Research Article

Paula Maines da Silva*, Luciana Maines da Silva, Simone Soares Echeveste

Circular Economy in Tourism and Hospitality: Analysis of Scientific Production on the Theme

<https://doi.org/10.2478/ejthr-2021-0005>

received July 30, 2020; accepted April 16, 2021

Abstract: In studies on tourism and hospitality, the sustainable aspect has been continuously treated. A current approach that expands the concept of sustainability is the circular economy, considered a closed economic model that aims to maintain the most significant utility and value of products, components, and materials at all times. This issue has been addressed not only in the productive sphere but also in the area of services. In this sense, the objective of this research was to understand how the circular economy is being treated in the tourism and hospitality sectors. A review of published articles accessed across four databases—Spell, CAPES Portal, SciELO, and Web of Science—was carried out. The main results indicate that studies in this area are still incipient, with a greater number of publications starting in 2019; European studies prevail; the publications are still theoretical, with little empirical research; and address the benefits of the circular economy, and the economic, social, and environmental aspects.

Keywords: Circular Economy; Tourism; Hospitality; Scientific Production

1 Introduction

Tourism is a social, cultural, and economic phenomenon that involves people's movement to countries or places outside their usual environment for personal, professional, or commercial reasons. These people are

called travellers (who can be tourists or hikers, residents or non-residents) (World Tourism Organization, 2020). When moving to another city, the traveller will need to stay somewhere, usually in a hotel. The hotel can be considered an 'own accommodation establishment that offers furnished rooms, with private bathrooms, for imminent or temporary occupation, offering full food service, and the rest, services inherent to the hotel activity' (Castelli, 1992, p. 88).

Nowadays, more and more tourist destinations and hotel developments are concerned with social, environmental, and economic aspects, mainly from the second half of the twentieth century, as in this period, tourist activity started to increase (Almeida & Abranja, 2009), and the need to develop sustainable tourism arose. Sustainable tourism is 'developed and maintained in an area (community and environment) in a way and on a scale that remains viable over an infinite period and does not degrade or alter the environment (physical and human) in which it exists to the degree that it prohibits successful development and well-being with other activities and processes' (Hanai, 2012, p. 216).

A new approach to concern with aspects related to society and the environment is the circular economy, which is an economic model based on sharing, rental, reuse, repair, reform, and recycling, in a (almost) closed cycle, which aims to maintain the most significant utility and value of products, components, and materials at all times (Bourguignon, 2017; Bartl, 2018; Sehnem et al., 2019).

From this context, this research aims to understand how the circular economy is being treated in the tourism and hospitality sectors. To this end, 18 scientific articles were analyzed, highlighting: the location of the studies carried out; the school of thought of circular economy; practices connected to the principles and types of gradations of the circular economy; the type of benefit (economic, social, or environmental) obtained; the type of methodology used in the research; the journals used for publication; and, finally, the main results of the research carried out concerning the circular economy and its relationship with tourism and hospitality.

*Corresponding author: Paula Maines da Silva, Business School, Universidade Luterana do Brasil – ULBRA, Av. Farroupilha, 8001 - São José, Canoas, 92425-020, Brasil, Email: paulam@cpovo.net
Luciana Maines da Silva, Business School, Unisinos University, Av. Nilo Peçanha, 1600, Porto Alegre, 91330-002, Brasil
Simone Soares Echeveste, Business School, Universidade Luterana do Brasil – ULBRA, Av. Farroupilha, 8001 - São José, Canoas, 92425-020, Brasil

The article is structured in the following sections: a theoretical framework with an approach to the circular economy; methodology applied in this study; analysis of the results and discussions; and conclusions.

2 Circular Economy

The current economic model is transforming as more and more organizations and consumers are becoming concerned with the impacts that production and consumption have on society and the environment. The linear economy, in which the extraction of raw materials, the production of goods, distribution, consumption, and generation of waste occurs, gives way to the circular economy, which involves decoupling economic activity from the consumption of finite resources and eliminating waste from the system in principle. Supported by a transition to renewable energy sources, the circular model builds eco-

nomic, natural, and social capital (Ellen MacArthur Foundation, 2020). Among the different schools of thought that address the issue of the circular economy, each considers it to be a concept of a cyclical/closed system (Murray et al., 2017). Table 1 shows these schools and the main points addressed by each.

