CONCEPTUAL AND PRACTICAL DIFFERENCES BETWEEN CIRCULAR AND GREEN ECONOMY

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Abstract
The shift from systems based on the need for economic growth to eco-friendly economic systems has resulted in the introduction of new ideas such as sustainable development, sustainable growth, sustainable economy, circular economy, and green economy. While the circular economy and green economy share several ideas, they differ in some ways. The circular economy emphasizes waste reduction and resource efficiency, whereas the green economy emphasizes the incorporation of environmental and social concerns into economic decision-making. While both concepts advocate for sustainable production and consumption, the circular economy emphasizes the circular movement of resources, whereas the green economy emphasizes the overall sustainability of economic activities. In terms of knowledge, these have been widely developed over the last 30 years, but their practical applicability has proven less rigorous, also in European Union and Romania.

Key words: *circular economy; green economy; sustainability; sustainable economy; sustainable growth.*

JEL Classification: *F63, F64, O4, Q56, Q57.*

I.CIRCULAR ECONOMY APPLIED PRINCIPLES

The concept of a circular economy has gained ground in recent years as a possible paradigm for long-term growth. Unlike the traditional linear economy, which is based on a "take-make-dispose" model, a circular economy attempts to minimize waste while maximizing material reuse and regeneration. We can lessen the environmental impact of our production and consumption systems while simultaneously creating new economic opportunities by changing to a circular economy. The first step toward a circular economy is to redesign and repurpose our design and manufacturing processes to make them more sustainable. This entails thinking about a product's complete lifecycle, from raw material extraction through disposal, and creating goods that may be reused, mended, or recycled. We can make products that are more durable, efficient, and ecologically responsible by adopting circular design principles such as modular design and material reuse. Many industries' existing design and manufacturing practices have contributed to severe environmental deterioration and natural resource depletion. To develop a more sustainable future, we must rethink our design and manufacturing processes and adopt more sustainable practices. This paper investigates why and how we may rethink our design and manufacturing processes (Mustaquim and Nystrom, 2017).

Why should we rethink our design and manufacturing processes? Our current design and manufacturing practices have resulted in major environmental issues such as pollution, climate change, and habitat destruction. This is due to a focus on increasing manufacturing efficiency and lowering costs without taking into account the environmental impact of these methods. Furthermore, our present processes are linear, which means that products are made, used, and then discarded. This generates a substantial quantity of garbage and depletes natural resources. Rethinking our design and manufacturing methods can help us overcome these issues. We may lessen the environmental effect of our products and create a circular economy by adopting more sustainable techniques that reduce waste and reuse and recycle resources (Re, Liu et al, 2021).

How can we revisit our design and manufacturing processes? We may rethink our design and manufacturing processes in a variety of ways. One strategy is to employ sustainable materials in manufacturing. This includes the use of renewable, recyclable, or biodegradable materials. For example, instead of using wood in buildings, use bamboo or biodegradable packaging materials. Another strategy is to create items that are simple to repair and reuse. This entails designing items that can be disassembled, mended, and reused rather than being discarded. Creating modular items, for example, that can be easily upgraded or mended rather than being completely replaced. We may also implement more efficient manufacturing techniques that consume fewer resources and produce less waste. This includes implementing technologies and practices that reduce energy usage and trash output. For example, instead of mass production methods that generate waste, 3D printing can be used to create personalized products. Finally, by adopting a circular economy strategy, we can rethink our entire approach to product design. This entails developing items from conception to disposal with the entire lifecycle in

mind. This strategy seeks to reduce waste and maximize resource consumption by establishing closed-loop systems in which waste is reduced and resources are reused and recycled. There are various advantages to reconsidering our design and manufacturing processes. For starters, it can help to lessen the environmental effect of our products by reducing waste and natural resource depletion. Second, it can aid in the creation of new business opportunities, such as the development and selling of environmentally friendly items. Finally, it can lead to cost savings by decreasing waste and boosting the efficiency of manufacturing operations (Marsch, Velenturf et al, 2022).

