

# Exploring the Role of Consumers in Promoting a Circular Economy: Increasing Awareness and Engagement

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**Abstract.** *The term “circular economy” is currently gaining a lot of attention and refers to a sustainable economic model that aims to conserve resources for a longer period by reducing waste and pollution, recycling and reusing existing products and materials, and regenerating the natural environment. Therefore, consumers are those who have an important role to play in driving the transition to such an economy by making purchasing decisions that prioritize durable, repairable, and recyclable products. Those who make these choices are more likely to contribute to the success of a circular economy. Many consumers may not be aware of the benefits a circular economy could have on the environment and economy or may not understand how their purchasing decisions can impact the environment. By increasing consumer awareness and education, we can empower consumers to make more sustainable purchasing decisions. The article will explore ways to increase consumer engagement in the circular economy. Therefore, it will present an overview of the role of consumers in promoting a circular economy and ways to increase awareness and engagement. It will demonstrate that by empowering consumers to make more sustainable purchasing decisions, we can create a more sustainable future and preserve resources for future generations.*

**Keywords:** circular economy, consumer behavior, sustainable purchasing, consumer engagement, consumer awareness, sustainable future

## Introduction

Over the last two decades, the concept of the “circular economy” has become increasingly popular and has been used more often when talking about sustainable development. Thus, there have been many definitions offered for this concept, most of which are based on the term “reuse”. Kirchherr, Reike and Hekkert have analyzed 114 definitions of this concept in 2017 and have finally come up with the following definition: “A circular economy describes 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 operating 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, which implies creating environmental quality, economic prosperity and social equity, to the benefit of current and future generations.” (Kirchherr et al., 2017, pp. 224-225)

According to the definition given above, the circular economy has the potential to diminish dependence on finite resources, foster economic growth, and mitigate climate change. To benefit from these positive effects, however, consumer behavior plays a key role. More specifically, consumers are responsible for activating the circular economy mechanism and for tightening the goods and consumer products supply chain. The role of consumers in the development of circular economy strategies has been approached from a variety of perspectives, including green consumer behavior, circular packaging purchases, consumer understanding of product circularity, the impact of consumer behavior on waste in such an economy, and consumer barriers to the circular economy. (Shevchenko et al., 2023).

The purpose of this article is to explore the role of consumers in promoting a circular economy and it will also examine the importance of consumer awareness and education, and strategies for increasing consumer engagement. Based on a content analysis of selected articles from the literature, the present work aims to answer the following research questions:

RQ1. How do consumer behaviors and purchasing decisions impact the transition to a circular economy?

RQ2. What are the most effective strategies for promoting sustainable purchasing decisions among consumers?

The article will be organized as follows: first, it will briefly explore the concept of the circular economy and the importance of consumer engagement in promoting the circular economy. Then, the article will explain the methodological approach for this paper, which involves a content analysis of selected articles that discuss the importance of consumer awareness and education. The article will continue to identify the variety of methods to increase consumer involvement in the transition from linear to circular economy. Finally, the article concludes with suggestions for further research and future action.

### **Circular economy and consumer engagement**

The transition to a circular economy, which aims to maintain resources in use for as long as possible, has received increasing attention in recent years as a way to address the economic and environmental challenges facing our society. One of the key factors in promoting a circular economy is consumer behavior and purchasing decisions. This literature review explores the current research on the role of consumers in promoting a circular economy and ways to increase awareness and engagement.

Studies have shown that the choices consumers make when purchasing products play a significant role in advancing a circular economy (Dentchev et al., 2018). Adopting environmental stewardship over environmental management is recommended for companies to support this shift. Additionally, research has linked the principles of a circular economy with the environmental management and performance of businesses (Chiappetta Jabbour et al., 2020) and it has been demonstrated that circular systems can help prevent negative environmental impacts (Tura et al., 2019).

Therefore, changing consumer behavior towards a more circular economy requires not only raising awareness and education, but also providing practical solutions such as better access to circular economy products and services and creating incentives for sustainable purchasing (Pieroni et al., 2018).