Verifying the theme from the perspective of different schools allows the theme to contribute to the insertion in different circularities of the economy, ‘either by the reincorporation of matter in biological cycles or technical cycles, or by observing the behavior of natural cycles, that is, by the need for an economic order to reuse materials or elements in certain activities’ (Stival et al., 2020, p. 74).

The circular economy has the following principles (Economia Circular, 2020):

- Eco-design: Consider and integrate environmental impacts throughout a product’s life cycle in its design.
- Industrial and Territorial Ecology: Establish an industrial-organizational method in a territory character-

Table 1: Schools of Thought on Circular Economy

School of thought	Author	Approach
Regenerative Design	John T. Lyle	All systems can be managed regeneratively: the systems alone could generate or renew the sources of energy and materials they consume.
Performance Economy	Walter Stahel	The idea is to sell services instead of products. Ownership of the products or services offered is the producer’s domain, while the user of the products and services pays only the rent for their use.
Cradle to Cradle	Michael Braungart and Bill McDonough	Materials considered obsolete must serve as a source of secondary material for other production lines. These are the flows of biological nutrients and technical nutrients.
Industrial Ecology	Roland Clift and Angela Druckman	This theory consists of the study of material and energy flows in industrial systems. The authors suggest that, within industrial systems, closed cycles are created so that the leftovers of the productive processes serve as material for another type of production. This closed cycle directly interferes with the supply chain natural raw materials, thus influencing the environmental and social aspects of the world.
Biomimicry	Janine Benyuys	The author thinks of it as ‘innovation inspired by nature’. Biomimicry is based on three fundamental principles: <ul style="list-style-type: none"> • Nature as a model: studying models of nature and simulate these forms, processes, systems, and strategies to solve human problems. • Nature as a measure: using an ecological standard to judge the sustainability of our innovations. • Nature as a mentor: seeing and valuing nature based not on what we can extract from the natural world but on what we can learn from it.
Blue Economy	Gunter Pauli	It is based on 21 principles. The movement defends the creation of solutions that consider each location’s environmental, ecological, and physical characteristics. Emphasis is placed on the cascading use of available resources, employing a strategy in which the leftovers of a productive process are transformed into resources and energy for another production process.

Source: Based on Ellen MacArthur Foundation (2020) and Stival et al. (2020).

ized by optimized management of stocks and flows of materials, energy, and services.

- Economy of ‘Functionality’: Favour use over possession, selling a service versus a good.
- Second use: Reintroduce products that no longer meet consumers’ initial needs into the economic circuit.
- Reuse: Reuse certain products or parts of these products that still work to make new artifacts.
- Repair: Find damaged products and give them a second life.
- Recycle: Make use of discarded materials.
- Recovery: Use the energy from waste that cannot be recycled.

The circular process occurs through various gradations, or circularity options. Van Buren et al. (2016) listed the gradations as the nine R’s:

1. Refusing—preventing the use of raw materials
2. Reduce—reduce the use of raw materials
3. Reuse—reuse products (second-hand, product sharing);
4. Repair—maintenance and repair
5. Recondition—recondition products
6. Remanufacturing—creating new products from (parts of others) old products;
7. Reuse—reuse the product for a different purpose;
8. Recycling—processing, and reusing materials;
9. Recover energy—incinerate residual streams.

According to Stival et al. (2020), the benefits occur in economic, environmental, and social spheres. The economic benefits are economic growth, job creation, and innovation. The environmental benefits that stand out are

reduction in greenhouse gases (GHG) and carbon dioxide (CO₂), a decrease in consumption of primary materials, increased productivity, and soil conservation. Finally, the social benefits are increased financial income, greater use of products and services, and reduced programmed obsolescence.

Another positive aspect for companies that adopt this type of strategy is the reduction of costs in the short and medium terms, profit in the offer of services of the reverse cycle (sorting of collection), and financing of new business models. Allied to that, companies can still mitigate some challenges related to reducing raw material accounts, improving customer interaction and loyalty, less product complexity, and more manageable life cycles (Ellen MacArthur Foundation, 2013).

For consumers, the gains involve the fact that the products will last longer and will be more reusable, which would generate a significant reduction in total costs of ownership; choice and convenience increase as manufacturers can customize the duration, type of use, and product components the customer wants, replacing today’s standard for a broader set of options; and secondary benefits, if the products deliver more than the primary function (for example, carpets that act as air filters or packaging that serve as fertilizers). In addition to generating value for the client, there will also be a reduction in environmental costs through a circular system (Ellen MacArthur Foundation, 2013).