Extended Producer Responsibility (EPR) is a regulatory framework that places the burden for managing a product's environmental impact on the producer rather than the consumer or local government. The EPR concept is founded on the premise of "polluter pays," which states that those who manufacture things with negative environmental consequences should shoulder the price of managing and disposing of them. In recent years, this policy framework has gained support as a means of shifting the responsibility of waste management from local governments to producers and encouraging manufacturers to design more sustainable products. The EPR framework works by compelling producers to bear responsibility for their goods' whole lifecycle, from design and manufacturing to disposal and recycling. This means that producers must consider the environmental impact of their products at each stage of their lifecycle and seek to reduce it. This can involve building easier-to-recycle products, employing more sustainable materials in production, and developing mechanisms for collecting and recycling things at the end of their lives. EPR has various advantages. For one thing, it makes it more expensive for manufacturers to design and produce more sustainable products by making it more expensive for them to generate items with negative environmental implications. Furthermore, by supporting the development of methods for recycling and disposing of products at the end of their lifecycle, it can assist to limit the quantity of garbage that ends up in landfills. Finally, it can help to lessen the product’s environmental effect by encouraging manufacturers to utilize more sustainable materials in production and to design goods that are easier to recycle (Turaga and Bhaskar, 2017).

The European Union's Waste Electrical and Electronic Equipment (WEEE) Directive is one example of EPR in operation. This directive mandates electronic goods manufacturers to cover the costs of managing and disposing of their products at the end of their lives. As a result, mechanisms for collecting and recycling electronic goods have been developed, helping to limit the quantity of electronic trash that ends up in landfills. Another example is British Columbia, Canada's Extended Producer Responsibility program. This initiative mandates packaging and printed paper manufacturers to fund the collection and recycling of their products. As a result, the amount of packaging and printed paper recycled in the province has increased significantly. While EPR is a potential paradigm for decreasing product environmental effects, it is not without its difficulties. One problem is ensuring that manufacturers follow EPR rules and take responsibility for their goods' whole lifecycle. Another problem is ensuring that the costs of product management and disposal are not passed on to consumers in the form of higher prices. Despite these obstacles, EPR has the potential to be a successful policy framework for lowering product environmental impact and pushing manufacturers to develop more sustainable products. EPR can help to establish a more sustainable and environmentally friendly economy by putting the burden of monitoring a product's environmental impact on the manufacturer rather than the consumer or local government (Atasu, 2019; Maitre-Ekern, 2021).

Circular business models are a sort of company model that aims to add value to consumers and society while avoiding waste and maximizing resource efficiency. Unlike typical linear business models that are based on product production, consumption, and disposal, circular business models attempt to keep products, materials, and resources in use for as long as feasible, decreasing waste and fostering a more sustainable economy. This essay will look at circular business models and their advantages. What precisely is a Circular Business Model? A circular business strategy emphasizes creating value for customers and society while minimizing waste and maximizing resource efficiency. This is accomplished through a variety of tactics, including the design of items for reuse and recycling, the use of renewable energy sources, and the promotion of resource sharing. A circular business model's ultimate purpose is to create a closed-loop system in which products, materials, and resources are used for as long as possible before being destroyed (Barañano, Garbisu et al, 2021).

Circular business concepts can be seen in a variety of industries. The fashion sector, for example, is a major contributor to environmental deterioration and waste. Some fashion businesses have used circular business strategies, such as employing sustainable materials, developing goods for reuse and recycling, and encouraging resource sharing. Patagonia company, for example, has a program named Worn Wear that encourages customers to mend and reuse their products rather than purchase new ones. The car-sharing sector is another example of a circular business model. Customers can rent automobiles from car-sharing firms on a short-term basis, reducing the requirement for individual car ownership and the accompanying environmental impact. Furthermore, some car-sharing organizations use electric vehicles, which minimizes the environmental impact of commuting even further. Circular business concepts have various advantages. For starters, they aid in waste reduction and

resource efficiency, which helps to a more sustainable economy. Second, they can generate new revenue streams and commercial prospects, such as the selling of reconditioned or recycled products. Finally, as customers become more concerned about sustainability and environmental effect, circular business models can strengthen brand reputation and promote customer loyalty (Kanda, Geissdoerfer et al, 2021).