According to Buren (in Barros et al., 2021), the transition to a circular economy requires a fundamental change in society. In order for consumers to make sustainable purchasing decisions, they need to be aware of the environmental and economic benefits of a circular economy and understand how their purchasing decisions can impact the environment. Studies have shown that consumer awareness and education about the green economy, which includes the circular economy, is limited (Bucur, 2022). The cause of this limitation is the fact that society is captive within itself, this captivity being defined by factors such as lack of initiative, self-satisfaction and enslavement to various norms or customs. (Bodea, 2022). Therefore, in order to remove these limitations, the experts consider that it's crucial to provide education and information through schools and universities, businesses and governments, and labeling and traceability systems (McDonagh et al., 2014).

Additionally, creating a culture of repair and sharing, by promoting the use of repair shops, libraries of things and encouraging consumers to share products and services, can be a way to increase the use of products and reduce the demand for new ones. Moreover, creating a culture of rental or subscription-based models for products can also help in prolonging their use and keeping them in the economy for a longer time (McDonagh et al., 2014).

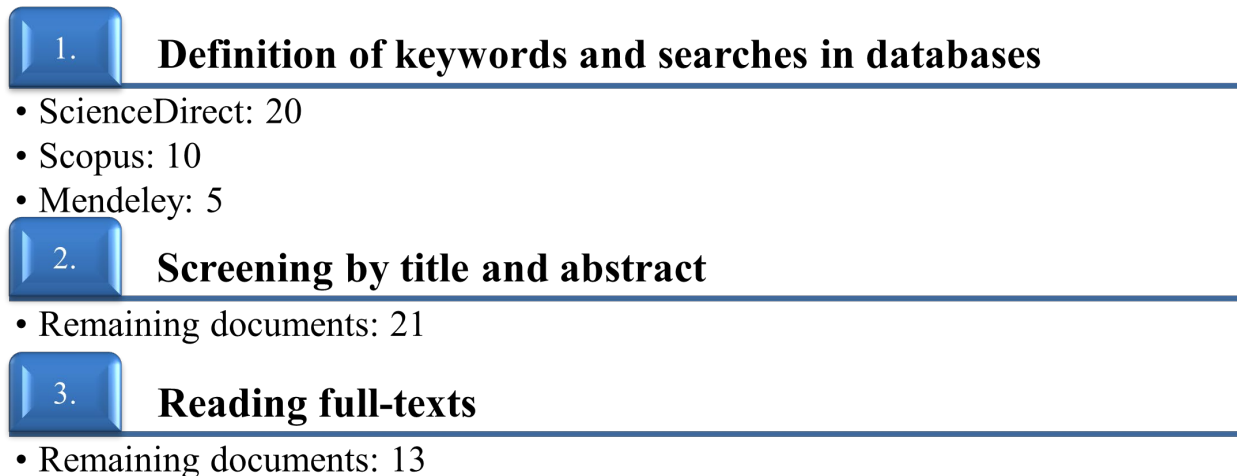
## Methodology

The methodology followed by the article is a content analysis on the circular economy and is composed of two phases. This method is largely used in literature. A similar methodology was used by Barros et al. in 2021 in the article entitled “*Circular economy as a driver to sustainable businesses*” which had the purpose to identify how circular economy influences different business areas. Another relevant example is the article entitled “*Conceptualizing the circular economy: An analysis of 114 definitions*” by Kirchherr et al., 2017. This article used a similar method, having as the main purpose to analyze 114 definitions of the concept circular economy.

In the present article, the first phase involves a literature review and consists of selecting relevant articles from Science Direct, Scopus and Mendeley. In the second phase, selected articles are analyzed in order to identify features for the following guidelines: the impact of consumer behavior on the circular economy, the importance of consumer awareness and education, and ways to increase consumer engagement.

### *Phase 1 – a scrutiny in the literature*

This part of the article involves a scrutiny in the literature on the topic of circular economy. As it is shown in Figure 1, there have been explored the most relevant sources for the topic and provide insights into the behavior of individuals regarding the circular economy.



