reduce the use of plastic by replacing them with sustainable alternatives (RPRA, 2019). "Clean Blue Paros" is funded by several organizations such as Common Seas, the Municipality of Paros, WATT, WWF Greece, and the Cyclades Preservation Fund (Cyclades Guide, 2025). The project includes training programs for local people and tourists, the recognition of the necessity and investment of plastic waste capacity, and the implementation of source sorting practices. It should be noted that Paros has 350% more waste than usual during the peak season, and its landfill sites are almost full. More details about waste management in Santorini, Mykonos, and Paros are provided in Table 3.

Table 3. Waste management strategies for Santorini, Mykonos, and Paros.

Island	Key Waste Management	Specific Conservation Initiatives	Challenges
Santorini	New waste treatment and bio-waste plants (Travel Tomorrow, 2025)	Pilot plastic-free and recycling model (Travel Tomorrow, 2025). Intermediate landfill solution and mobile composting (Greece Is, 2022)	- VERNE project: composting and biogas systems (Verne, 2025). - Plants operational by 2026 (OT, 2023). - Municipality of Thira, private sector (PPP), Green Fund, and VERNE project partners (Travel Tomorrow, 2025). - Outdated urban planning (Travel Tomorrow, 2025). - Existing landfill issues (OT, 2023). - National low recycling rates (21% in Greece) (Packnode, 2023).
Mykonos	Zephyros Cliffside Sanctuaries: Net Zero Waste (on-site composting and methane digesters)	CPF "All for Blue": school trainings; clean-ups (plastic-free). University of Aegean: Summer Workshops (waste management and clean-ups) (Cyclades Preservation Fund, 2025a)	- Proposed Material Recovery Facilities (MRFs) (EBRD, 2025). - Aim for "Net Zero Waste" in specific projects (Urbanao, 2025). - Promote plastic-free environment (Cyclades Preservation Fund, 2025a). - MRFs planned for separately collected waste (EBRD, 2025). - Urban A&O, Cyclades Preservation Fund, All for Blue, University of the Aegean, and EBRD. - Mounting waste management challenges; strained resources (Travel & Tour World, 2025a). - High season waste increase. - National low recycling rates (Packnode, 2023).

Table 3. *Cont.*

Island	Key Waste Management	Specific Conservation Initiatives	Challenges
Paros	"Clean Blue Paros" initiative (plastic-free island) (RPRA, 2019)	Businesses reducing single-use plastics, using alternatives (RPRA, 2019). Source sorting implementation (Cyclades Guide, 2025).	- Aim to be first plastic-free Mediterranean island (Cyclades Guide, 2025). - Local business support (Cyclades Guide, 2025). - Landfills nearing capacity (Cyclades Guide, 2025). - Common Seas, Municipality of Paros, WATT, WWF Greece, and Cyclades Preservation Fund (Cyclades Guide, 2025). - 350% waste increase during high season (Cyclades Guide, 2025). - Lack of proper waste disposal centers (Digital Paros, 2025). - Old polluting collection trucks (Digital Paros, 2025).

5.3. Water Resource Management and Conservation Strategies

Santorini Island has taken effective measures to overcome its water scarcity challenges through desalination. A newly constructed desalination plant in Oia can produce 900 m^3/day of drinking water from brackish sources, which is a significant improvement compared to the previous one whose capacity was 350 m^3/day (Thira, 2016). In addition, TEMAK SA has installed another desalination plant with a capacity of 1200 m^3/day (Temak, 2009). The sustainability of these water desalination plants has been increased by the following procedures: the application of energy systems (achieving 90% efficiency), the use of inverters in low-pressure pumps, the installation of solar systems for the operation of secondary units, and the adoption of high-efficiency reverse osmosis membranes (Thira, 2016). Despite these improvements, water demand in Santorini has doubled since 2020 due to the rising number of tourists (Eco Turbino, 2025). One of the most important initiatives to deal with this problem is the VERNE project. The Verne project, which is the first sustainable impact hotel pilot, focuses on the education of nature-based water conservation methods (Verne, 2025). Furthermore, the Cyclades Preservation Fund supports the "Cald-Erata" project. This is a scientific project that aims to monitor changes in seawater parameters, such as acidity, dissolved oxygen, dissolved solids, and pressure, inside the Santorini caldera, providing crucial data regarding the health of the marine ecosystem (Cyclades Preservation Fund, 2025b).