The use of resources in a way that maximizes their value with minimizing waste and environmental effects is referred to as resource efficiency. Resource efficiency is becoming increasingly significant as a means of promoting sustainability and avoiding environmental degradation in an era of fast population increase and increasing demand for resources. In this post, we will look at resource efficiency and its benefits. What exactly is resource efficiency? The use of resources in an approach that maximizes their worth while minimizing waste and environmental effects is referred to as resource efficiency. This includes using energy, materials, water, and other resources efficiently in the production and utilization of goods and services. Resource efficiency also entails the development and application of technologies and practices that minimize waste and pollution while encouraging material reuse and recycling. There are numerous advantages to resource efficiency. For starters, it can help to lessen the environmental effect of economic activities by minimizing resource use and waste output. This, in turn, can aid in the mitigation of climate change, the reduction of pollution, and the preservation of natural habitats (Krasulja, Ilic et al, 2020).

Second, resource efficiency can result in cost reductions for both organizations and individuals. Businesses can cut input costs, enhance production, and reduce waste disposal expenses by using resources more efficiently. Households may additionally save money by conserving energy and water, as well as reusing and recycling things. Finally, resource efficiency has the potential to foster innovation and the creation of new technologies and processes. There is a growing market for sustainable products and services as firms and people adopt more resource-efficient practices. This, in turn, has the potential to spur innovation and the growth of new technologies that encourage sustainability and resource efficiency (Steliac and Steliac, 2019).

Several examples of resource efficiency can be found in numerous industries. For example, the construction sector can encourage resource efficiency by employing sustainable building materials, planning buildings for energy efficiency, and encouraging construction material reuse and recycling. Resource efficiency in the transportation industry can be improved by using fuel-efficient vehicles, promoting public transportation, and developing alternative fuels such as electric or hydrogen-powered vehicles. Resource efficiency in the food sector can be improved by reducing food waste, using sustainable agriculture practices, and developing alternative protein sources like plant-based meats (Kedir, Hall et al, 2023).

Promoting sustainability and accomplishing environmental goals requires educating and involving stakeholders. Individuals, communities, businesses, and governments are all stakeholders in the creation of a sustainable future. This article will discuss the significance of educating and engaging stakeholders, as well as providing examples of effective techniques for doing so. Why is it important to educate and engage stakeholders? Stakeholder education and engagement are critical for various reasons. For starters, it can raise awareness of sustainability issues and encourage the adoption of more environmentally friendly practices. Stakeholders are more likely to take action to lessen their environmental footprint if they are educated about the advantages of sustainability and the negative consequences of unsustainable activities. Second, through educating and involving stakeholders, more effective environmental rules and regulations can be developed. Policymakers can guarantee that policies are guided by the perspectives and needs of individuals who will be affected by them by incorporating stakeholders in the decision-making process. This has the potential to result in more effective policies that are better customized to the demands of local communities and companies. Finally, educating and involving stakeholders can help to foster innovation and the creation of new sustainable technologies and practices. Businesses may ensure that they are serving the needs of consumers and are more likely to be successful in the long run by incorporating stakeholders in the growth of new technologies and practices (Phiri and Chen, 2013).

There are several successful methods for educating and engaging stakeholders. Public education initiatives are one example. These campaigns can employ a range of media, including billboards, social media, and television commercials, to raise awareness of sustainability issues and promote more environmentally friendly practices. Community engagement programs are another excellent strategy. These programs include local communities in decision-making and allow them to provide feedback and influence environmental policies and projects. This can aid in the development of trust and collaboration between local people and governments. Businesses can also engage stakeholders by creating sustainability reports and disclosing facts regarding their environmental impact. This can help to establish customer and investor trust while also demonstrating a commitment to sustainability (Brown, Bolton et al, 2022).

Finally, educational institutions and universities may play a vital role in educating and engaging stakeholders. They can help to improve awareness of sustainability challenges and promote the embrace of more

sustainable practices by including sustainability in the curriculum and giving chances to students to participate in sustainability activities (Ali, Rattanawiboonsom et al, 2019).

So, Figure 1 develops some practical important steps toward the implementation of a circular economy nowadays.