Among the industries that have been applying actions aimed at economic, environmental, and social aspects are tourism and hospitality. Thus, verifying what scholars in these areas are researching circular economy and applying it to the service sector is a way of encouraging new businesses to understand the proposal of this theme and the possibilities of putting it into practice.

Table 2: Keywords Used in the Search for Articles

Keywords in Portuguese	Keywords in English
Economia Circular + Turismo	Circular Economy + Tourism
Economia Circular + Hospitalidade	Circular Economy + Hospitality
Modelos de Negócios Circulares + Turismo	Circular Business Mapping + Tourism
Modelos de Negócios Circulares + Hotelaria	Circular Business Mapping + Hospitality
Mapeamento de Empresas Circulares + Turismo	Circular Business Models + Tourism
Mapeamento de Empresas Circulares + Hotelaria	Circular Business Models + Hospitality

Source: from the authors (2020).

3 Method

This research aimed at analyzing scientific publications involving the circular economy, tourism, and hospitality. Thus, it was decided to develop descriptive research on the theme in the administration area (Hair *et al.*, 2005). Bibliographic research was used as a research method (Gil, 2008), based on the databases' articles. The data collection used the keyword junctions, shown in Table 2.

The data collection was based on four databases—Spell, CAPES Portal, SciELO, and Web of Science—in June 2020. In the Spell database, all the keywords mentioned in Table 3, in Portuguese, were used, and no articles were found.

In the CAPES Portal database, the 'any containing' action was selected in the search item, showing only peer-reviewed journals. The keywords mentioned in Table 3, in Portuguese, were used, which generated 30 results for the terms *Circular Economy + Tourism*. Using other keywords, no results were obtained. When analyzing the 30 articles, it was found that only two contained in the keywords of the study the terms *Circular Economy + Tourism*, and only one article was considered, as the other was a report.

In the SciELO database, both Portuguese and English keywords were used, generating no results.

In the Web of Science database, keywords were used in English, and the system generated 54 results for the terms *Circular Economy + Tourism*; 5 results for *Circular Economy + Hospitality*; and 2 results for *Circular Business Models + Tourism*. Among the *Circular Economy + Hospitality* articles, four were used, as one was an editorial material. The articles with *Circular Business Models + Tourism* were fully utilized. *Circular Economy + Tourism* articles, on the other hand, were evaluated, and those that were already published in journals were selected, excluding those that were presented at congresses, that were not focused on tourism, and that were repeated in the search, as was the case for three articles that also appeared in the result with the term *Hotels* as well as an article that appeared in the search for *Circular Business Models + Tourism*, totalling 11 articles. Thus, the final sample was 18 articles, described in Table 3.

Content analysis (Bardin, 2016/1977) was used to understand how the circular economy is employed in tourism and hospitality. The organization took place as proposed by the author, presented through three chronological poles:

- (1) pre-analysis;
- (2) exploration of the material; and
- (3) treatment of results, inference, and interpretation.

In the pre-analysis, the material was organized by selecting articles, according to the criteria presented above, in Chart 3. From the identification of the 18 articles, the material was explored with consideration of the pre-established objectives: the location of the studies carried out; the school of thought of circular economy; practices connected to the principles and types of gradations of the circular economy; the type of benefit (economic, social or environmental) obtained; the type of methodology used in the research, the journals used for publication; and, finally, the main results of the research carried out with the circular economy and its relationship with tourism and hotels.

The last stage refers to the moment of reflective and critical analysis (Bardin, 2016), presented in the discussion section.

4 Analysis of Results and Discussions

In seeking to understand how the circular economy is applied in the tourism and hospitality sectors, 18 articles were identified. The connection between the themes is relatively recent, being the first study in 2016, and it was only from 2018 that the studies were intensified (Figure 1).

Most studies were carried out in European countries, with an emphasis in Spain, with four publications, and Italy, with three publications. The remaining publications represent the following countries: the Netherlands; Lithuania; the United Kingdom; Romania; a partnership between Austria, Canada, and the United States; a partnership between Canada, the United States, and Australia; Denmark; Portugal; Cuba; Australia; and a partnership between the United States and Finland.