Mykonos is fully dependent on desalination units for its water supply. The units have a total nominal capacity of 10,000 m^3/day and are located in the old Slaughterhouses and Korfos areas (Travel.gr, 2023). The island continually faces "stretched water resources" due to very high tourist flows (Travel & Tour World, 2025a). The Zephyros Cliffside Sanctuaries project that aims for "Net Zero Water" is one of the several efforts for water saving. It includes recycling devices that capture and treat greywater and rainwater for reuse as well as water-efficient fixtures (Urbanao, 2025). Research in hybrid renewable energy systems in Mykonos also includes the integration of desalination plants with a capacity of 1000 m^3/hour that would fulfill the water demands of the island (Platanitis et al., 2025). At the micro-level, Amyth Hotel in Mykonos can be an example of a company that carries out water management in a number of ways. Some of the water saving procedures that are implemented in this hotel are the following: dual-flush toilets, timers for watering plants,

encouraging guests to reuse towels, and reduction in the use of water, energy, and chemical use (Amyth, 2025).

Paros takes advantage of the desalination process to provide the island with water that is safe for human consumption, with a plant that started operation in 2019 and produces 2500 m^3/day (Sychem, 2025). However, the Europa Nostra report indicates that Paros (and other Cycladic islands) face significant strain on local resources, especially regarding water management systems, due to intensive tourism and unregulated construction (Europa Nostra, 2025). The platform of Digital Paros states that there is no visible effort to reduce the overall water consumption. It also indicates that there is no visible effort to collect rainwater for the recharge of aquifers. The platform indicates that the huge number of swimming pools that are beyond the reasonable limit is an unsustainable practice that will only make the situation of groundwater depletion worse (Digital Paros, 2025). More details are presented in Table 4.

Table 4. Water resource management for Santorini, Mykonos, and Paros.

Island	Desalination Capacity (m^3/day)	Specific Conservation Initiatives	Challenges
Santorini	New Oia plant: 900 m3/day (Thira, 2016)	TEMAK SA plant: 1200 m^3/day (Temak, 2009)	- Energy-saving measures in desalination (energy recovery; solar for secondary units) (Thira, 2016). - VERNE project: nature-based water conservation education (Verne, 2025). - CPF "Cald-Erata": seawater quality monitoring (Cyclades Preservation Fund, 2025b). - Water use doubled since 2020 due to tourism (Eco Turbino, 2025). - Strain on local supplies (Eco Turbino, 2025).
Mykonos	Total nominal: 10,000 m^3/day	Zephyros: Net Zero Water (greywater/rainwater recycling, efficient fixtures) (Urbanao, 2025)	- Hybrid RES research: desalination integration (Platanitis et al., 2025). - Hotels (Amyth): dual-flush toilets, towel reuse, and plant timers (Amyth, 2025). - Stretched water resources due to overtourism (Travel & Tour World, 2025a). - High water demand during summer peaks (Platanitis et al., 2025).
Paros	2500 m^3/day plant (opened 2019) (Sychem, 2025)	Advocacy for reduced water consumption and rainwater harvesting (Digital Paros, 2025)	- Digital Paros highlighting excessive swimming pools (Digital Paros, 2025). - Strain on water management systems from tourism and construction (Europa Nostra, 2025). - Lack of public works for aquifer enrichment (Digital Paros, 2025).

5.4. Sustainable Accommodation and Certification Landscapes

Santorini Island presents a strong "footprint" in the international market of sustainable accommodations with certifications. There are several hotels on the island that have reached the Green Key certification status, a globally recognizable eco-label for tourism businesses. Some of these hotels are the following: Cocoon Suites, Nous Santorini, Radisson Blu Zaffron Resort, Rocabella Santorini Hotel and SPA, Sao Maris Oia Luxury Suites and SPA, Santorini Kastelli Resort, and Santorini Secret Suites and SPA (Green Key, 2024a). Rocabella Santorini Hotel and SPA has been recognized as the first "Green Hotel" on most major booking platforms (Expedia, 2025b). Furthermore, Coco-Mat Santorini offers

an eco-friendly stay, which is based on the use of natural materials. It also offers the choice of bicycle rental for the guests, promoting sustainable exploration of the island (Eco Tourism Greece, 2025). Hence, the adoption of Green Key certificates implies a sector that is committed to environmental standards.