**Figure 1. Steps for the scrutiny in the literature on the topic of circular economy**

Source: Authors' own research results/contribution.

*1 – Definition of keywords and searches in databases.* The primary data collection method has been through a review of relevant literature. A comprehensive search of academic journals, published on Science Direct, Scopus and Mendeley was conducted to gather information and insights on the subject. 35 articles have been selected, the criteria used being to encounter the

following keywords: circular economy, consumer behavior, sustainable decisions, consumer engagement and sustainable future.

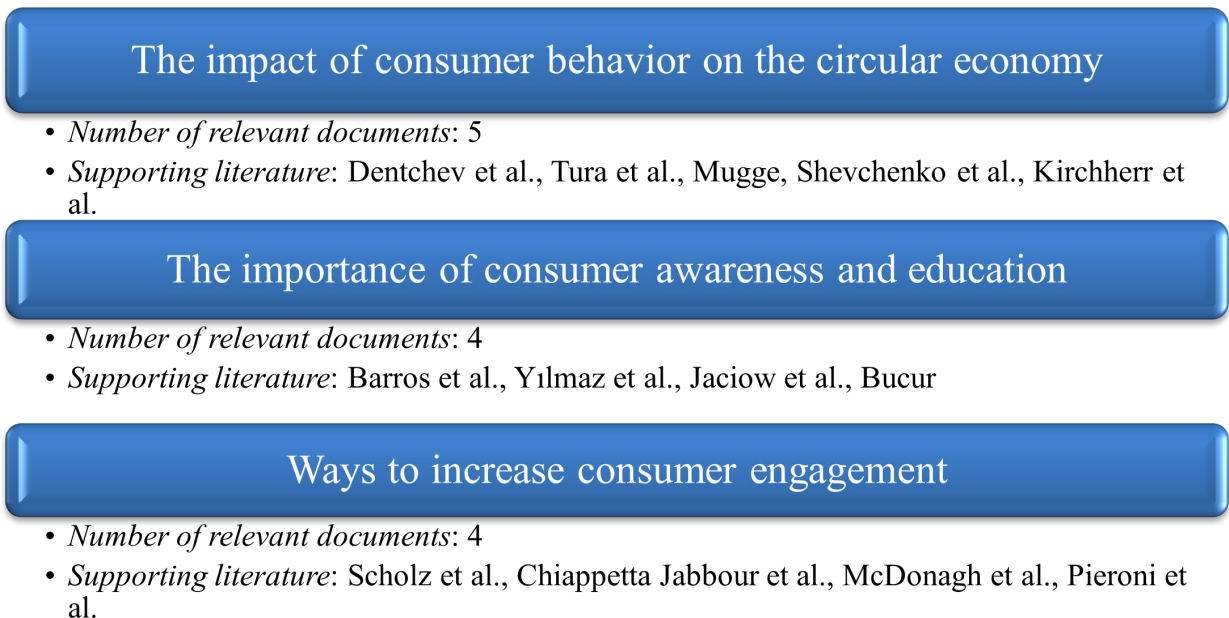
2 – *Screening by title and abstract.* The title and abstract of all documents were reviewed and the following question led to the decision whether or not to consider the document relevant to the present research: does this research contribute to exploring the awareness and engagement of consumers in promoting a circular economy?

3 – *Reading full-texts.* After the second phase, the full texts of all documents were read and analyzed and, then once again, the decision whether or not to consider the document relevant to the research was guided by the following question: does this research contribute to exploring the awareness and engagement of consumers in promoting a circular economy? There have been identified 13 articles from the period 2014-2023 as relevant for the present article but searches from the last 4 years were predominantly considered.

***Phase 2 – identifying features for the awareness and engagement of consumers in promoting a circular economy***

Generally, the second phase of this research offers an in-depth investigation of the topic and provides a glimpse into the perspectives and experiences of those involved in promoting a circular economy. The 13 documents considered for this research provide a wide understanding of the topic and contribute to current literature on the role of consumers in promoting a circular economy. In the results and discussion section, each of the previously mentioned issues will be expanded.

