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## Article

# Creating Value via the Circular Economy: Practices in the Tourism Sector

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**Abstract:** Among major international research and practice issues, the issue of the circular economy has emerged recently as “an alternative economic paradigm” to address the current needs of the present and to search for innovative solutions for the future. The objective of this paper is to explore the initiatives and practices of the circular economy that could be actuated by tourism firms with the aim of understanding the value that could be created and its contribution to sustainable development based on decarbonization, energy efficiency, and the use of renewable sources. To achieve this objective, an in-depth, qualitative case study of a tourism resort is presented and analyzed to identify the key CE practices activated, with the aim of creating greater value and contributing to sustainable production and consumption. The results show that the main CE practices implemented focus primarily on enhancing resource efficiency, reducing emissions, and minimizing environmental impacts. This research also emphasizes the benefits that the CE provides in terms of economic, environmental, and social efficiency. The study enriches the relevance of CE and the sustainability approach for the tourism sector by highlighting the main value opportunities that tourism firms could grasp from the application of CE. Also, the paper contributes to providing practical suggestions regarding possible initiatives and practices that tourism managers could adopt for deploying CE practices.

**Keywords:** circular economy; tourism sector; value creation; sustainability



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## 1. Introduction

Tourism researchers worldwide are now debating strategies, policies, and new business models to assist in the recovery of the sector from the disastrous effects caused by the COVID-19 situation on the socio-politic and economic situation (Zenker and Kock 2020). What resonates with most practitioners and researchers is to radically rethink and redesign the competitive strategies of the sector for recovery and renewal (Gössling et al. 2020; Hall et al. 2020; Sigala 2020).

In the current scenario, sustainable tourism development has emerged as a critical issue for future development trajectories with the aim of boosting the efficient use of natural resources while producing less waste and addressing the challenges of climate change and biodiversity (UNWTO 2020). A new economic concept known as the “circular economy” (CE) has emerged recently to address social and environmental sustainability issues that increasingly arise in tourism research and its practice (Manniche et al. 2021; Geissdoerfer et al. 2017). CE is replacing the traditional “take, make, dispose” economic model (Urbanati et al. 2021, p. 1), which has become highly unsustainable.

In recent years, there has been a significant surge in interest and engagement with the concept of the circular economy among researchers and practitioners. The circular economy has gained traction across various domains, and different managerial journals are now focusing on exploring the principles of the circular economy, their impact on new business

models, and the dynamics of value creation and capture (Antikainen and Valkokari 2016; Bocken et al. 2016; Lewandowski 2016; Centobelli et al. 2020).

The literature related to the tourism domain has also increased due to the negative impacts of its activities on the community and environment.

In the current debate on sustainable tourism, the practices related to a CE are considered to be critical (Vargas-Sánchez 2018), and that CE is relevant due to its promises as an “integrative and instructive framework for encouraging more sustainable tourism practices” (Manniche et al. 2021, p. 2). However, few references and empirical research are found in the tourism sector. Therefore, there is fertile ground for additional empirical research on the practices and initiatives in the tourism sector.

In this context, this research aims to investigate the initiatives and practices of the circular economy and understand the value that can be generated as well as the impact on sustainable development. To achieve this, a case study methodology is applied. Through the case study analysis, we seek to describe the role of CE practices in driving the sector toward new mechanisms for sustainable value creation, transfer, and capture. We also provide practical insights into suitably approaching CE in the tourism field.

The paper is structured as follows: first, a literature review of the CE in tourism is provided, followed by the methodology used to analyze the case study. Then the findings obtained from our case study analysis have been presented that highlight the key CE practices that the hospitality firm has activated to create, transfer, and capture sustainable value.

## 2. Literature Review

### 2.1. *Creating Value with the Circular Economy*

Recently, the term CE has become the keyword for researchers, policymakers, and managers, indicating the significant attention that society is dedicating today to new approaches that seek to transform the way we use resources radically. It does this by replacing previous linear production and consumption models with closed production systems that place more emphasis on time by reusing and recycling and keeping resources in a loop of production and usage (EMF 2015). CE consists of a new economic model that is associated with significant competitive advantages for businesses as well as benefits to the environment (EMF 2015). The relevance of this new economic model is also evidenced by EU strategies and policies, such as the European Green Deal that aims to transform the EU into a modern, resource-efficient, and competitive economy, as well as EU policy and recovery packages (EU Commission 2020).

The academic research has, so far, dedicated significant attention to the conceptualization and definition of the main features and dimensions of the CE paradigm. There are different definitions reported in the literature that aim to grasp the main features and characteristics of CE.

EMF (2015), defines it as follows: “CE is an industrial system that is restorative or regenerative by intention and design. It replaces the ‘end-of-life’ concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse, and aims for the elimination of waste through the superior design of materials, products, systems, and, with this, business models”, thus highlighting the relevance of “reuse” and “recycle” of resources and products as well as “re-duction” of environmental and social impacts.

One of the most complete definitions is the one of Kirchherr et al. (2017), that describes it as “an economic system that is based on business models which replace the ‘end-of-life’ concept with reducing, alternatively reusing, recycling, and recovering materials in production/distribution and consumption processes, thus operational at the micro-level (products, companies, consumers), meso level (eco-industrial parks) and macro level (city, region, nation and beyond), to accomplish sustainable development, which implies creating environmental quality, economic prosperity, and social equity, to the benefit of current and future generations”.

