Chapter 8 Good Practices of Circular Economy in Tourism in Castellón



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Introduction

Tourism is one of the fundamental pillars of the Spanish economy and its importance is undoubted. Spain is one of the most popular tourist destinations in the world, with tourism reaching an estimated figure of 159,490 million euros in 2022 (Exceltur, 2023), which represents 12.2% of the country's GDP. These figures are much closer to the reality prior to the global pandemic, considering that the figure of 157,355 million euros was reached in 2019, which represents 12.6% of the country's GDP, while in 2021 97,126 million euros were collected (INE, 2023).

Thus, this activity represents a key sector for the country, both from the economic and social point of view, since it generates a large amount of employment and wealth. In addition, tourism contributes to promoting economic development in regions with less activity and to diversifying the country's economy.

But tourism's impact is not exclusively related to positive effects in the economic and social sphere. Tourism has a direct impact on the environment and is a great challenge in terms of waste and pollution management given the high number of visitors that Spain receives each year (Sgambati et al., 2021; Renfors, 2022). It is therefore essential to promote sustainable and responsible tourism.

Given that the circular economy (CE) is an economic model that seeks to minimize waste and maximize the reuse of resources, it can be fundamental for the tourism sector. The World Travel & Tourism Council's (WTTC) study on circular economy highlights that CE can help tourism businesses reduce costs and improve their long-term sustainability, while reducing the environmental footprint (World Travel & Tourism Council & Harvard T.H. Chan School of Public Health, 2022).

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The concept of CE can be understood as an economic system that replaces the 'end-of-life' concept with reducing, alternatively reusing, recycling, and recovering materials in production/distribution and consumption processes (Ellen MacArthur Foundation, 2013). It operates at the micro level (products, companies, consumers), meso level (eco-industrial parks) and macro level (city, region, nation and beyond), with the aim to accomplish sustainable development, thus simultaneously creating environmental quality, economic prosperity and social equity, to the benefit of current and future generations (Kirchherr et al., 2017; Prieto-Sandoval et al., 2018).

Therefore, CE follows a cradle-to-cradle perspective, where materials are viewed as nutrients circulating in healthy and safe metabolisms. This design enables the creation of wholly beneficial industrial systems driven by the synergistic pursuit of positive economic, environmental, and social goals (Braungart et al., 2007). Also, a review on CE made by Ghisellini et al. (2016) states that CE allows a reduction of the costs for the companies and municipalities due to a reduction of the problem of waste management, as well as to a reduction of the externalities for the society (lower pollution), new job opportunities and increased welfare for low-income households. Regarding employment creation, the implementation of a CE could generate up to 700,000 additional jobs in the tourism sector by 2040, according to a report by the Ellen MacArthur Foundation (2021).

But, on the other hand, to achieve a CE, it is necessary for both producers and consumers to take an active role in recycling or reusing products, moving away from the passive "throwaway" mentality that characterizes the linear economy (Shah, 2014; Rodríguez et al., 2020). Furthermore, given that economic expansion cannot continue indefinitely, it is crucial to view the CE as a shift toward a novel business model that decouples wellbeing from resource consumption. By promoting less resource utilization and greater wellbeing, CE could facilitate the transition to a degrowth trajectory, which appears increasingly necessary in developed economies that have already exceeded ecological thresholds (Ghisellini et al. 2016; Kerschner 2010).

In conclusion, as opposed to the linear "one use only" model, the CE focuses on creating systems in which products, materials and resources maintain their value and usefulness as long as possible, avoiding the generation of waste and minimizing the extraction of raw materials. Therefore, its importance in today's society and tourism is very high, not only for being environmentally positive, but also for generating important economic and social benefits.

Thus, CE represents a real and necessary alternative to build a fairer, more sustainable, and environmentally friendly tourism model. That is why it is essential to promote the transition towards a CE both from the private and public spheres and raising awareness about its importance.

All this leads to the need to observe which specific actions are being carried out in this field, in order to learn about companies and citizens' current position regarding CE in tourism.