During the reading of the full-texts, in order to fulfill the objective of this piece of research, the author identified three main guidelines which are helpful when it is wanted to understand and explore the role of consumers in promoting a circular economy. Those main guidelines were the impact of consumer behavior on the circular economy, the importance of consumer awareness and education, and ways to increase consumer engagement. *Figure 2* presents the main guidelines, the number of documents that contributed to identifying features for these guidelines and the respective references of the supporting literature.



**Figure 2. Main guidelines, number of documents, and the references of the supporting literature**

Source: Authors' own research results/contribution.

## Results and discussions

### *The impact of consumer behavior on the circular economy*

Consumer purchasing decisions are crucial in the move towards a circular economy. As it was shown in the previous sections of this paper, the circular economy relies on keeping products and materials in use. Therefore, consumer behaviors that prioritize buying durable, repairable, and recyclable products are more likely to support such an economy. On the other hand, consumer behaviors that prioritize buying cheap, disposable products are less likely to support a circular economy.

Consumer behavior research has expanded beyond individual characteristics and now includes an examination of consumer values and the way in which they willingly adopt sustainable consumption practices or engage in anti-consumer behaviors with a focus on sustainability. McDonagh and Prothero (2014) stress the importance of studying not only individuals' concerns, attitudes, and behaviors, but also sustainable consumption practices at a societal level. This includes understanding the conditions that are necessary for society as a whole to adopt a more sustainable consumption philosophy, as opposed to just a select group of individuals. It is crucial to consider the feasibility of sustainable consumption practices on a larger scale, in order to effectively promote and implement sustainable consumption behaviors throughout society.

One example of supportive consumer behavior is buying products made from recycled materials. This not only reduces the need for virgin materials, but also supports the recycling industry and creates demand for recycled materials. It could be a challenge as many consumers are not aware of the environmental benefits of using recycled materials or they just simply don't know if the product they are buying is made of recycled materials. In this case, producers have the responsibility to offer a wider range of circular goods and services. Different design choices can either highlight unique benefits or mitigate specific concerns. However, there is a need for more knowledge to assist companies and designers in effectively addressing this key challenge. (Mugge, 2018)

Another example is opting for products with a longer lifespan or that can be easily repaired. This reduces the need for replacement products and supports a circular economy. This is a challenge as well, as many consumers are not aware of the lifetime of the products they are buying and the potential for repair, and many times these products are cheaper but in the long term, it will cost more to replace them. Therefore, it is important to have better information provided to consumers about the product's lifespan and repairability. (Mugge, 2018)

However, changing consumer behavior is not always easy. Many consumers may not know about the environmental and economic benefits of a circular economy, or they do not understand how their buying decisions can impact the environment. There are also a lot of consumers who understand that the benefits of the circular economy go beyond the economic part and have great impacts on social and environmental parts. Even so, they tend to not involve themselves in the transition to a green economy, because they are captive in their own comfort or in their opinions and points of view regarding the consumption models and not only (Bucur, 2022).

What is important to note is that consumer actions that promote the circular economy model occur throughout the product's lifecycle, including the purchase, use and disposal stages. In order to effectively implement circular strategies, the second stage should be viewed as a three-phase "buy, use, return" process, where actions in the first phase impact the next. To support this process, consumers engage with a variety of circular products, including reusable and recyclable items, remanufactured and reused products, recycled goods, shared products and second-hand items. Alternatives such as sharing, renting or leasing can also be considered as additional environmentally-friendly and financially savvy opportunities for consumers (Shevchenko, et al., 2023).

### ***The importance of consumer awareness and education***

Currently, consumer awareness and education about the circular economy is increasing, but in some cases it is still limited. Many consumers may not be aware of the concept of a circular economy or its potential benefits. Additionally, they may not understand the relationship between their purchasing decisions and the environment. Without this awareness and understanding, it is unlikely that consumers will make sustainable purchasing decisions.