Mykonos demonstrates many Green Key-certified hotels that are committed to environmental responsibility. Some of Mykonos' "Green" hotels are as follows: Domes Noruz Mykonos, Koukoumi Hotel Mykonos (it is called the only Vegan Hotel in Greece), Mykonos Blu Grecotel Boutique Resort, and Rocabella Mykonos (Green Key, 2024b). Rocabella Mykonos is a perfect example of a hotel that fits within the "Green Hotels" concept as it is a Green Key-certified hotel that highlights its eco-identity (Rocabella, 2025). In addition to the Green Key certification, Amyth Hotel in Mykonos has been awarded with a Travelife Gold certification (Amyth, 2025). This certificate signifies compliance with stringent requirements across various areas, such as environment management, emissions reduction, biodiversity protection, human rights, and waste management. Mykonos Blu Grecotel Boutique Resort is also recognized with a Travelife Gold award (Grecotel, 2025).

Paros is the place that according to the given information does not have Green Key- or Travelife-certified hotels directly mentioned (Expedia, 2025a). Although this does not necessarily imply that there is an absence of sustainable practices, it indicates a possibility of fewer local businesses that utilize the same kinds of global certifications for sustainability or less publicity of such accomplishments in comparison with Santorini and Mykonos. More details are provided in Table 5.

Table 5. Sustainable accommodation and certification landscapes.

Island	Green Key-Certified Hotels	Travelife-Certified Hotels	Implications for Sustainability
Santorini	-Cocoon Suites, Nous Santorini, Radisson Blu Zaffron Resort, Rocabella Santorini Hotel and SPA, Santo Maris Oia Luxury Suites and Spa, Santorini Kastelli Resort, Santorini Secret Suites and Spa (Green Key, 2024a)	Coco-Mat Santorini (Eco Tourism Greece, 2025)	- No explicit listings in provided snippets. - Strong adoption of Green Key indicates commitment to environmental standards; eco-conscious stays offered.
Mykonos	- Domes Noruz Mykonos, Koukoumi Hotel Mykonos (1st Vegan Hotel), Mykonos Blu Grecotel Boutique Resort, Rocabella Mykonos (Green Key, 2024b)	- Amyth of Mykonos Agios Stefanos (Gold) (Amyth, 2025)	- Mykonos Blu Grecotel Boutique Resort (Gold) (Grecotel, 2025). - Significant adoption of both Green Key and Travelife, including niche "vegan" offering, signals market-driven sustainability and operational efficiency focus.
Paros	No explicit listings in provided snippets	No explicit listings in provided snippets	- Potential area for growth in international eco-certifications; may indicate a different focus on sustainability without formal certification.

5.5. Sustainable Transportation Options and Infrastructure

Santorini Island is the leader in sustainable transportation for its visitors. For instance, the Santorini Taxi Service, along with car-sharing, offers eco-conscious options like electric vehicles, hybrid cars, bicycles, and e-bikes. Additionally, Santorini provides guided walking tours and boat rides to nearby islands. This way of transportation is a more environmentally friendly way to travel (Abroad Guide, 2025). Moreover, the private car hire company VIP

Santorini is willing to make all its services carbon-neutral by increasing its electric car fleet (currently 50% of its fleet consists of electric cars). The company has also agreed to get rid of the single-use plastic parts of the operations (Sustainable Travel International, 2025). The VERNE project promotes eco-friendly behaviors by promoting the use of electric vehicles for visitor transportation and by encouraging "slow tourism" experiences that decline high-carbon transport options (Verne, 2025). The fees that are implemented on cruise ship visitors aim to contribute to transport sustainability by reducing congestion that is caused by short-term visitors (Travel & Tour World, 2025b).

Mykonos faces a lot of problems with traffic jams caused by overtourism (Travel & Tour World, 2025a). Nevertheless, Mykonos offers ride-sharing services like Uber as well as other potential ride options, and promotes sustainable ways of transformation (Uber, 2025). Sustainable travel tips for visitors, such as walking and bike renting, are promoted as the most effective ways not only to reduce carbon footprint but also to dive into the island's charm (Kinglike, 2025). The Mykonos Port Fund is fostering environmental practices as it utilizes digital tools to manage the capacity of cars and hence makes the transport flow more sustainable and smoother (Tornos News, 2025).