In this chapter, we will make a compilation and analysis of good practices of CE performed in the tourism sector of the province of Castellón. To accomplish this, we will mainly rely on a study carried out by the Polytechnic University of Valencia, in

collaboration with the Universitat Jaume I of Castellón and the University of Alicante within the InnoEcoTur project.¹ We will also outline a specific example of a hotel in Castellón (Spain).

Castellón's Tourism Industry²

The province of Castellón, located on the east coast of the Valencian Community in Spain, is a popular tourist destination and of great importance for the region.

According to the report of the Evolution of Tourism Activity in the Province of Castellón (GVA, 2021), 3.3 million tourists visited the province in 2021, a 35.3% higher amount than the previous year. Regarding the figures of hotel establishments in the province, these registered significant year-on-year growth in 2021, both in the number of travelers (78.2%), and in the number of overnight stays (94.4%).

However, the comparison of 2021 and 2020 should be carefully analyzed, since both years were importantly affected by the global pandemic, compared to usual figures (for example, 4.4 million tourists arrived in the province in 2019). In any case, this also indicates that the sector has been able to recover after the situation caused by the pandemic.

The province has a wide variety of tourist attractions, from beaches and natural landscapes to historic cities and architectural monuments.

The Costa Azahar is one of the main tourist attractions in the region, since it offers a wide variety of options for tourists, from urban beaches to virgin coves surrounded by nature. In addition, the coast has many tourist services such as hotels, restaurants, bars and stores, making it an attractive option for those looking for a complete holiday.

Other tourist attractions in the province of Castellón are its charming villages and towns, such as Peñíscola, Morella or Vilafamés. Also, it has a wide range of rural and active tourism since its interior territory is full of natural parks and hiking trails.

It is also an ideal destination for gastronomic tourism lovers, since the province has a rich variety of typical dishes and local products, such as olive oil, citrus fruits, wines, or cheeses.

Thus, tourism is a key sector in the economy of Castellón throughout the year, not only during summer months. In addition, promoting sustainable tourism is a key

¹Creation of an Innovation Platform for Promoting and Implementing a Circular Economy Strategy in the Tourism Sector of the Valencian Community (InnoEcoTur). https://innoecotur.webs.upv.es/ ²This section has been written using information available on the following websites, accessed in May 2023:

https://www.castellonturismo.com/

https://turismodecastellon.com/es/

https://www.castellonvirtual.es/

https://www.valenciabonita.es/2021/07/09/descubre-interior-castellon/

objective for the future development of the province, favoring natural and cultural resources' protection while respecting the environment and local population.

Focus Groups³

The purpose of the InnoEcoTur project's report (InnoEcoTur, 2022) was to gather information on the requirements of companies in the tourism sector to adopt the values and principles of Circular Economy (CE). This was achieved through the organization of three focus groups, each conducted in a different province of the Valencian Community, over the period from October 2021 to January 2022. By employing this method of information gathering, the aim was to ascertain the participants' viewpoints regarding the implementation of CE within their respective companies, as outlined by Krueger and Casey (2015).

For the realization of these sessions, a profile of participants was concretized composed of high-level executives in their companies, with the capacity to make decisions on the transition to the CE; of hotel companies, restaurants, and suppliers of both throughout the Valencian Community. In addition, companies of considerable size have been selected, to ensure that they have experience in the transition to the circular economy. Specifically, the companies⁴ based in Castellón that participated are Hotel Voramar, Hotel del Golf, Idear Ideas, Grupo DeCasa & Congelados DIL, Marabrasa and Pou de Beca.

Given that the focus groups were conducted within the Valencian Community, it is important to note that in this chapter, we will specifically highlight the notable circular economy practices identified in the province of Castellón. Nevertheless, obtaining information at a broader level does not imply that we cannot recognize that most of the conclusions and practices mentioned in the other two provinces can be potentially applied to the situation in Castellón as well.

In addition to this study, in order to try to reflect reality as close as possible to specific CE practices' reality, we will also collect information from other complementary sources of information such as: specialized publications, touristic companies' websites, local press reports, scientific publications, etc.

³This part of the chapter was based on the INNOECOTUR report, where the focus groups process is fully explained. It is accessible through: https://innoecotur.webs.upv.es/primer-informe-de-necesidades-del-sector-turistico-para-la-transicion-a-la-economia-circular/

⁴We would like to thank all the participants who took part in this dynamic, for sharing with us their knowledge and experiences in the transition towards the circular economy in the sector in the province of Castellón.