In addition, researchers have reserved significant attention for analyzing how firms are innovating their business practices, strategies, and models to implement CE with the ultimate goal of achieving improved production effectiveness and business performance in a sustainable and cost-efficient mode (Geissdoerfer et al. 2020).

Geissdoerfer et al. (2020), defined four main strategies that firms could adopt for redesigning and innovating the way how they create, deliver, and capture value consisting of Cy-cling; Extending; Intensifying, and Dematerializing strategies (Parida et al. 2019; Bressanelli 2018; Lüdeke-Freund et al. 2019).

These strategies could be used by firms to reuse, repair, and increase the lifetime of products and materials, intensify resource loops, as well as increase collaborative consumption services.

On the other hand, other researchers have focused on analyzing how the implementation (Lüdeke-Freund et al. 2019; Centobelli et al. 2020) of CE practices impacts value-creation and -capturing processes (Centobelli et al. 2020). For example, Urbinati et al. (2021), argued that there are different new and innovative managerial practices that firms could activate for creating, capturing, and delivering value through CE business models along two main dimensions:

Dimension 1—addresses how firms design the value network. This means how firms organize and structure key resources, activities, and supply chain relationships with the stakeholders to create and enhance value.

Dimension 2—relates to how firms design innovative value propositions and interfaces to capture value. The authors highlight that there are different options to be adopted for redesigning a new value network, such as:

- Initiatives oriented toward the reduction in greenhouse gas emissions and negative environmental impacts (Sassanelli et al. 2019; Su et al. 2013), recognized as Energy efficiency initiatives;
- Initiatives oriented toward new practices and capabilities that contribute to enabling sustainable loops by using natural, recyclable, sustainable, and eco-friendly materials and by activating new design practices for enabling product and component circularity (recycle, reuse, disassembly) (Sassanelli et al. 2019), recognized as Design for “X” initiatives;
- Enhanced awareness and systemic view initiatives aimed to endorse direct participation of supply chain stakeholders in value-creation processes and to create shared value and trust by implementing operative communication (Ghisellini et al. 2016; Singh and Ordoñez 2016);
- Redesign the customer value proposition and interface initiatives by activating new modalities of bringing the products to users such as leasing or renting products, pay-per-use activities, and by offering complementary services for products with the aim of broadening their lifecycle through, e.g., repair and maintenance services, ND take-back programs (Kunz et al. 2018; Stahel 2016);
- Promotion and communication initiatives aimed at informing customers about the new value proposition of the business through websites and social media, as well as directly by staff, with the aim of directly involving them in CE themes (Baxendale et al. 2015).

However, activating such new practices requires the redefinition of business and supply chain processes, as well as new business practices to reinvent the way firms create, transfer, and capture value (Centobelli et al. 2020) by reducing the environmental impact of materials and products, minimizing the need for virgin resources and distribute resources in an equal and fair mode (EMF 2014).

## 2.2. CE and ESG Goals

The overarching objective of a circular economy (CE) is to achieve a harmonious balance among people, the planet, and economic growth (profit) (Elkington 1997). The CE concept is deeply rooted in environmental economics and employs scientific principles

to pursue sustainable goals (Mentink 2014). While sustainability and circularity are often used interchangeably, they have distinct objectives, origins, and motivations.

Sustainability aims to achieve “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland 1987). On the other hand, the concept of the circular economy focuses on an economic model that is restorative and regenerative by design, aiming to retain the maximum value from products, components, and materials (EMF 2015).

Einarsson and Sorin (2020), argued that sustainability is a broader concept that encompasses economic, social, and environmental benefits at the societal level, while the circular economy primarily pertains to economic actors who implement the new production and consumption system. Therefore, the circular economy is seen as a necessary process and an intrinsic foundation for a radical transition towards sustainability (Sengers et al. 2016) and for achieving sustainable development goals. In other words, Sustainability is the goal; circularity is a means. Hence, the circular economy concept embraces and complements the established notion of sustainability, reinforcing its relevance.

It is important to note that transitioning to a circular economy requires rethinking and redesigning growth, focusing not only on positive economic impacts but also on broad societal benefits (Taylor 2021). Moreover, it involves the utilization of advanced and disruptive technologies to reduce the overall demand for raw materials and maximize the value and lifespan of products (Stahel 2013). Such new practices necessitate the redefinition of business and supply chain processes and the adoption of novel business practices to reinvent how firms create, transfer, and capture value (Centobelli et al. 2020).

### 2.3. Activating CE in Tourism

To thrive in the post-COVID-19 era, it is crucial for scholars and researchers to steer tourism development strategies toward sustainable resource utilization by introducing new ideas, models, approaches, and paradigms (Del Vecchio et al. 2020; Einarsson and Sorin 2020; Romagosa 2020; Rodríguez et al. 2020; Sigala 2020). The Circular Economy (CE) approach is gaining popularity as a guiding principle for achieving a sustainable and resilient tourism ecosystem (Einarsson and Sorin 2020, p. 4). Despite the tourism industry’s significant contributions to socio-economic growth, including GDP, jobs, and economic development, it also has a range of negative environmental and social impacts, such as pressure on the natural capital and local resources, harm to ecological habitats, the utilization and consumption of resources such as land, buildings, furniture, vehicles, fossil fuel, food, and textiles, as well as contributing to global greenhouse gas emissions (Einarsson and Sorin 2020; Rodríguez et al. 2020).