Researchers claim that understanding of products is a crucial, yet frequently disregarded aspect of consumer behavior research. They suggest that through consumer knowledge-based insights, marketing strategists can more effectively target customer groups using a variety of marketing techniques. Consumer knowledge, defined as “what a consumer knows” plays a vital role in every stage of the purchasing decision process (Yılmaz et al., 2017).

Consumer knowledge of a product class is not always the main factor shaping behavior, but relies more on product-related experience in information seeking, product use and ownership behavior. It is believed that young people tend to have a higher level of consumer knowledge due to their ability to adapt quickly to new technologies, such as the internet, which gives them the opportunity to keep up to date with news about responsible consumption. Another important aspect in the transition to a green economy is consumer awareness. This refers to individual rights and responsibilities during the market exchange process. As consumers know their rights and responsibilities, they can make better informed buying choices and are safe from being exploited by companies. According to research by Yılmaz et al. (2017), several key characteristics have been identified as defining consumer awareness, including the tendency to search for deals, a general understanding of consumer-related topics, specific knowledge about products, a desire to seek out information, and a sensitivity to pricing.

Apart from consumer knowledge, the article refers to consumer education. According to Vigar-Ellis (in Yılmaz et al., 2017), consumer education focuses on fairness, equity, and truth, and plays a crucial role in fostering a harmonious and civilized society. By educating consumers about their rights and responsibilities, they are better able to protect themselves. Educated consumers tend to be more responsible in their consumption and have a positive impact on the environment. Manufacturers and marketers also tend to be more responsible when faced with an educated consumer base. This type of education has a great impact on consumer behavior, because this can be influenced by social learning, and the educational institutions provide an important setting for this socialization to take place.

It is also important to talk about awareness of environmental issues. It is increasing and people tend to change their consumption behavior. People are increasingly better informed, more sensitive to environmental issues and appreciate sustainable practices. Consumers are making more and more informed decisions about their environmental impact and are more likely to encourage others to adopt similar environmental-friendly behaviors.

Environmental awareness could lead to proactive environmental behavior, but a simple awareness of environmental issues does not always mean pro-environmental behavior. Being aware of environmental issues is the first step to becoming a conscious consumer and can be made operational through a motivated environmental behavior. To determine pro-environmental behavior there are two main attitudes - attitudes towards nature and towards pro-environmental actions. Consciousness of environmental issues, especially when encouraged by real pro-environmental behavior, is called environmental responsibility (Jaciow et al., 2022).

Wondering which factors influence research on environmental awareness, one of these factors is the perceived effectiveness of the consumer. Vermeir (in Jaciow et al., 2022) defined this

concept as “the extent to which consumers believe that their personal efforts can contribute to solving a problem”. Research has shown that perceived effectiveness of consumer behavior is positively correlated with pro-environmental purchasing attitudes and behaviors across a broad and diverse group of products, national markets and consumer groups. This suggests that perceived consumer efficacy plays an important role in promoting sustainable consumption practices.

A further factor influencing environmental consciousness is mobilizing consciousness, also called mobilizing attitude. Studies in this area have expanded beyond activist campaigns towards mobilizing citizens on issues such as climate change and the circular economy (Yılmaz et al., 2017). Mobilization consciousness can be understood as the activation of communities to positively engage in and support efforts related to the transition from a linear to a circular economy. Empirical research has provided solid proof of the impact of mobilization awareness on green practices (Jaciow et al., 2022). For example, Macias and Williams (in Jaciow et al., 2022) found that living in tightly connected neighborhoods provides residents with the opportunity to buy more organic and chemical-free products. It was also found that these residents tend to consume less water and household energy and drive less due to their exposure to diverse perspectives. All these actions have a big impact on the adoption of a circular economy.

Considering the above, by becoming more environmentally aware, consumers can make better and more environmentally friendly decisions. Through the power of example, they can influence others to adopt similar sustainable behaviors, so a large segment of environmentally conscious consumers has been created in the market. People in this segment are driven by a desire for self-fulfillment and the desire to take on new opportunities.