Circular Economy Practices in Castellón's Tourism Industry

The transition towards a CE requires a change in society's mindset and consumption habits at large. Given their complexity, the demands towards CE may seem generic or unclear, which makes their practical implementation difficult. This is why it is essential to translate these demands into concrete and tangible concepts so that they can be understood and accepted by society and to achieve greater public awareness and commitment to the CE. In the field of tourism companies, this becomes even more important, as they are dynamic agents reflecting where both direct and indirect actions that facilitate the transition towards a CE should be directed.

Thus, some examples that we have been able to identify of good circular economy practices carried out by companies in Castellón are:

- Employee training and awareness-raising on energy saving and circular economy.
- The reconversion of worn-out hotel sheets into uniforms for their staff.
- Renewal of electrical appliances, such as air conditioners, to replace them with new, more energy-efficient models.
- Measurement of the carbon footprint and the consequent establishment of actions to reduce it.
- Use of water and light sensors in hotels and restaurants.
- Creation of own reusable packaging to be used in relations between hotels and restaurants and their suppliers.
- Purification, use and reuse of water from showers and toilets in hotels.

During the focus group discussions on CE in the tourism industry of Castellón, it became evident that some participants expressed significant concerns regarding the challenges of implementing CE measures. A prominent concern revolved around the financial barriers associated with adopting sustainable practices. Participants highlighted the higher upfront costs and ongoing expenses involved in transitioning to circular business models. These cost barriers often deterred businesses from taking action, particularly smaller establishments with limited resources. Additionally, participants expressed a sense of frustration regarding the lack of consumer appreciation and understanding of CE practices. Despite their efforts to adopt sustainable measures, businesses reported a reduced competitiveness in the market due to a perceived lack of demand for eco-friendly products and services. This consumer indifference hindered the broader adoption of circular economy practices within the tourism industry, making it difficult for businesses to justify investing in sustainable initiatives.

However, there is one establishment whose involvement has stood out above and beyond the efforts and actions we have compiled. This is the Hotel Voramar in Benicàssim, whose participation in this area is based on a strategy centered on the Economy for the Common Good (ECG), a similar and complementary concept to the CE. This case study is not intended to be an exhaustive analysis, but a concrete positive example to show other actors in the tourism industry the way to sustainability through circularity (Voramar, 2015; Ruiz-Carmona, 2018).

Following the SEGITTUR (2022) report, observed good practices are summarized in a simple fact sheet along with the identification of its circular business model, based on the proposal of Arponen et al. (2018).

Hotel Voramar

Entity	Hotel Voramar
Location	Benicassim, Castellón, Spain
Activity	Accommodation and catering
Business	Circular sourcing, green procurement, inter-agent collaboration, reverse
model	logistics
Rs	Redesign/Reduce/Reuse/Repair/Recycle
Description	

It is a company that aims to be excellent, with a high level of awareness of the environment, people and its surroundings. Despite obtaining a score of 40.7% in its 2015 Common Good Balance Sheet, it has obtained very good results in indicators such as fair distribution of the work volume, fair distribution of income, and social transparency and participation in decision-making Its mission is defined as "to contribute to the wellbeing of all people, providing them with accommodation and catering services of the highest quality, efficiency and sustainability" "Our interest is that Voramar is a pleasant, warm place, and in general, a refuge for all the people who wish to visit us. To provide sensations; to inspire moments of joy and happiness among friends, families and co-workers and to create values; values of respect and commitment that can serve as an example and help to create healthy and responsible companies"

On the other hand, its vision is "to repay our customers, our team, our suppliers, shareholders and society in general for their trust and their time".

Thus, we can highlight different CE actions carried out by this hotel, such as:

Establishment of criteria for the selection of sustainable suppliers and products, including proximity of the product, environmental certifications of the supplier, returnability of packaging used, etc.