The tourism industry’s consumption and production model is primarily based on a linear take-make-dispose model, relying heavily on vast quantities of raw and natural resources (Manniche et al. 2021). However, researchers are exploring the potential for the tourism industry to contribute to the CE, given its complexity, heterogeneity, interdisciplinary nature, and interconnectedness with various indirect value chains, activities, and sectors (Del Vecchio et al. 2020). Consequently, researchers are now focusing on exploring the CE for tourism by examining the different practices and mechanisms employed by tourism businesses.

Recent studies have highlighted the significance of transitioning toward circular production and consumption modes for different stakeholders in the tourism sector, including food production, transportation, building, and construction (Pamfilie et al. 2018; EMF 2015). Key practices that support circular tourism include recovery, reuse, redevelopment, valorization, and regeneration (Menegaki 2018).

Many CE practices and strategies can be implemented by tourism businesses and destinations to create a more sustainable experience for all stakeholders, reducing natural resource consumption and negative social and environmental impacts (Rodríguez et al. 2020). Examples of accommodation structures, such as the Greet hotel brand by Accor, Crowne Plaza Copenhagen Towers, and Green Solution House, that have implemented

initiatives that focus on building material recycling, asset renovation, in-place material, and workforce utilization, modular and reusable raw material use, modular design, flexible partitioning solutions, and preference for easily repairable, upgradable, and customized materials and products (Einarsson and Sorin 2020; Manniche et al. 2021). For example, the study by (45) highlighted the use of renewable energy sources in Greek hospitality structures, including thermal, geothermal, and biomass-generated energy. Girard and Nocca (2017) provided evidence of the practices and initiatives undertaken by Italian hotels to reduce CO<sub>2</sub> emissions and create a differentiation strategy, including the use of natural gas, electric buses, and zero-km menus.

Scholars have focused on analyzing how CE can contribute to sustainable tourism by creating new opportunities for long-term recreation activities, reducing negative impacts on the environment, and attracting green customers. (Ma et al. 2018; Merli et al. 2019). Other studies have focused on understanding the customer perception and interest in circular economy practices, such as the effect of green practices on customer satisfaction and purchasing intentions (Kim et al. 2017; Yusof et al. 2017) or the relationship between green practices and profitability (Yang et al. 2015).

Research has shown that hospitality businesses are primarily focused on sustainability activities and transition to circular practices mainly within reduction strategies (38). Studies have also aimed to identify best practices, strategies, and guidelines for transitioning toward a circular model in hospitality companies, such as Rodríguez-Antón and del Mar Alonso-Almeida (2019), who analyzed CE practices in four European hotel chains and Menegaki (2018), who examined the extent hotels in Greece.

For instance, Pamfilie et al. (2018), analyzed the deployment of CE practices by hotel establishments in Romania, viewed from the perspective of industry managers. Florido et al. (2019), provided a roadmap for transforming a tourist destination into a CE model, while Manniche et al. (2021), studied how CE, natural capital, and resilience concepts are being utilized by scholars and companies in the tourism and hospitality sector in their business operations and development plans.

Food services and restaurants are also employing reusability, recycling, and reduction practices in the production, packaging, and waste management of food (Alhola et al. 2017; Privitera 2016). At a macro level, there are a variety of initiatives, policies, and interventions in place to promote and support the development of CE. Examples include the European project Ecobnb, which brings together eco-friendly accommodation structures, the Eco Leader Award initiated by TripAdvisor to acknowledge sustainable infrastructures, and the Booking Booster program launched by Booking, which provides financial support and training opportunities for companies involved in sustainable tourism.

Despite the growing number of scientific works on CE in tourism, research on circular tourism is still in its infancy. Further research is required to comprehend the approaches to adopting CE principles, the challenges and barriers businesses face during the transition, and to identify best practices (Rodríguez et al. 2020; Manniche et al. 2017).

This paper aims to address this gap by presenting empirical evidence of CE practices being implemented by hospitality structures in the Mediterranean region.

### 3. Methodology

This research paper utilized a single-case-study methodology to explore a “contemporary phenomenon within its natural context, where researchers have limited control over participant behavior” (Yin 2014, p. 14). According to Berg (2007), employing the case study approach allows for a thorough analysis of intricate particulars, patterns, and fundamental components that may be disregarded when using alternative research methods. Furthermore, Creswell et al. (2007), asserted that this approach integrates various methods of data collection, including interviews, archival reports, documents, artifacts, and direct observations.

For this case study, a range of data sources was employed, including semi-structured interviews, field notes from informal meetings, internal documents and reports, websites,

social media, and media releases. The use of multiple data sources facilitates data triangulation (Yin 2014), which is crucial for attaining a comprehensive understanding by considering different perspectives on the phenomenon (Stake 2000). The validation strategy, ensuring internal, construct, and external validity, is outlined in Table 1.