None of the articles mentioned the beginning of circular economics. The vast majority of researchers presented

Figure 1: Publication of articles on circular economy in tourism and hospitality.

Source: from the authors (2020).

Table 3: Analyzed Articles

	Journal	Title	Year	Author(s)	Database
1	<i>Sustainability</i>	The roads, tracks, paths, and ropeways of the first world war: An opportunity to preserve, maintain, and valorize alpine landscape	2020	Gatti & Indrigo	Web of Science
2	<i>Tourism Review</i>	Food waste in tourist households: A perspective article	2020	Gretzel et al.	Web of Science
3	<i>Tourism Geographies</i>	Lessons from COVID-19 can prepare global tourism for the economic transformation needed to combat climate change	2020	Prideaux et al.	Web of Science
4	<i>Estudios y Perspectivas en Turismo</i>	La economía circular como contribución a la sostenibilidad en un destino turístico Cubano de sol y playa	2020	Acosta-Pérez et al.	CAPES Portal
5	<i>Sustainability</i>	The circular economy strategy in hospitality: A multi-case approach	2019	Rodríguez-Antón & Alonso-Almeida	Web of Science
6	<i>Sustainability</i>	Opportunities for slow tourism in Madeira	2019	Valls et al.	Web of Science
7	<i>Sustainability</i>	An efficient waste-to-energy model in isolated environments. Case study: La Gomera (Canary Islands)	2019	Uche-Soria & Rodríguez-Monroy	Web of Science
8	<i>Current Issues in Tourism</i>	Circular economy tourist practices	2019	Sørensen et al.	Web of Science
9	<i>Administrative Sciences</i>	How to carry out the transition towards a more circular tourist activity in the hotel sector. The role of innovation	2019	Florido et al.	Web of Science
10	<i>Journal of Sustainable Tourism</i>	A critical framework for interrogating the united nations sustainable development goals 2030 agenda in tourism	2019	Boluk et al.	Web of Science
11	<i>International Journal of Contemporary Hospitality Management</i>	The circular economy, natural capital, and resilience in tourism and hospitality	2019	Jones & Wynn	Web of Science
12	<i>Resources, Conservation & Recycling</i>	The expansion of the built environment, waste generation and EU recycling targets on Samothraki, Greece: An island's dilemma	2019	Nolla et al.	Web of Science
13	<i>Quality – Access to Success</i>	Agriculture, rural tourism and circular paradigm	2018	Immacolata	Web of Science
14	<i>Anfiteatro Economic</i>	Circular economy – A new direction for the sustainability of the hotel industry in Romania?	2018	Pamfilie et al.	Web of Science
15	<i>TransNav: International Journal on Marine Navigation and Safety of Sea Transportation</i>	Blue growth circular innovation	2018	Paulauskas	Web of Science
16	<i>Worldwide Hospitality and Tourism Themes</i>	The unavoidable disruption of the circular economy in tourism	2018	Vargas-Sánchez	Web of Science
17	<i>Aestimum</i>	From linear to circular tourism	2017	Girard & Nocca	Web of Science
18	<i>Journal of Cleaner Production</i>	Two life cycle assessment (LCA) based methods to analyze and design complex (regional) circular economy systems. Case: making water tourism more sustainable	2016	Scheepens et al.	Web of Science

Source: from the authors (2020).

the concepts of circular economy and its link to tourism and hospitality.

To the practices connected to the principles and types of gradations of the circular economy, it was possible to identify the direction that the researchers gave to this point in only seven articles. One article mentioned reduction, reuse, and recycling; one article cited recycling and reuse; one article indicated recycling; one article addressed reduction, reuse, recycling, redesign, replace, and rethink; one article focused on reducing; and two articles worked with a focus on reuse (Figure 2).

Concerning the types of benefits of the circular economy, nine articles discussed the benefits focused on the economic, environmental, and social aspects; six articles showed benefits for the environmental aspect; one article addressed the environmental and social benefits; one article dealt with social benefits; and one article focused on economic benefits (Figure 3).