Introduction of ethical marketing techniques, mainly through honesty in communications and the promotion of positive stereotypes, protecting the interests of individuals and disadvantaged groups

Supporting events and actions aimed at promoting local culture, environmental protection values and social commitment. To this end, they actively collaborate in numerous events in the municipality by means of a financial contribution or by providing free accommodation or catering services

Energy rehabilitation of buildings, mainly through the exchange of cold/heat with groundwater Installation of solar and photovoltaic panels

Use of electric vehicles

WEB	https://www.voramar.net/
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Therefore, we can affirm that the Voramar hotel follows the three principles on which circularity is based, disseminated by the MacArthur Foundation⁵ to support the transition to CE. They focus on (1) the elimination of waste and pollution, (2) the circularity of its products and materials, and (3) the regeneration of nature. Moreover, they focus on five of the seven "Rs" of CE from a business point of view: Redesign, Reduce, Reuse, Repair and Recycle.

Conclusions

With this chapter we have tried to show a set of actions in the Circular Economy so that other agents in the tourism industry can benefit from these experiences, and thus join the desired transition to the CE and, consequently, towards greater sustainability. We understand that a collection and exchange of information through good practices in CE among the different actors involved is a fundamental tool to foster the transition from the current model to the CE model (SEGITTUR, 2022).

This chapter has provided a comprehensive overview of several commendable examples of circular economy practices implemented by companies in Castellón. These examples include employee training and awareness-raising on energy conservation and circular economy principles, repurposing worn-out hotel sheets into staff uniforms, upgrading to energy-efficient electrical appliances, measuring and reducing carbon footprints, utilizing water and light sensors, creating reusable packaging for hotel-restaurant-supplier relationships, and implementing water purification and reuse systems in hotels. Notably, the Hotel Voramar in Benicàssim has emerged as a standout establishment, going above and beyond in their commitment to the CE. By adopting a strategy rooted in the Economy for the Common Good (ECG), they have exemplified an approach that aligns with and complements the principles of circularity. These examples serve as inspiring models of sustainable business practices and highlight the potential for widespread adoption of CE principles in Castellón and beyond.

However, in this chapter we also acknowledge the existence of certain barriers to the implementation of CE practices, including: the high costs associated with carrying out these practices, lack of training, knowledge, and awareness about CE (both among customers and companies themselves), institutional and administrative barriers, and lack of incentives.

Regarding this, it is worth mentioning that a somewhat pessimistic perspective is evident among entrepreneurs in the sector. It has even been mentioned that these barriers create a disadvantaged situation compared to other competitors in the sector, highlighting the significant impact these practices have on companies' profit margins. Additionally, there seems to be a lack of interest from consumers towards CE practices, which further hampers their implementation. Addressing these concerns

⁵https://ellenmacarthurfoundation.org/

and raising awareness among both businesses and consumers will be crucial to overcoming the challenges and fostering a more circular and sustainable tourism sector in Castellón.

In this vein, we also need to highlight a topic that was subtly mentioned in the previous section regarding specific practices carried out in the province. This is, the difficulty of accessing information regarding these specific practices, either due to a lack of publicity or because there is indeed a limited number of practices. It should be noted that despite conducting an exhaustive search for information in this area, we were unable to compile an extensive list of such practices.

Furthermore, during this information search process, we have observed that while it is challenging to find information about specific practices implemented by companies, it is possible to find relatively abundant information and publications about claims (rather than facts) of a strong awareness and commitment from many companies in the sector regarding CE, sustainability, or carbon footprint. Numerous publications highlight certifications, awards, and recognitions bestowed upon these companies. As a result, all of this leads us to believe that there is a significant lack of specificity in terms of actual practices, even though many companies easily assert that they are doing great work in this field.

Thus, the difficulty in observing and assessing the practices effectively implemented in this area presents a certain contradiction. It is worth considering which factor has the greatest impact on the fact that it is so challenging to compile a list of CE practices, whether it is a problem of publicity or rather a lack of actual implementation of these practices in the sector.

Therefore, it is important to conduct future analysis to understand the actual efforts in the field of circular economy. In this regard, it might be necessary for tourism companies in the province of Castellón to clearly communicate the practices they are carrying out, and to promote greater transparency and societal involvement in evaluating these practices.