**Table 1.** Case study validity (own elaboration).

Test	Strategy	Phase
Internal validity	The case presents characteristics that justify the internal validity of the results	Selection of the case (defining criteria for a representative case)
Construct validity	Multiple data sources Validation of the constructs through the key components of CE Adoption of Urbinati and framework on CE practices	Data collection (reports, interviews, visits) Design of the study
External validity	Validation with external references	Construction of the findings (data analysis by three researchers)

The research context centers on enriching knowledge regarding circular tourism and its potential achievements, specifically through the examination of the Vivosa Resort. This Italian hospitality firm that has embraced circular economy practices across its value chain processes. The selection of this case is motivated by several factors:

1. The case represents the Mediterranean tourism ecosystem, aligning with the book's objective to provide insights into how hospitality establishments in the region are employing circular economy principles to redefine the future of tourism;
2. The case exemplifies interesting and ambitious practices and initiatives pertaining to material recovery, waste reduction, energy efficiency, and more;
3. The resort's strategy is firmly rooted in economic, social, and environmental sustainability;
4. The resort has received numerous awards and certifications for its commitment to sustainable practices;
5. The case serves as a success story, illustrating tangible benefits derived from the adoption of circular economy principles;
6. The case is highly relevant as it exemplifies a virtuous model that combines sustainable tourism concepts with eco-projects aimed at enhancing guest experiences.

To analyze the evidence from the case study concerning the circular economy, the framework proposed by Urbinati et al. (2021), was employed. This framework categorizes the various practices and initiatives implemented by the resort over time into two dimensions: the value network dimension, which encompasses energy efficiency, design considerations, use of sustainable materials, and stakeholder involvement, and the customer value proposition and interface redesign dimension, which focuses on promoting the resort's core value proposition through diverse communication channels, engaging customers in sustainability practices, and enhancing staff and customer awareness and capacity building.

#### 4. Research Findings: The CE Experience of the Resort

##### *Case Description*

The case considered was an Italian resort located in the Apulia Region, Italy, which has been recognized as a frontrunner for its sustainability practices adopted due to a set of initiatives and practices deployed that are described. The resort is part of the Eco-resorts group due to different sustainable, innovative principles developed over time, high-tech solutions, and the adoption of managerial techniques and practices.

The CE practices of the resort are evidenced using the framework of two dimensions proposed by (Urbinati et al. 2021) (Table 2):

- The value network dimension that includes Energy efficiency initiatives; Design for “X”; Usage of durable, natural, recyclable, modular products and materials; the extent of involvement of supply chain stakeholders in value creation initiatives; communication practices with the supply chain stakeholders and upstream partners.
- The value proposition dimension includes initiatives to promote its core value proposition through its website, social media, and all available communications channels, as well as the involvement of customers in sustainability and CE practices.

**Table 2.** Value creation initiatives (own elaboration from data received from reports of the Vivosa resort).

Value Creation Initiatives	
Energy Efficiency Solutions	<p>Resort invested in reducing fossil energy consumption</p> <p>Installed photovoltaic panels for energy production from alternative sources.</p> <p>Replaced traditional bulbs with LED technology.</p> <p>Implemented “Crepuscular” ignition devices for adaptive lighting and reduced electricity consumption.</p> <p>Increased electricity use from alternative sources from 3.6% Kw/h in 2015–2017 to 35% in 2019.</p> <p>Expected a 15% increase in electricity production from its photovoltaic system by 2021.</p> <p>Significant reduction in CO<sub>2</sub> emissions.</p>
Reuse and Recycle Initiatives	<p>Adopted the Design for X practices for water and waste reuse and recycling.</p> <p>Encouraged sustainable energy sources, 0 plastic, and electric columns.</p> <p>Promoted use of eco-friendly products.</p> <p>Utilized advanced digital technologies for environmental design.</p>
Sustainable Management of Resources	<p>Efficient management of water resources, focusing on consumption reduction.</p> <p>Installed a system for greywater reuse.</p> <p>Reused food waste in agricultural production.</p> <p>Implemented waste reduction policies.</p> <p>Reduced waste per guest night by 5% in 2019 and an additional 3% reduction in 2020.</p>
Involvement of Stakeholders in CE Business	<p>Suppliers engaged in sustainable production and consumption.</p> <p>Strong collaboration with the local community for procurement of goods and services.</p> <p>Hiring practices support the local economy and sustainability goals.</p> <p>Collaboration with sustainability associations and training for operators and employees.</p>
Redesigning the Value Proposition	<p>Communicated sustainability and awards through its website and social media.</p> <p>Enhanced customer awareness and engagement in sustainability practices.</p> <p>Promoted “Green” activities and respect for the environment.</p> <p>Used sustainability certification and awards to communicate the circular value proposition to customers</p> <p>Obtained benefits in cost reduction, socioeconomic and environmental impact, supply chain sustainability, and reputation.</p>

These initiatives have resulted in various benefits, including cost reduction, socio-economic and environmental impacts, supply chain sustainability, energy efficiency, development of new skills and capabilities, enhanced brand reputation, and improved competitive advantage.