Figure 1 – Important steps to implement a circular economy

II.GREEN ECONOMY PRINCIPLES

A green economy is an economic system that stresses sustainability and environmental protection. It is an alternative to the old economic model, which is based on unsustainable resource use and the generation of waste and pollution. Economic growth in a green economy is achieved in a way that promotes social and environmental well-being. A green economy is based on several basic elements. First, it encourages sustainable production and consumption, which involves using resources in a way that reduces waste and contamination while ensuring their availability for future generations. Second, it incorporates environmental and social concerns into economic decision-making, which implies that the economic impact of actions is evaluated their environmental and social impact. Third, it recognizes and incorporates the value of natural resources and ecosystem services into economic systems (Serbanescu, Puie et al, 2021).

The emergence of new economic opportunities is one of the primary benefits of a green economy. A green economy can create new sectors and jobs by fostering sustainable development in areas like renewable energy, sustainable agriculture, and eco-tourism. It can also help to lower the economic consequences of environmental degradation, like pollution and climate change. Another advantage of a green economy is the preservation of natural resources and the protection of the environment. A green economy can lessen the negative effects of economic activity on the environment, like deforestation, habitat destruction, and water pollution, by prioritizing sustainability and the conservation of natural resources (Ferreira, Lopes et al, 2023).

However, the shift to a green economy is not without difficulties. Significant modifications to existing economic systems are required, such as the adoption of new technology and practices, as well as the formulation of new policies and regulations. It also necessitates collaboration among several sectors of society, notably government, industry, and civil society. Despite these obstacles, many governments and organizations are pursuing a green economy. The United Nations has highlighted the green economy as a critical method for attaining sustainable development, and many nations have adopted national green economy goals and policies.

The commercial sector is also becoming more aware of the advantages of a green economy and implementing sustainability into its company's practices (Maran and Nedelea, 2017).

Some necessary steps for the practical implementation of the green economy are listed in Figure 2.

Figure 2 – Approaches regarding applied green economy

III.CIRCULAR ECONOMY VERSUS GREEN ECONOMY

As the globe faces rising environmental challenges, the concepts of circular economy and green economy have become increasingly significant. These two ideas are similar, yet they are not the same. In this post, we will look at the notions of circular economy and green economy, as well as the benefits of both. A circular economy is an economic concept that promotes resource reuse and eliminates waste. It is founded on the concepts of reducing waste and pollution, reusing products and materials, and renewing natural systems. A circular economy keeps resources in use for as long as possible while minimizing waste through reuse, recycling, and regeneration. A circular economy has many advantages, including reduced waste and pollution, the promotion of sustainable production and consumption, as well as the development of new economic opportunities. A circular economy can reduce dependency on virgin materials and the environmental effect of production by encouraging resource reuse. It has the potential to generate new economic opportunities in sectors like recycling, repair, and remanufacturing (D'Amato, Droste et al, 2017).

A green economy is an economic paradigm that promotes long-term development while reducing environmental harm. It is founded on the ideals of incorporating environmental and social concerns into economic decision-making, fostering sustainable production and consumption, and safeguarding natural ecosystems. Economic growth in a green economy is achieved in a way that encourages social and environmental well-being. A green economy has many advantages, including the promotion of sustainable development, a decrease in environmental deterioration, and the emergence of new economic opportunities. A green economy could encourage sustainable development and lessen the negative effects of economic activity on the environment and society by incorporating environmental and social issues into economic decision-making. It has the potential to generate new economic opportunities in fields like renewable energy, sustainable agriculture, and eco-tourism (Surmanidze, 2019; Rathnaswamy, Rathnaswamy et al, 2022).

IV. CONCLUSION

Putting in place a circular economy is a critical step toward attaining sustainable development and decreasing environmental damage. It necessitates a fundamental transformation in how we think about and create items, as well as how we consume and discard them. This may be accomplished through the design of circular goods, the promotion of resource efficiency, the building of recycling infrastructure, cooperation, and partnerships, as well as education and awareness. We can build an enabling environment for circularity and advance toward a healthier and equitable future by working together.

Implementing a green economy necessitates a multifaceted and collaborative strategy including governments, enterprises, and individuals. It necessitates investments in renewable energy, energy efficiency promotion, the development of sustainable agriculture, investments in green infrastructure, and the promotion of sustainable consumption. We can establish a healthy and resilient economy that combines economic growth with environmental conservation and social inclusion only by working together.

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