Paros Island is dependent on its public transport system, with buses operated by KTEL noted as a relatively simple and accessible way to travel on the island. Local citizens as well as local organizations are deeply concerned about the possible development of the place, and they are requesting a great number of changes. Some of these changes are the reduction in the number of private cars, the increase in the number and frequency of the public transport services, and the expansion of the networks of footpaths and cycle paths (Friends of Paros & Antiparos, 2018). Greek law requires that Greece increase the total electrification of the car fleet on a national level by 2030. In fact, taxis are required to achieve this goal by 2025 (Digital Paros, 2025). In line with this, electric vehicle charging stations are already in place at spots that have high priority, such as Naoussa (Plug Share, 2025). The platform of Digital Paros promotes diversified public transport and "soft mobility" options (such as pedestrians and cyclists) and suggests limits on the total amount of vehicles that are allowed on the island (Digital Paros, 2025). More details are provided in Table 6.

Table 6. Sustainable transportation options and infrastructure.

Island	Available Sustainable Transport Options	Infrastructure Developments	Policy Goals/Challenges
Santorini	Electric vehicles, hybrid cars, bicycles, and e-bikes (Abroad Guide, 2025)	Guided walking tours and boat transfers (Abroad Guide, 2025)	- Carbon-neutral private tours (VIP Santorini) (Sustainable Travel International, 2025). - Electric vehicles for visitor transport (VERNE) (Verne, 2025). - Increasing electric vehicle fleet (VIP Santorini) (Sustainable Travel International, 2025). - Cruise visitor limits/fees reduce congestion (Travel & Tour World, 2025b). - Promotion of slow tourism (Verne, 2025).
Mykonos	Uber available (Uber, 2025)	Walking and bike rentals encouraged (Kinglike, 2025)	- Mykonos Port Fund: environmentally responsible port infrastructure; digital capacity management (Tornos News, 2025). - Congested roads due to overtourism (Travel & Tour World, 2025a). - Need for investments in infrastructure (Travel & Tour World, 2025a)

Table 6. *Cont.*

Island	Available Sustainable Transport Options	Infrastructure Developments	Policy Goals/Challenges
Paros	KTEL buses and sea buses (Friends of Paros & Antiparos, 2018)	Calls for fewer cars and better public transport (Friends of Paros & Antiparos, 2018)	- Advocacy for "soft mobility" (pedestrians and cyclists) (Digital Paros, 2025). - Electric vehicle charging stations (Naoussa) (Plug Share, 2025). - Calls for expanding footpaths and cycle paths (Friends of Paros & Antiparos, 2018). - Greek law: car fleet electrification by 2030; taxis by 2025 (Plug Share, 2025). - Public implementation still needed. - Need for limits on vehicles (Plug Share, 2025).

5.6. Cultural Heritage Preservation and Local Community Engagement

Santorini is branding its image as a cultural destination to bring back its cultural identity through a project called "Santorini 2025 Initiative". This project is supported by the Municipality of Thira and the local community. The overall goal of "Santorini 2025 Initiative" is to protect and promote the island's cultural and historical heritage, which includes local history, traditions, architecture, food, music, and art (To Vima, 2025). One of the main cultural completions is the scheduled return of the "Kore of Thera" statue to the newly restored Archeological Museum of Thira, which will be presented in its official reopening (To Vima, 2025). This initiative focuses on highlighting not only well-known historical sites like the Bronze Age settlement of Akrotiri but also lesser-known attractions such as the Chapel of Agia Irini and traditional freshmen's huts (To Vima, 2025). Additionally, this project aims to implement practices that constitute the local culture of the island such as the survival of unique island traditions, linguistic idioms, distinctive animal bells, traditional dry-farming techniques, folk music, UNESCO stone walling ("xerolithies"), and local boat-building traditions (To Vima, 2025). Local traditional food products (such as fava beans, capers, olives, and unique wines) are recognized as contributions to the economic resilience of the community and good sustainable practices (Akrotiri Museum, 2025).

Mykonos prioritizes its cultural heritage by embracing various strategies, such as purchasing goods from local artisans, indulging in traditional festivals, and conserving local heritage sites (Through Eternity Tours, 2024). The island is full of great cultural assets like the Mykonos windmills (Kato Miloi), the UNESCO World Heritage site of Delos (an ancient sanctuary), and the museums of the island (the Archeological Museum, the Aegean Maritime Museum, Lena's House, the Agricultural Museum (Bonni Mill), and the Folklore Museum) (Sally's Place, 2025). Traditional festivals are very significant for the local community as they help preserve the customs and traditions of the island. Additionally, traditional festivals invite visitors to be a part of the joy of Mykonos' traditions. However, overtourism has created several challenges to the locals. According to a survey, locals believe that overtourism "has eroded traditional culture" and has created "frictions between locals and tourists" that have a negative impact on the social–cultural heritage of the island (Travel & Tour World, 2025a).