## 5. Discussion of Results

### *Value Network Practices*

*Creating value by investing in Energy efficient solutions:* The management of the resort is highly committed to pursuing an energy efficiency policy that contributes to reducing greenhouse gas emissions and negative environmental impacts. Following this goal, the resort has invested in reducing fossil energy consumption and has commenced different initiatives to increase the production of energy from alternative sources. To this aim, the resort has installed photovoltaic panels on the shelters shading all internal areas designated for parking; traditional bulbs have been replaced with LED technology; “Crepuscular” ignition devices have been installed to reach the target of +20% of the parking lot’s lighting points, to adapt the degree of illumination in real-time to natural brightness, and to reduce electricity consumption. All these initiatives allow for a reduction in greenhouse gas emissions and have a significant environmental impact. Indeed, these initiatives have allowed the company to increase the percentage of electricity use from alternative sources from 3.6% Kw/h, on average from 2015 to 2017, to 20% in 2018 and 35% in 2019. The electricity production from the photovoltaic system is expected to increase by 15% by 2021. The installation of photovoltaic panels has led to a significant reduction in CO<sub>2</sub> emissions. The average value of CO<sub>2</sub> emissions in 2019 exceeded the target of 12.13 kg per guest night, while in 2020, with the increased functionality of the photovoltaic system, the CO<sub>2</sub> reduction allowed a further 12% reduction compared to 2019.

*Capturing value from reuse and recycle initiatives:* The resort adopts Design for X practices to reuse and recycle water and waste (as explained above). Also, design for the environment through new forms of sustainable energy sources thanks to solar panels, 0 plastic, and electric columns are encouraged. Where possible, the resort favors the use of eco-friendly products: eco-friendly detergents for cleaning and biodegradable catering products (place-mats, containers). Also, the use of advanced digital technologies contributes to the design of an environment such as online check-in (eliminating paper consumption and use); Intelligent management of consumptions in the rooms: the electricity line of the rooms working with a key card inserted into a reader; and air conditioning controlled by sensors placed on the windows, and operating only with closed doors and windows.

*Creating value by sustainable management of resources:* Being cognizant that tourist facilities can put pressure on aquatic resources and energy sources as well as on local biodiversity if waste management is not adequately managed, the resort seeks to efficiently manage its natural resources, such as water, and pays particular attention to its consumption reduction, by undertaking re-use, recover, and resource-efficient treatment initiatives, also considering the recent emergencies in the supply, especially in Southern Italy. For this reason, a system of recovery has been installed for the reuse of greywater, i.e., water coming from sinks and showers. This less valuable water can be recovered, treated, and reused for non-potable purposes: most of the wastewater is recoverable since it contains organic substances that can be degraded in a short time and a bacterial load that can be easily managed. The following are among the recognized uses of this water: feeding toilet drains; fire extinguishing systems; feeding fountains and water tanks; irrigation systems; and circuits of air conditioning systems. Concerning waste management, the resort promotes and pursues a policy of reducing waste thanks to a reduction in the use of beverages in plastic packaging and the commitment to reduce the production of undifferentiated waste and wet waste to be sent to landfills. Also, initiatives focusing on the reuse of food waste are favored that contribute to extending their lifetime and contribution, i.e., by reusing them in agricultural production to circumvent chemically based fertilizers. The company

also uses, where possible eco-friendly products, such as eco-friendly detergents for cleaning and biodegradable catering products (placemats, containers).

These practices have permitted the company to reduce waste per guest night by 5% in 2019 (compared to 2018) and an additional 3% reduction in 2020.

*Create value by promoting the complete involvement of all stakeholders in CE business.* Suppliers are highly involved in the sustainable production and consumption processes of the resort to endorse closed-loop processes and innovative procurement for materials, products, and raw materials. The resort has established strong and fruitful cooperation with the local community for goods and services procurement, i.e., local products are favored to support the local economy and to reduce transport distances and, therefore, the emission of CO<sub>2</sub>. Also, the hiring practices of the firms are oriented toward achieving different sustainable goals, such as hiring most of its employees from neighboring countries to support the local economy. The resort also benefits from a strong collaboration with various associations committed to sustainability. The resort organizes targeted training courses to sensitize all operators in the value chain to the impact of their actions on the social, economic, and environmental ecosystem as well as training related to performing and adopting CE principles. In addition, for its employees, specific training courses related to sustainability policy and its application are organized in cooperation with experts and institutes.

*Creating value by redesigning the value proposition*—The redesign of the customer value proposition and interface is achieved through the website, social media, and all available communications channels. The website communicates instantly what the Resort is about and which target it addresses. There is a section dedicated to sustainability as well as the different awards won over the years (i.e., gold-travel life, TUI Umwelt champion, environmental management standard ISO14001, 2020 and 2021 Italy's Leading Eco Resort—World Travel Awards) ([www.worldtravelawards.com](http://www.worldtravelawards.com), accessed on 23 May 2022). Continuous communication and the presence of its values on social media are realized under the hashtag #ecoresort. The resort pays special attention to enhancing awareness of and actively engaging customers in sustainability and CE practices. To this aim, the resort sensitizes and provides useful information to the customers for reducing the washing of linen—not every day, reducing the use of water; engaging customers in the “Green” activities of the Vivosa resort, such as the initiative Eco kids which shares the love of nature and respect for the environment, organizing naturalistic excursions for customers (guided by certified naturalists), urging clients to respect and not disturb flora and fauna. Sustainability certification and awards are another way of interfacing and communicating the circular value proposition of the company to the customers.

All these adopted managerial practices have allowed the resort to obtain a set of benefits in terms of cost reduction, socioeconomic and environmental impacts, supply chain sustainability, energy efficiency, new skills and capabilities development, brand reputation enhancement, and improved competitive advantage.