Regarding the methodology used in the research, six articles carried out theoretical research; three articles carried out unique case studies; two articles applied a survey; and one article researched an extensive literature review and compared maps and databases from different years. Legal aspects of the country were also used with the subject of study; one article was based on media

reports and not on peer-reviewed literature, which, in the case of tourism literature, is often reflective and generally written with the advantage of retrospect; one article carried out a bibliometric review; one article worked with a multiple-case study; one article applied the Delphi study with four rounds of interviews; one article carried out the mixed methods approach, which allowed the integration of official statistical data, field research, and interviews; and one article carried out desk research and used additional documents located on the internet (Figure 4).

Concerning the journals used for the publication of the research, it is emphasized that only seven articles were published in journals focused on the area of tourism and hotels. The other articles were submitted to publications of different subject areas, including sustainability, administrative sciences, and clean production.

Finally, the main research results in the circular economy and its relationship with tourism and hospitality point out that the circular economy model can be transferred/applied to tourism (Girard & Nocca, 2017). There are still few well-documented initiatives on the circular economy in the tourism industry. Therefore, this is still a poorly researched area that will inevitably deserve much more attention in the coming years (Vargas-Sánchez, 2018; Florido *et al.*, 2019). Despite this, the tourism industry, particularly sustainable tourism, contributes to strengthening the circular economy model's assumption as a model of an economic system that facilitates the adoption of behaviours by all interested parties searching for sustainable paths (Immacolata, 2018).

In the hotel industry, the results showed that hotel chains' main strategies, about gradations, in that order, are reduction, recycling, and reuse (Rodríguez-Antón & Alonso-Almeida, 2019). In some locations, the hotel industry is not yet sufficiently prepared to adopt the circular economy principles, as is the case in Romania, a study by Pamfilie *et al.* (2018).

Other studies indicate that there is a need to reduce food waste in tourism (Gatti & Indrigo, 2020); reuse water

Figure 2: Gradations used by the authors in the articles ($n = 7$).

Source: from the authors (2020).

Figure 3: Types of circular economy benefits ($n = 18$).

Source: from the authors (2020).

Figure 4: Methodologies used in the articles.

Source: from the authors (2020).

(Pérez, Delgado & Martínez, 2020); work with waste recycling alternatives at tourist destinations (Noll, Wiedenhofer, Miattob & Singh, 2019); and develop solutions that take into account the circular economic model as a self-regenerating system in which the entry of resources and waste emissions and energy losses are minimized by slowing down, closing, and reducing material loops and energy (Uche-Soria & Rodríguez-Monroy, 2019). These aspects are part of the principles of the circular economy.

In general, the evidence from the surveys carried out shows that circular economy practices are still complex and need to overcome many barriers so that tourist destinations and hotel businesses will implement actions aimed at future development (Sørensen, Bærenholdt & Greve, 2019).

5 Conclusion

The concern for future generations has become a constant among people and organizations. Therefore, thinking about the best way to use resources is in line with what the circular economy preaches. The proposal is to envision the materials in a cyclical process, enabling its trajectory for much longer, thus preserving its value (Webster, 2017).

The circular economy is an interdisciplinary field and could not be left out of tourism and hospitality. Despite being a new field of study (Vargas-Sánchez, 2018; Florido, Jacob & Payeras, 2019), research shows that the segment has been seeking to understand and apply the concept in the daily lives of hotel companies and tourist destinations. According to the survey carried out, the studies are still mostly focused on Europe. Our study presents opportunities for Brazilian researchers to expand their studies with national reality.

Due to its incipient character, studies have not dealt with the schools that originated the circular economy concept. Despite this, it is clear that the use of the concept is the essence of the circularity of the economy—that is, resources and destinations can and should be used in different ways and countless times (Murray et al., 2017), impacting as little as possible on the environment and society.

Another aspect presented in the articles is the type of circular economy degradations. It is observed that there are still few studies that address any of the nine R's proposed by Van Buren et al. (2016), but this occurrence can be inferred since it is a recent topic in the areas of tourism and hospitality and has not yet been explored in its wholeness.

Regarding the benefits of the circular economy, studies show returns in economic, social, and environmental aspects. This question is in line with what Stival et al. (2020) address. Due to the theoretical nature of the vast majority of articles researched, it appears that it is still necessary to explore and/or identify empirically the benefits generated.

It is assessed that the field is vast and can be explored with different qualitative and quantitative techniques regarding the methodologies used. Researchers are still producing theoretical research, which points to possibilities for further empirical research to ratify the circular economy concept.