Paros has been making efforts to broaden its tourism, accepting markets beyond the typical "sun and sea" model by memorializing its cultural and natural environment. Its aim is to attract visitors who are more environmentally aware and appreciate the fact that the character of the island is still authentic (Digital Paros, 2025). The Paros Environmental and Cultural Park (Paros Park) symbolizes this strategy in every respect as it a prime example of cultural and green tourism. The park is the place where the Cycladic nature and the

measurable qualities of the local culture represented by a post-Byzantine monastery as well as the presence of the Russian navy can co-exist, combined with performances of various cultural events like music concerts and open-air cinema (Greeka, 2025b). The "Ancient Quarries of Paros" initiative, which is directed by the NGO Paros Ancient Marble Quarries Park, aims to facilitate the underground tunnels that would lead to the restoration of the site of history (The National Herald, 2023). The island encourages visitors to engage in eco-conscious activities and also support local artists and producers (Catamaran Chapter Greece, 2025). The Day of the Assumption of the Virgin Mary is one of the traditional feasts which has become one of the most vibrant community events. It includes processions, wine, and dancing (Kinglike, 2025). More details are presented in Table 7.

Table 7. Cultural heritage preservation and local community engagement.

Island	Key Cultural Heritage Assets/Traditions	Specific Preservation Initiatives	Challenges
Santorini	History, traditions, architecture, cuisine, music, and art (To Vima, 2025)	"Kore of Thera", Akrotiri, Agia Irini, dry-farming, dry-stone walling (UNESCO), and local products (fava, capers, and wine) "Santorini 2025 Initiative" (Municipality of Thira) (To Vima, 2025)	- Return of "Kore of Thera" to renovated museum (To Vima, 2025). - Spotlighting historical sites and traditions (To Vima, 2025). - Tourism supports local businesses and jobs (Akrotiri Museum, 2025). - Focus on authenticity for future (To Vima, 2025). - Shift from quantity to quality needed (To Vima, 2025). - Balancing economic benefits with cultural preservation (Akrotiri Museum, 2025).
Mykonos	Windmills, Delos (UNESCO site), various museums, and traditional festivals (Easter, Christmas) (Sally's Place, 2025)	Local artisans (Through Eternity Tours, 2024). Support for local artisans, traditional festivals, and heritage sites (Through Eternity Tours, 2024)	- Guided tours of cultural sites (Eco Tourism Greece, 2025). - Residents voice frustration over "party-centric hotspot" (Travel & Tour World, 2025a). - Support local guides (Eco Tourism Greece, 2025). - Overtourism eroding traditional culture (Travel & Tour World, 2025a). - Friction between locals and tourists (Travel & Tour World, 2025a).
Paros	Cycladic identity, local natural, and cultural heritage (Digital Paros, 2025)	Paros Environmental and Cultural Park, Byzantine Road, and ancient quarries (Greeka, 2025b). Day of the Assumption of the Virgin Mary festival (Kinglike, 2025)	- Digital Paros showcasing heritage (Digital Paros, 2025). - Paros Park: cultural events; preservation of scenery and heritage (Greeka, 2025b). - "Ancient Quarries of Paros" project (The National Herald, 2023). - Encouraging patronage of local artists/producers (Catamaran Chapter Greece, 2025). - Fostering community of informed residents and visitors (Digital Paros, 2025). - Engaging in eco-conscious activities (Catamaran Chapter Greece, 2025). - Diversifying beyond "sun and sea" narrative (Digital Paros, 2025). - Preserving unique Cycladic identity from over-construction (Digital Paros, 2025).

5.7. Beach Quality and Environmental Standards

Santorini is a strong example of a place that really cares about beach quality, and Blue Flag certifications are just one of the ways to prove it. In 2024, Santorini's beaches were awarded seven Blue Flags, indicating an upward trend in the number of flags compared to previous years (Santorini.net, 2025). The certified beaches were Agios Georgios, Vlychada, Kamari 1, Kamari 2, Perivolos, Perissa, and Monolithos Beach. Blue Flags reflect good quality in the water, environmental management, safety, and services.