## 6. Conclusions

The growing recognition of limited resources and the importance of extracting value from them has emphasized the urgent need for a significant transformation in the tourism industry. This shift involves replacing the conventional linear tourism model with a circular economy (CE) model. Researchers have started exploring the interest of different stakeholders within the tourism value chain in embracing CE principles. Through a case study analysis, this chapter presents the endeavors of tourism businesses in implementing practices, initiatives, and opportunities that facilitate the transition toward a circular economy.

However, the case study highlighted that the implemented practices primarily focus on enhancing resource efficiency, reducing emissions, and minimizing environmental impacts (Urbinati et al. 2020). The initiatives related to reusing, recycling, and recovering materials primarily revolve around waste management within hotels, including items such as paper, glass, used oil, and plastics.

These findings are perfectly consistent with those indicated in the previous literature (Manniche et al. 2021; Rodríguez et al. 2020) and demonstrate that the transition toward the embracement of CE is in its early stages, with practices and initiatives mainly bound to reduction and recycling. Adopting a CE business model that is grounded in exploring resilient, regenerative, innovative business models and operations could be fundamental to developing sustainable and differentiation strategies for the post-COVID-19 restart of the tourism sector (Sorin and Sivarajah 2021). However, the full shift toward a new socio–techno–economic system grounded in the principles of CE is a multilevel and multidimensional process that necessitates interventions in technical, economic, social, cultural, and political domains (Manniche et al. 2021), as well as a reconceptualization of the purpose of the firm. This logic drives its value-creation and a rethinking of its perceptions of value.

This study has theoretical implications as it contributes to better conceptualizing what is meant by tourism CE and sustainability. The study reinforces the relevance of CE and the sustainability approach for the tourism sector. It brings into light the relative importance of the application of CE practices for tourism firms by elucidating the main benefits that tourism firms could obtain from it. Indeed, by considering the different mechanisms of value creation and capture resulting from the implementation of CE practices, the study contributes to understanding how tourism firms could create, transfer, and capture economic, social, and environmental value. Finally, it enriches the existing body of knowledge with new empirical research.

From a practical point of view, the study contributes to providing practical suggestions for a suitable approach to CE in the tourism field. The study provides a hands-on analysis regarding possible initiatives and practices that tourism managers could adopt to deploy CE practices. A specific approach and managerial orientation are necessary for the proper and beneficial application of CE principles with the aim of creating greater value and contributing to sustainable production and consumption models. Furthermore, the study can enlighten managers as well as policymakers regarding the adoption of new frameworks that support tourism firms to transit from linear to circular economy approaches.

Our study, like all research, has certain limits. First, the use of a single case study presents a limitation, especially concerning the problems associated with generalizing the findings. Yin (2014), countered that case studies seek to deliver analytical generalizability from the observations of a phenomenon by contributing to theoretical explanations that can be applied to identify similar cases. Second, more studies are needed concerning practical guidelines on how tourism business could design their business model according to CE principles. Third, it would be interesting to investigate the challenges and opportunities of the CE further. All the limitations represent future lines of research.

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## References

- Alhola, Katriina, Hanna Salmenperä, Sven-Olof Ryding, and Niels J. Busch. 2017. Circular Public Procurement in the Nordic Countries. *TemaNord* 512: 1–59.
- Antikainen, Maria, and Katri Valkokari. 2016. Framework for sustainable circular business model innovation. In *ISPIM Innovation Symposium*. Manchester: The International Society for Professional Innovation Management (ISPIM), p. 1.
- Baxendale, Shane, Emma K. Macdonald, and Hugh N. Wilson. 2015. The impact of different touchpoints on brand consideration. *Journal of Retailing* 91: 235–53. [CrossRef]