Considering the characteristics of consumers who are knowledgeable about the green economy, the paper can highlight the importance that companies should give to these consumers. They should be much more cautious when assuming that they are socially and environmentally responsible, because consumers with knowledge in this area will be much more demanding and will react negatively if they do not deliver what they promise.

Summarizing what has been mentioned in this section of the paper, it can be said that as consumer awareness of environmental degradation caused by economic activities has increased, citizens have become more responsible and have started to behave in a greener way. Thus, the demand for sustainable products or services has increased and the circular economy has become more and more widespread. As a result, manufacturers understood the importance of consumer awareness and started to adopt socially and environmentally responsible practices. Some studies show that many companies are using green marketing as a competitive strategy to attract environmentally conscious consumers (Jaciow et al., 2022).

### ***Ways to increase consumer engagement***

Increasing consumer engagement is crucial in promoting a circular economy. Consumer engagement refers to the extent to which consumers are actively involved in supporting and participating in the circular economy, such as through purchasing circular economy products and services, supporting circular economy businesses, and participating in circular economy initiatives.

There are several strategies that can be used to increase consumer engagement in the circular economy. One strategy is to provide financial incentives for purchasing circular economy products and services. For example, governments and businesses can provide tax breaks or other financial incentives for purchasing circular economy products, or they can invest in infrastructure and education programs to make circular economy products and services more widely available (Mugge, 2018).

Another strategy is to create awareness and education campaigns that highlight the environmental and economic benefits of the circular economy, and how consumers can support it through their purchasing decisions. This can include hosting workshops and seminars, creating informational websites and brochures, and utilizing social media to spread information and education.

After analyzing the most appropriate articles and studies regarding the ways to involve the consumer in the transition to a circular economy, in the following part of this paper, there will be discussed some important methods which could increase consumer engagement in the transition to this type of economy.

*Creating consumer-friendly circular economy products and services:* By designing products and services that are easy to use, affordable and accessible, businesses can make it more likely for consumers to engage with the circular economy.

*Developing consumer-facing circular economy platforms:* By creating platforms that make it easy for consumers to find, purchase, and learn about circular economy products and services, businesses can increase consumer engagement (Scholz et al., 2016).

*Building community and social networks around circular economy:* By creating social and community networks that connect consumers with each other, businesses can foster a sense of community and shared purpose around circular economy, encouraging consumer engagement (Scholz et al., 2016).

*Creating transparency and traceability for circular economy products:* By providing consumers with information about what the environmental impacts of products and services are, companies can enhance consumer engagement, making it easier for people to make more informed purchasing choices.

*Leveraging technology to increase engagement:* By using technology such as mobile apps, websites, and social media to connect consumers with circular economy products and services, businesses can increase consumer engagement (Scholz et al., 2016).

*Encouraging consumer participation in circular economy initiatives and campaigns:* By creating opportunities for consumers to participate in circular economy initiatives and campaigns, businesses can increase consumer engagement.

*Creating incentives for sustainable purchasing:* By creating rewards and incentives for consumers who make sustainable purchasing decisions, businesses can increase consumer engagement.

*Creating a culture of repair and sharing:* By promoting the use of repair shops, libraries of things, and encouraging consumers to share products and services, businesses can increase consumer engagement in the circular economy. This not only prolongs the use of products and reduces the demand for new ones but also fosters a sense of community and shared responsibility.

*Offering rental and subscription-based models:* By offering rental and subscription-based models for products, businesses can increase consumer engagement in the circular economy. This allows consumers to access products without having to purchase them outright, which can make circular economy products and services more accessible and affordable.

## Conclusion

In conclusion, the role of consumers in encouraging a circular economy is essential. Through their purchasing decisions and behavior, consumers can contribute to a circular economy. However, in order to make sustainable purchasing decisions, it is necessary for consumers to be aware of both



the economic and environmental benefits of the circular economy and to have an understanding of how their buying actions can impact on the natural environment.

The article has examined the impact of consumer behavior on the circular economy, the importance of consumer awareness and education, and strategies for increasing consumer engagement. By providing education and information through schools and universities, businesses and governments, and labeling and traceability systems, as well as fostering a culture of repair and sharing, the consumer awareness and understanding of the circular economy could be increased. Additionally, by providing financial incentives, raising awareness and education, and fostering a culture of repair and sharing, consumer engagement could increase and the transition to a circular economy could be supported.