Mykonos provides coastal water beaches that are Blue Flag-certified, which also signifies a commitment to environmental standards for its marine ecosystem. Elia Beach, a cosmopolitan destination, is regularly given the Blue Flag, which means that it complies with the environmental quality and safety requirements (Turquoise Collection, 2025). In 2024, Mykonos earned one more Blue Flag beach award (Kalafatis—Aphrodite Beach) (GeoGreece, 2024).

Paros' beaches have been awarded several Blue Flags although the specific ratings may vary annually (Paros Paradise, 2025). The island's most famous Blue Flag beaches are Chrysi Akti, Kolibythres, Logaras, and Tserdakia (Paros Paradise, 2025). In 2024, Paros was awarded four Blue Flag beaches: Logaras, Pounta, Marpissa—Chrysi Akti, and Livadia (GeoGreece, 2024). More details are provided in Table 8.

Table 8. Blue Flag beaches (data received in 2024).

Island	Number of Blue Flag Beaches	Beach Names
Santorini	7 (Santorini.net, 2025)	Agios Georgios, Vlychada, Kamari 1, Kamari 2, Perivolos, Perissa, and Monolithos Beach (Santorini.net, 2025)
Mykonos	1 (GeoGreece, 2024)	Kalafatis/Aphrodite Beach Resort (Elia Beach consistently awarded) (GeoGreece, 2024)
Paros	4 (GeoGreece, 2024)	Logaras, Pounta, Marpissa/Chrysi Akti, and Livadia (Chrysi Akti, Kolibythres, Logaras, and Tserdakia long-running) (GeoGreece, 2024)

6. Discussion

The cross-functional examination reveals the presence of three separate ecological models of the Cycladic islands. These models illustrate various management styles that local authorities may have employed to address the issue of overtourism. The governance style of Santorini, which is mainly regulated by setting limits to the number of cruise ships (8000 visitors per day) and implementing a vessel scoring system, can be considered a direct management approach. This approach has been outlined by Koens et al. (2018) as the strategy required for places that are already saturated with visitors. Postma et al. (2017) refer to this approach as "hard regulation"—a category of direct intervention methods that endeavor to regulate visitor flows through the use of policy instruments.

On the other hand, Mykonos's dependence on the private sector is an illustration of what Hall and Page (2022) describe as "market-based sustainability governance," a model in which green solutions emerge from the business sector rather than being imposed by law. The Zephyros "Net Zero Waste" initiative, along with various hotel-scale resource-saving measures, is a good example of this method; however, it does not have the same degree of coverage as the regulations (Milano et al., 2019).

The community-driven model of Paros, especially through Digital Paros and local advocacy groups, serves as a perfect example of "participatory governance" as characterized by Bramwell and Lane (2011)—a type of governance where a sustainable solution is found through local engagement and data-driven awareness. This method is consistent

with the research of Nunkoo and Smith (2013), who assert that the commune holding the development process of tourism is the best way to achieve long-lasting, ecologically sustainable outcomes, albeit without the immediate effect of regulatory interventions.

The environmental management strategies in the three islands have varying impacts on the effectiveness of addressing tourism-induced pressures. Among the infrastructural investments in Santorini are the new waste treatment facilities and the increased desalination capacity (900–1200 m^3/day), which are examples of "technological fixes" to sustainability challenges as delineated by Gössling et al. (2012). Nevertheless, the fact that water consumption has doubled since 2020 shows that water supply solutions can only go so far in relieving environmental pressures driven by demand (Paranychianakis et al., 2019).

Waste management initiatives are producing varying outcomes across the islands. The "Clean Blue Paros" campaign in Paros, which has achieved a reduction in plastic use at the enterprise level, is a good example of the efficiency of targeted behavioral interventions that García-Hernández et al. (2017) link to the successful implementation of a circular economy in tourist destinations. Nevertheless, the 350% increase in seasonal garbage on all islands points to the major problem that the authors Mateu-Sbert et al. (2013) have recognized: the infrastructures of small islands are not capable of handling the large number of tourists without causing extensive environmental damage.

Water resource management unearths essential conflicts with sustainability. Although each of the three islands has invested in desalination facilities, the fact that these solutions require a significant amount of energy leads to what March and Saurí (2010) call "sustainability paradoxes"—a new kind of environmental problem arising from the use of environmental solutions. The absence of rainwater harvesting, which is easy to notice, and the lack of any notable reduction in consumption on Paros, as shown by the Digital Paros advocacy, are symptoms of more significant challenges in demand-side management, which Zorpas and Voukkali (2017) point out as a necessary condition for the sustainability of islands.