- Berg, Bruce Q. 2007. *Qualitative Research Methods for the Social Sciences*. London: Pearson Education.
- Bocken, Nancy M. P., Ingrid De Pauw, Conny Bakker, and Bram Van Der Grinten. 2016. Product design and business model strategies for a circular economy. *Journal of Industrial and Production Engineering* 33: 308–20. [CrossRef]
- Bressanelli, Gianmarco. 2018. The role of digital technologies to overcome Circular Economy challenges in PSS Business Models: An exploratory case study. *Procedia Cirp* 73: 216–21. [CrossRef]
- Brundtland, Gro Harlem. 1987. Our common future—Call for action. *Environmental Conservation* 14: 291–94. [CrossRef]
- Centobelli, Piera, Roberto Cerchione, Davide Chiaroni, Pasquale Del Vecchio, and Andrea Urbinati. 2020. Designing business models in circular economy: A systematic literature review and research agenda. *Business Strategy and the Environment* 29: 1734–49. [CrossRef]
- Creswell, John W., William E. Hanson, Vicki L. Clark Plano, and Alejandro Morales. 2007. Qualitative research designs: Selection and implementation. *The Counseling Psychologist* 35: 236–64. [CrossRef]
- Del Vecchio, Pasquale, Valentina Ndou, Giuseppina Passiante, and Demetris Vrontis. 2020. Circular Economy Innovative Entrepreneurship: A Conceptual Foundation. In *Innovative Entrepreneurship in Action*. Cham: Springer, pp. 129–44.
- Einarsson, Stefan, and Fabrice Sorin. 2020. Circular Economy in Travel and Tourism: A Conceptual Framework for a Sustainable, Resilient and Future-Proof Industry Transition. CE360 Alliance. Available online: <https://circulareconomy.europa.eu/platform/sites/default/files/circular-economy-in-travel-and-tourism.pdf> (accessed on 23 April 2023).
- Elkington, John. 1997. The triple bottom line. *Environmental Management: Readings and Cases* 2: 49–66.
- EMF—Ellen MacArthur Foundation. 2014. *Towards the Circular Economy: Accelerating the Scale-Up Across Global Supply Chains*. Isle of Wight: Ellen MacArthur Foundation, vol. 3.
- EMF—Ellen MacArthur Foundation Growth. 2015. *A Circular Economy Vision for a Competitive Europe*. Isle of Wight: Ellen MacArthur Foundation. Available online: [https://www.ellenmacarthurfoundation.org/assets/downloads/publications/EllenMacArthurFoundation\\_Growth-Within\\_July15.pdf](https://www.ellenmacarthurfoundation.org/assets/downloads/publications/EllenMacArthurFoundation_Growth-Within_July15.pdf) (accessed on 2 July 2023).
- EU Commission. 2020. The Recovery and Resilience Plan. Available online: [https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility\\_en#the-recovery-and-resilience-facility](https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en#the-recovery-and-resilience-facility) (accessed on 2 July 2023).
- Florido, Carmen, Marta Jacob, and Margarita Payeras. 2019. How to Carry out the Transition towards a More Circular Tourist Activity in the Hotel Sector—The Role of Innovation. *Administrative Sciences* 9: 47. [CrossRef]
- Geissdoerfer, Martin, Marina P. P. Pieroni, Daniela C. A. Pigosso, and Khaled Soufani. 2020. Circular business models: A review. *Journal of Cleaner Production* 277: 123741. [CrossRef]
- Geissdoerfer, Martin, Paulo Savaget, Nancy M. P. Bocken, and Erik Jan Hultink. 2017. The circular economy—A new sustainability paradigm? *Journal of Cleaner Production* 143: 757–68. [CrossRef]
- Ghisellini, Patrizia, Catia Cialani, and Sergio Ulgiati. 2016. A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production* 114: 11–32. [CrossRef]
- Girard, Luigi Fusco, and Francesca Nocca. 2017. From linear to circular tourism. *Aestimum* 70: 51.
- Gössling, Stefan, Daniel Scott, and Michael Hall. 2020. Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism* 29: 1–20. [CrossRef]
- Hall, C. Michael, Daniel Scott, and Stefan Gössling. 2020. Pandemics, transformations, and tourism: Be careful what you wish for. *Tourism Geographies* 22: 577–98. [CrossRef]
- Kim, Sun-Hwa, Kiwon Lee, and Ann Fairhurst. 2017. The review of “green” research in hospitality, 2000–2014. *International Journal of Contemporary Hospitality Management* 29: 226–47. [CrossRef]
- Kirchherr, Julian, Denise Reike, and Marko Hekkert. 2017. Conceptualizing the circular economy: An analysis of 114 definitions. *Resource, Conservation and Recycling* 127: 221–32. [CrossRef]
- Kunz, Nathan, Kieren Mayers, and Luk N. Van Wassenhove. 2018. Stakeholder views on extended producer responsibility and the circular economy. *California Management Review* 60: 45–70. [CrossRef]
- Lewandowski, Mateusz. 2016. Designing the business models for circular economy—Towards the conceptual framework. *Sustainability* 8: 43. [CrossRef]
- Lüdeke-Freund, Florian, Stefan Gold, and Nancy M. P. Bocken. 2019. A review and typology of circular economy business model patterns. *Journal of Industrial Ecology* 23: 36–61. [CrossRef]
- Ma, Yuan, Guisheng Hou, Qiyue Yin, Baogui Xin, and Yajun Pan. 2018. The sources of green management innovation: Does internal efficiency demand pull or external knowledge supply push? *Journal of Cleaner Production* 202: 582–90. [CrossRef]
- Manniche, Jesper, Karin Topsø Larsen, Rikke Brandt Broegaard, and Emil Holland. 2017. *Destination: A Circular Tourism Economy: A Handbook for Transitioning toward a Circular Economy within the Tourism and Hospitality Sectors in the South Baltic Region*. Bornholm: Centre for Regional and Tourism Research (CRT).
- Manniche, Jesper, Karin Topsoe Larsen, and Rikke Brandt Broegaard. 2021. The circular economy in tourism: Transition perspectives for business and research. *Scandinavian Journal of Hospitality and Tourism* 21: 247–64. [CrossRef]
- Menegaki, Angeliki N. 2018. Economic aspects of cyclical implementation in Greek sustainable hospitality. *International Journal of Tourism Policy* 8: 271–302. [CrossRef]
- Mentink, Bas. 2014. *Circular Business Model Innovation: A Process Framework and a Tool for Business Model Innovation in a Circular Economy*. Doctoral dissertation, Delft University of Technology, Delft, The Netherlands.