As a suggestion for future studies, an analysis of the circular economy within the scope of tourism and hospitality in Brazil is proposed. Comparing practices employed in Europe and their similarities and/or difficulties to be applied at the national level. Moreover, publications occur more in journals in the fields of tourism and hospitality.

Bionotes

Paula Maines da Silva has a PhD in business administration at Unisinos University (Brazil). She is a lecturer at Universidade Luterana do Brasil (ULBRA). Her research focuses on social innovation, corporate social responsibility, networks, and interorganizational relations. Orcid: <https://orcid.org/0000-0002-2567-4306>, email: paulam@cpovo.net.

Luciana Maines da Silva is a professor at Unisinos University (Brazil) with a PhD in business administration at Unisinos University (Brazil). Her research focuses on responsible innovation, stakeholder inclusion, innovation management, and the healthcare sector. Orcid: <https://orcid.org/0000-0003-1670-0629>.

Simone Soares Echeveste is a professor of statistics at Universidade Luterana do Brasil - ULBRA (Brazil). She has a master's in administration and bachelor's in statistics from Universidade Federal Rio Grande do Sul - UFRGS (Brazil). He works in the areas of research in Statistical Education and teaching methodology in the distance modality. Orcid: <https://orcid.org/0000-0002-5658-9454>.

References

- [1] Bardin, L. (2016). *Análise de Conteúdo* [Title]. 3ª Reimpressão da 1. Edição, 70.
- [2] Bartl, A. (2018). The EU Circular Economy Package: A genius programme or an old hat? *Waste Management & Research: The Journal for a Sustainable Circular Economy*, 36(4), 309–310. DOI: 10.1177/0734242x18755022
- [3] Boluk, K., Cavaliere, C., & Higgins-Desbiolles, F. (2019). A critical framework for interrogating the United Nations Sustainable Development Goals 2030 Agenda in tourism. *Journal of Sustainable Tourism*, 27(7), 847–864. DOI: 10.1080/09669582.2019.1619748
- [4] Bourguignon, D. (2018). Circular economy package: Four legislative proposals on waste. European Parliamentary Research Service. Retrieved July 24, 2020, from <https://goo.gl/jviFVN>
- [5] Castelli, G. (1992). *Administração hoteleira*. Rio de Janeiro: Educ.
- [6] Circular Economy — UK, USA, Europe, Asia & South America — The Ellen MacArthur Foundation. (2021). Retrieved July 16, 2020, from <https://www.ellenmacarthurfoundation.org>
- [7] de Almeida, I. D., & Abranja, N. A. (2009). Turismo e sustentabilidade [Title]. *Cogitur: Journal of Tourism Studies*, 2(2), 15–31.
- [8] Economia Circular (2020). Retrieved July 17, 2020, from <http://economiecircular.org/>
- [9] Florido, C., Jacob, M., & Payeras, M. (2019). How to carry out the transition towards a more circular tourist activity in the hotel sector. The role of innovation. *Administrative Sciences*, 9(2), 47. DOI: 10.3390/admsci9020047
- [10] Gatti, M., & Indrigo, A. (2020). The roads, tracks, paths, and ropeways of the First World War: An opportunity to preserve, maintain, and valorize alpine landscape. *Sustainability*, 12(3), 1157. DOI: 10.3390/su12031157
- [11] Gil, A. (2008). *Métodos e técnicas de pesquisa social* [Title]. Atlas.
- [12] Girard, L. F., & Nocca, F. (2017). From linear to circular tourism. *Aestimum*, 70.
- [13] Gretzel, U., Murphy, J., Pesonen, J., & Blanton, C. (2019). Food waste in tourist households: A perspective article. *Tourism Review*, 75(1), 235–238. doi: 10.1108/tr-05-2019-0170
- [14] Hair, J., Babin, B., Money, A., & Samouel, P. (2005). *Fundamentos de métodos de pesquisa em administração* [Title]. Bookman Companhia Ed.
- [15] Hanai, F. Y. (2012). Desenvolvimento sustentável e sustentabilidade do turismo: conceitos, reflexões e perspectivas [Title]. *Revista Brasileira de Gestão e Desenvolvimento Regional*, 8(1).