Environmental protection, combined with the safeguarding of culture and community engagement, exhibits significantly different implementation across the three destinations. The "Santorini 2025 Initiative" of Santorini is an example of what Honey and Krantz (2007) denote as "integrated destination management," whereby the aim is to harmonize economic use with the preservation of the community's cultural authenticity. Concentrating the initiative on ancient ways of living, local products, and historical preservation aligns with Sharpley (2020) argument that sustainable tourism requires cultural support for environmental protection.

Community acceptance of sustainability, on the other hand, exhibits some worrying differences. Mykonos is going through the situation which R. Butler (2020) calls "social carrying capacity" issues, where local communities say that tourism has "eroded traditional culture" and resulted in "frictions between locals and tourists." These results confirm the findings of Nunkoo and Gursoy (2012), who argue that the advantages of tourism for the community need a proper balance with the maintenance of the social structures and cultural identity.

Paros's method, through the Environmental and Cultural Park, as well as the preservation of the old quarries, highlights one key aspect that Weaver (2006) refers to as "integrated heritage tourism"—a concept where environmental and cultural heritage issues are mutually supportive. The focus of the island on preserving "authentic Cycladic character" and, at the same time, advocating green-minded activities clearly shows the island's positive application of the concept of multidimensional sustainability indicators as suggested by Torres-Delgado and Saarinen (2014).

The extent to which green measures can be implemented in other tourist locations that are alike in nature shows not only potential benefits but also limitations. The governance strategy of Santorini notably highlights the limitations imposed on cruise visitors and the fees charged to passengers, exemplifying the scalability potential that Capocchi et al. (2019) link to the successful management of overtourism in other Mediterranean destinations. The rating system for ships and instruments for capacity management is an example of what the authors Koens et al. (2018) term "replicable policy innovations," which can be utilized by islands facing similar tourism pressures.

The community-based monitoring on Paros, enabled by Digital Paros and GIS mapping, is an example of "transferable governance innovations" (Hall, 2008)—innovations that can be adapted for various local settings while still being effective. The business engagement framework of the plastic reduction initiative offers the "scalable behavioral interventions" proposed by Font and McCabe (2017), which could be utilized by small island economies of a similar nature.

Nevertheless, the differing performance of private sector initiatives across the various islands suggests the so-called "context dependency" of sustainability management, as referred to by Bramwell (2011). The difficulties of Mykonos in the public works sector, notwithstanding the engagement of the private sector, indicate that market-based solutions require a strong legal framework to achieve sustainable results, which in turn corroborates Mihalic (2020) thesis about the need for combined governance approaches.

The results show that achieving sustainability in the long run involves the use of tailor-made strategies for each destination that mix the use of regulations, technology, and community engagement. There is no single method that works for all cases, which implies that Saarinen (2006) statement that the development of sustainable tourism needs to adjust to local economic, environmental, and social conditions, rather than using standardized solutions, is valid.

7. Conclusions

The examination of sustainability practices on Santorini, Mykonos, and Paros has revealed a complex, dynamic landscape. The Cyclades islands are not only implementing a wide range of measures aimed at reducing the negative impact of tourism on the environment and local communities, but the journey to sustainability appears to be full of challenges. Through a strong, policy-driven strategy, Santorini is successfully controlling the visitor flow and allocating funds to the crucial waste and water management infrastructure.

The private sector in Mykonos, with the support of large business organizations, is addressing issues related to sustainable development, and the island is reaping the benefits. Paros is taking a significant step forward with creative and community-driven projects, primarily focused on plastic reduction and cultural preservation, which are expected to lead to a more balanced and authentic tourism model.

The findings underscore that even a "green" tourism development plan does not establish sustainable tourism as the standard. For a strategy to be effective, it should be tailored to the socio-economic, ecological, and cultural issues of a local destination. Whether or not these initiatives succeed is contingent upon the involvement of comprehensive scheduling, deep-rooted policy enactment, up-to-date technology, genuine partnerships between business and government, and, above all, the attendance and offering of local communities and visitors.