It is important to note that the transition to a circular economy is a collective effort that requires the participation and cooperation of businesses, governments, and consumers. To ensure future generations can maintain current levels of well-being, society must minimize the negative environmental impact of achieving this well-being. Implementing closed-loop processes, in which products retain their value for longer periods, can reduce the environmental harm caused by consumption. However, the success of this circular economy relies heavily on consumer behavior and attitudes.

To conclude, raising consumer awareness and educating consumers is key to the success of the circular economy. By providing consumers with information on the benefits of circular products and services and explaining how their behavior can contribute to the circular economy, together we can increase the wider consumption of circular products and services and play a role in bridging the gap between “attitude and behavior”.

## References

- Barros, M. V., Salvador, R., do Prado, G. F., de Francisco, A. C., & Piekarski, C. M. (2021). Circular economy as a driver to sustainable businesses. *Cleaner Environmental Systems*. doi:<https://doi.org/10.1016/j.cesys.2020.100006>
- Bodea, G. (2022). *Clash-ul crizelor sau violența lumii asimetrică*. (Vol. 2. Societatea captivă). ed. Cluj-Napoca: Presa Universitară Clujeană.
- Bucur, L. M. (2022). The Social Nature of the Green Economy. *Emerging Markets Economics and Business. Contributions of Young Researchers. Proceedings of the 13th International Conference of Doctoral Students and Young Researchers* (pp. 58-61). Oradea: Oradea University Press.
- Chiappetta Jabbour, C. J., Seuring, S., Lopes de Sousa Jabbour, A. B., Jugend, D., De Camargo Fiorini, P., Latan, H., & Izeppi, W. C. (2020). Stakeholders, innovative business models for the circular economy and sustainable performance of firms in an emerging economy facing institutional voids. *Journal of Environmental Management* 264.
- Dentchev, N., Rauter, R., Johannsdottir, L., Snihur, Y., Rosano, M., Baumgartner, R., . . . Jonker, J. (2018). Embracing the variety of sustainable business models: A prolific field of research and a future research agenda. *Journal of Cleaner Production* 194, 695-703.
- Jaciow, M., Rudawska, E., Sagan, A., Tkaczyk, J., & Wolny, R. (2022). The Influence of Environmental Awareness on Responsible Energy Consumption – The Case of Households in Poland. *Energies*, 15(5339). doi:[https://doi.org/10.3390/15\(5339\)](https://doi.org/10.3390/15(5339))
- Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation & Recycling*, 221-232.

- McDonagh, P., & Prothero, A. (2014). Sustainability Marketing Research: Past, Present and Future. *Journal of Marketing Management*, 1186–1219.
- Mugge, R. (2018). Product Design and Consumer Behaviour in a Circular Economy. *Sustainability*.
- Pieroni, M., Pigosso, D., & McAloone, T. (2018). Exploring the synergistic relationships of circular business model development and product design. *International Design Conference*, 2715-2726.
- Scholz, J., & Smith, A. N. (2016). Augmented reality: Designing immersive experiences that maximize consumer engagement. *Business Horizons* 59, 149-161.
- Shevchenko, T., Saidani, M., Ranjbari, M., Kronenberg, J., Danko, Y., & Laitala, K. (2023). Consumer behavior in the circular economy: Developing a product-centric framework. *Journal of Cleaner Production*, 384. Retrieved from <https://doi.org/10.1016/j.jclepro.2022.135568>.
- Tura, N., Hanski, J., Ahola, T., Ståhle, M., Piiparinen, S., & Valkokari, P. (2019). Unlocking circular business: A framework of barriers and drivers. *Journal of Cleaner Production* 212, 90-98.
- Yılmaz, M. A., & Koçoğlu, D. (2017). Effects of Business Education on Consumer Awareness and Conscious Consumption. *European Scientific Journal*, 265-275.