- [16] Immacolata, V. (2018). Agriculture, rural tourism and circular paradigm. *Calitatea*, 19(S1), 556–562.
- [17] Jones, P., & Wynn, M. G. (2019). The circular economy, natural capital and resilience in tourism and hospitality. *International Journal of Contemporary Hospitality Management*, 31(6), 2544–2563. <https://doi.org/10.1108/IJCH-M-05-2018-0370>
- [18] Ellen MacArthur Foundation. (2013). Towards the circular economy, economic and business rationale for an accelerated transition, 21–34. <https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf>
- [19] Murray, A., Skene, K., & Haynes, K. (2017). The circular economy: An interdisciplinary exploration of the concept and application in a global context. *Journal of Business Ethics*, 140(3), 369–380.
- [20] Noll, D., Wiedenhofer, D., Miatto, A., & Singh, S. (2019). The expansion of the built environment, waste generation and EU recycling targets on Samothraki, Greece: An island's dilemma. *Resources, Conservation and Recycling*, 150, 104405. DOI: 10.1016/j.resconrec.2019.104405
- [21] Pamfilie, R., Firoiu, D., Croitoru, A. G., & Ionescu, G. H. I. (2018). Circular Economy—A New Direction for the Sustainability of the Hotel Industry in Romania. *Anfiteatro Economic*, 20(48), 388–404.
- [22] Paulauskas, V. (2018). Blue growth circular innovation. *TransNav: International Journal on Marine Navigation and Safety of Sea Transportation*, 12(4), 813–818. doi: 10.12716/1001.12.04.21
- [23] Pérez, I. A., Delgado, F. M., & Martínez, J. U. E. (2020). La economía circular como contribución a la sostenibilidad en un destino turístico cubano de sol y playa [Title]. *Estudios y Perspectivas en Turismo*, 29(2), 406–425.
- [24] Prideaux, B., Thompson, M., & Pabel, A. (2020). Lessons from COVID-19 can prepare global tourism for the economic transformation needed to combat climate change. *Tourism Geographies*, 22(3), 667–678. DOI: 10.1080/14616688.2020.1762117
- [25] Rodríguez A., & Alonso A. (2019). The circular economy strategy in hospitality: A multicase approach. *Sustainability*, 11(20), 5665. DOI: 10.3390/su11205665
- [26] Scheepens, A., Vogtländer, J., & Brezet, J. (2016). Two life cycle assessment (LCA) based methods to analyse and design complex (regional) circular economy systems. Case: Making water tourism more sustainable. *Journal of Cleaner Production*, 114, 257–268. DOI: 10.1016/j.jclepro.2015.05.075
- [27] Sehnem, S., Pandolfi, A., & Gomes, C. (2019). Is sustainability a driver of the circular economy? *Social Responsibility Journal*, 16(3), 329–347. <https://doi.org/10.1108/SRJ-06-2018-0146>
- [28] Sørensen, F., Bærenholdt, J. O., & Greve, K. A. G. M. (2020). Circular economy tourist practices. *Current Issues in Tourism*, 23(22), 2762–2765.
- [29] Stival, L. T., Barros, R. G., & da Veiga, R. M. (2020). Os instrumentos legais de gestão ambiental e sua relação com os princípios da economia circular [Title]. *Caminhos de Geografia*, 21(73), 70–85.
- [30] Uche-Soria, M., & Rodríguez-Monroy, C. (2019). An efficient waste-to-energy model in isolated environments. Case study: La Gomera (Canary Islands). *Sustainability*, 11(11), 3198.
- [31] Valls, J. F., Mota, L., Vieira, S. C. F., & Santos, R. (2019). Opportunities for slow tourism in Madeira. *Sustainability*, 11(17), 4534.
- [32] Van Buren, N., Demmers, M., Van der Heijden, R., & Witlox, F. (2016). Towards a circular economy: The role of Dutch logistics industries and governments. *Sustainability*, 8(7), 647.
- [33] Vargas-Sánchez, A. (2018). The unavoidable disruption of the circular economy in tourism. *Worldwide Hospitality and*

Tourism Themes, 10(6), 652–661. DOI: 10.1108/whatt-08-2018-0056

- [34] Webster, K. (2017). *The circular economy: A wealth of flows*. Ellen MacArthur Foundation.
- [35] World Tourism Organization (2020). *Glosario de términos de turismo*. Retrieved July 24, 2020, from <https://www.unwto.org/es/glosario-terminos-turisticos>