Comparative analysis offers several policy recommendations that, if implemented by Mediterranean island destinations, could help them overcome similar challenges. Firstly, it is found that the most effective measures are those integrating governance frameworks that combine regulatory controls with market incentives. National governments should

define carrying capacity thresholds and provide tax incentives to companies for ecological investments. Secondly, it is suggested that water and waste management have a significant impact on the environment, and thus require mandatory impact assessments for all tourism developments. In such a case, developers would be expected to raise funds for the upgrade of the existing infrastructure using sustainability levies. The third point states that community engagement opportunities must be formalized through the execution of official consultation processes, along with the signing of benefit-sharing agreements that offer local people the chance to participate in decisions regarding tourism planning.

Regional collaborative efforts among various island destinations should be enhanced to enable them to exchange successful practices and prevent the possibility of competitive degradation of environmental standards. It is possible to leverage the Blue Growth policy of the European Union to attract the necessary financial support for the islands' transition to a clean and sustainable future, particularly in cases such as upgrading desalination facilities and implementing circular economy projects. Moreover, the promotion of tourism can play a crucial role if it is targeted towards sustainable development rather than pursuing mass tourism. One way to achieve this goal could be through endorsements of eco-conscious hotels and tour companies that have demonstrated a reduction in their environmental and social impact through the implementation of verified practices.

This research acknowledges that there are several limitations related to both methodology and concepts, which define the extent to which the findings can be generalized. Firstly, the study is based on secondary data and publicly available reports. These may not only miss the range of the local problems but also the unrecorded environmentally friendly practices and the unorganized support that might be due to a lack of official documentation. The timeframe, focusing on developments after COVID-19 (2019–2025), may also be insufficient to provide an accurate picture of sustainability trends or the complete effectiveness of the newly introduced measures.

The comparative framework is insightful, as it sheds light on the differences between the three locations; however, it still fails to fully account for the numerous contextual variables that influence sustainability results, such as local political relationships, unreported economic activities, and intangible cultural aspects. Furthermore, the research overlooks the voices of primary stakeholders in the community, i.e., residents, tourists, and business operators, which creates a barrier to understanding the difficulties of the implementation process and the degree of community acceptance. By predominantly using English-language sources, there is a possibility that some local research and knowledge generated by the community, which is only available in Greek, may have been overlooked.

Economic evaluations of eco-friendly projects have not been thoroughly studied because standardized financial data were not readily available for the three islands. This factor may lead to a lesser acknowledgment of the potential conflicts between the economy and nature. Finally, the characteristics of the three islands in the Cyclades that the research focuses on may impose some limitations on the study's applicability to other islands in the Mediterranean region or the rest of the world, which have different tourism development trends, administrative systems, or resource availability.

Further studies should implement multimodal methods that incorporate actual data collection to provide more in-depth perspectives on the effectiveness of sustainability practices. Such studies, which follow environmental factors, community opinions, and financial changes over several tourism seasons, would be an invaluable source of information on the endurance and flexibility of sustainability models. Comprehensive studies on the economic advantages and disadvantages of particular measures, such as water desalination or waste treatment, would be a valuable tool for guiding policy-making and budgeting.

Such comparative studies, crossing the Cyclades and covering other islands of the Mediterranean (Malta, Corsica, and Sardinia), would be beneficial in understanding the impact of different governance systems, cultural contexts, and economic structures on sustainability outcomes. Research into tourists' behavior would provide a wealth of information on how tourists might adjust to sustainability measures, their readiness to pay for environmental services, and their reactions to capacity limits, which would be helpful in managing the demand side.

Research on technology innovation, focusing on renewable energy integration, intelligent tourism systems, and the application of the circular economy in small islands, is another significant area that requires the identification of new issues. Research that focuses on the social dimension of sustainability, particularly the sharing of tourism benefits and burdens among various community groups, would contribute to filling existing gaps in aspects of social equity and justice in sustainable tourism development.

Climate change adaptation research specifically focused on island tourism destinations should examine the performance of sustainability strategies under various climate scenarios, including rising sea levels, extreme weather events, and shifting tourist demand patterns. Last but not least, policy execution research, which examines the effectiveness of various governance models, stakeholder engagement methods, and enforcement strategies, would be a valuable resource for destination managers and policymakers seeking to implement the sustainable tourism transition.

The move towards sustainable tourism requires constant monitoring, flexibility, and a commitment to protect the Cycladic islands not only as destinations for future generations but also as exemplars of sustainable island tourism worldwide.

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