- Merli, Roberto, Michele Preziosi, Alessia Acampora, Mariaclaudia Lucchetti, and Faizan Ali. 2019. The impact of green practices in coastal tourism: An empirical investigation on an eco-labelled beach club. *International Journal of Hospitality Management* 77: 471–82. [CrossRef]
- Pamfilie, Rodica Daniela Firoiu, Adina-Gabriela Croitoru, and George Horia Ionescu. 2018. Circular economy—A new direction for the sustainability of the hotel industry in Romania. *Amfiteatru Economic* 20: 388–404. [CrossRef]
- Parida, Vinit, David Sjödin, and Wiebke Reim. 2019. Reviewing literature on digitalization, business model innovation, and sustainable industry: Past achievements and future promises. *Sustainability* 11: 391. [CrossRef]
- Privitera, Donatella. 2016. Describing the collaborative economy: Forms of food sharing initiatives. *Economic Science for Rural Development Conference Proceedings* 43: 92–98.
- Rodríguez, Carlos, Carmen Florido, and Marta Jacob. 2020. Circular economy contributions to the tourism sector: A critical literature review. *Sustainability* 12: 4338. [CrossRef]
- Rodríguez-Antón, José Miguel, and María del Mar Alonso-Almeida. 2019. The circular economy strategy in hospitality: A multicase approach. *Sustainability* 11: 5665. [CrossRef]
- Romagosa, Francesc. 2020. The COVID-19 crisis: Opportunities for sustainable and proximity tourism. *Tourism Geographies* 22: 690–94. [CrossRef]
- Sassanelli, Claudio, Giuditta Pezzotta, Fabiana Pirola, Monica Rossi, and Sergio Terzi. 2019. The PSS design GuRu methodology: Guidelines and rules generation to enhance PSS detailed design. *Journal of Design Research* 17: 125–62. [CrossRef]
- Sengers, Frans, Frans Berkhout, Anna J. Wieczorek, and Rob Raven. 2016. Experimenting in the city: Unpacking notions of experimentation for sustainability. In *The Experimental City*. Abingdon: Routledge, pp. 15–31.
- Sigala, Marianna. 2020. Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research* 117: 312–21. [CrossRef] [PubMed]
- Singh, Jagdeep, and Isabel Ordoñez. 2016. Resource recovery from post-consumer waste: Important lessons for the upcoming circular economy. *Journal of Cleaner Production* 134: 342–53. [CrossRef]
- Sorin, Fabrice, and Uthayasankar Sivarajah. 2021. Exploring Circular Economy in the Hospitality Industry: Empirical Evidence from Scandinavian Hotel Operators. *Scandinavian Journal of Hospitality and Tourism* 21: 265–85. [CrossRef]
- Stahel, Walter. 2013. Policy for material efficiency—Sustainable taxation as a departure from the throwaway society. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 371: 20110567. [CrossRef] [PubMed]
- Stahel, Walter. 2016. The circular economy. *Nature* 531: 435–38. [CrossRef]
- Stake, Robert. 2000. Case studies. In *Handbook of Qualitative Research*. Edited by Norman K. Denzin and Yvonna S. Lincoln. New York: Sage Publications, pp. 435–54.
- Su, Biwei, Almas Heshmati, Yong Geng, and Xiaoman Yu. 2013. A review of the circular economy in China: Moving from rhetoric to implementation. *Journal of Cleaner Production* 42: 215–27. [CrossRef]
- Taylor, Liam. 2021. Three Core Principles of the Circular Economy. Planetark.org. Available online: <https://planetark.org/newsroom/news/three-core-principles-of-the-circular-economy> (accessed on 2 July 2023).
- UNWTO. 2020. One Planet Vision for a Responsible Recovery of the Tourism Sector. Available online: <https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-06/one-planet-vision-responsible-recovery-of-the-tourism-sector.pdf> (accessed on 2 July 2023).
- Urbinati, Andra, Paolo Rosa, Claudio Sassanelli, Davide Chiaroni, and Sergio Terzi. 2020. Circular business models in the European manufacturing industry: A multiple case study analysis. *Journal of Cleaner Production* 274: 122964. [CrossRef]
- Urbinati, Andrea, Simone Franzò, and Davide Chiaroni. 2021. Enablers and barriers for circular business models: An empirical analysis in the Italian automotive industry. *Sustainable Production and Consumption* 27: 551–66. [CrossRef]
- Vargas-Sánchez, Alfonso. 2018. The unavoidable disruption of the circular economy in tourism. *Worldwide Hospitality and Tourism Themes* 10: 652–61. [CrossRef]
- Yang, Jianjun, Feng Zhang, Xu Jiang, and Wei Sun. 2015. Strategic flexibility, green management, and firm competitiveness in an emerging economy. *Technological Forecasting and Social Change* 101: 347–56. [CrossRef]
- Yin, Robert. 2014. *Case Study Research: Design and Methods*. New York: Sage Publications.
- Yusof, Yusnita, Kamaruzaman Jusoff, Yahaya Ibrahim, and Zainudin Awang. 2017. The influence of green practices by non-green hotels on customer satisfaction and loyalty in hotel and tourism industry. *International Journal of Green Economics* 11: 1–14. [CrossRef]
- Zenker, Sebastian, and Florian Kock. 2020. The coronavirus pandemic—A critical discussion of a tourism research agenda. *Tourism Management* 81: 104164. [CrossRef] [PubMed]

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