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References

- Arponen, J., Juvonen, L., & Vanne, P. (2018). Circular economy business models for the manufacturing industry. *Circular economy playbook for finnish SMEs*. SITRA.
- Braungart, M., McDonough, W., & Bollinger, A. (2007). Cradle-to-cradle design: Creating healthy emissions – a strategy for eco-effective product and system design. *Journal of Cleaner Production*, 15(13–14), 1337–1348., ISSN 0959-6526. https://doi.org/10.1016/j.jclepro.2006. 08.003
- Ellen MacArthur Foundation. (2013). *Towards the circular economy*. Ellen MacArthur Foundation. https://www.ellenmacarthurfoundation.org
- Ellen MacArthur Fundación. (2021). Objetivos universales para políticas de economía circular. Habilitando una transición a gran escala. https://archive.ellenmacarthurfoundation.org/assets/ downloads/ES-Objetivos-universales-depoli%CC%81ticas-para-la-economi%CC%81acircular.pdf

- Exceltur / N°83 Enero 2023/ Valoración turística empresarial de 2022. https://www.exceltur.org/ wp-content/uploads/2023/01/Informe-Perspectivas-N83-Balance-del-ano-2022-y-expectativaspara-2023.pdf Consultado en mayo 2023.
- Ghisellini, P., Cialani, C., & Ulgiati, S. (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., ISSN 0959-6526. https://doi.org/10.1016/j.jclepro.2015.09.007
- GVA. (2021). Informe sobre la evolución de la actividad turística de la provincia de Castellón. Estadístiques de Turisme de la Comunitat Valenciana. https://www.turisme.gva.es/tcv/ tcv2021/3_Castellon_2021c.pdf
- INE: Cuenta satélite del turismo de España. https://www.ine.es/dyngs/INEbase/es/operacion.htm? c=estadistica_C&cid=1254736169169&menu=ultiDatos&idp=1254735576863 Consultado en mayo 2023.
- InnoEcoTur. (2022). Primer Informe de necesidades del sector turístico para la transición a la economía circular. https://innoecotur.webs.upv.es/primer-informe-de-necesidades-del-sectorturistico-para-la-transicion-a-la-economia-circular/
- Kershner, C. (2010). Economic degrowth vs. steady-state economy. *Journal of Cleaner Production*, 18, 544–551.
- Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation and Recycling*, 127, 229.
- Krueger, R. A., & Casey, M. A. (2015). Focus groups. A practical guide for applied research. Sage.
- Prieto-Sandoval, V., Jaca, C., & Ormazabal, M. (2018). Towards a consensus on the circular economy. *Journal of Cleaner Production*, 179, 605–615. https://doi.org/10.1016/j.jclepro. 2017.12.224
- Renfors, S. M. (2022). Circular economy in tourism: Overview of recent developments in research. *Matkailututkimus*, 18(1), 47–63.
- Rodríguez, C., Florido, C., & Jacob, M. (2020). Circular economy contributions to the tourism sector: A critical literature review. *Sustainability*, 12, 1–27. https://doi.org/10.3390/su12114338
- Ruíz Carmona, O. (2018). In peace with capital? An alternative to the current capitalist system. Treball Final de Grau en Administració d'Empreses. Universitat Jaume I. http://hdl.handle. net/10234/176885
- SEGITTUR. (2022). Guía práctica para la aplicación de la economía circular en el sector turístico en España. https://www.segittur.es/sala-de-prensa/informes/guia-practica-para-la-aplicacionde-la-economia-circular-en-el-sector-turístico-en-espana/
- Sgambati, M., Acampora, A., Martucci, O., & Lucchetti, M. C. (2021). The integration of circular economy in the tourism industry: A framework for the implementation of circular hotels (Vol. 5, p. 95). University of South Florida (USF) M3 Publishing.
- Shah, V. (2014). The circular economy's trillion-dollar opportunity. Retrieved from https://www. ecobusiness.com/news/circular-economys-trillion-dollar-opportunity/. Accessed Apr 2023.
- Voramar. (2015). Balance del Bien Común. https://www.voramar.net/app_voramar/dossier/ dossierEBC2015.pdf
- World Travel & Tourism Council, & Harvard T.H. CHAN. (2022). *Economy circular*. https://wttc. org/Portals/0/Documents/WTTC-Harvard-LearningInsight-CircularEconomy.pdf

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