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Abstract: The linear economy of today's society conflicts with many environmental, social, and economic challenges. As a result, policymakers and researchers prioritize the implementation of the circular economy concept. The European Union supports a smooth transition to a circular economy through the Circular Economy Strategy, the European Green Deal (carbon neutrality by 2050), and the United Nations' Sustainable Development Goals (SDGs). Replacing traditional business models with circular business models necessitates a shift in technology features that incorporate R strategies (refuse, reduce, recycle, etc.). This study looks into how globalization dynamics affect the transition to a circular economy, as well as the implications for growth and development. Albania, as a transitioning economy in Southeast Europe, provides an important backdrop for understanding the problems and opportunities given by globalization when embracing circular economic principles.

Keywords: circular economy, waste management, innovation, globalization.

### **INTRODUCTION**

Adequate waste management has been in the spotlight for the last decade, as recent media attention highlights the tragic impacts caused by anthropogenic activity on the environment. Due to industrial and economic activities as well as the ever-rising population growth worldwide, the amount of waste accumulated rises in all classifications: domestic, industrial, municipal, agricultural, commercial, *etc.* (Okedu et al., 2022). In this sense, the Circular Economy concept has gained increasing momentum in urban and business settings, while the public, policymakers, and members of the scientific community have given the Circular Economy considerable attention. The Circular Economy concept constitutes a system that tackles global challenges (*i.e.*, climate change, waste, pollution, *etc.*) and is based on three main principles: (i) elimination of waste and pollution, (ii) circulation of products and materials in their highest value form; and (iii) regeneration of the natural environment. The main goal is to decouple economic activities from consumption patterns of limited resources. A circular Economy constitutes a resilient system striving to leave nobody behind (Ellen MacArthur Foundation, 2017). However, policymakers can either facilitate or constrict the process by enacting a regulative climate, increasing their authority and proper implementation of their

policies, as well as boosting entrepreneurship (Kruja, 2020b; Ahmeti & Kruja, 2021; Maione et al., 2021).

### 1.1 Circular Economy in the Focus of the European Union

In the context of developing a modernized and sustainable economy, in December 2015, the EU Commission introduced the Circular Economy Package, which defines the economy as 'where the value of products, materials, and resources is maintained in the economy for as long as possible, and the generation of waste is minimized. Because resource extraction and processing account for half of total greenhouse gas emissions as well as more than 90% of biodiversity loss and water stress, the European Green Deal1 started a coordinated approach for a climate-neutral, resource-efficient, and competitive economy. Scaling up the circular economy from early adopters to mainstream economic participants would make a significant contribution to attaining climate neutrality by 2050 and decoupling economic growth from resource use, while also maintaining the EU's long-term competitiveness and leaving no one behind.

### **1.2 Circular Economy in Albania**

Regarding the situation in Albania, the circular economy concept is still in its early stages. Therefore, firms may play a significant role in driving the transition to sustainability through their participation in the circular economy (Heras-Saizarbitoria et al., 2023, Marshall et al., 2023, Ting et al., 2023). The circular economy concept was introduced in the draft Integrated Waste Management Strategy (2018-2024) which was produced in January 2018. The revised Integrated Waste Management Strategy focuses on the concept of "zero waste," treating waste as raw materials and managing it through circulatory systems to preserve raw material resources. In the Strategy Policy Paper and Integrated National Waste Management Plan 2020-2035(The document of Strategic Politics and National Integrated Waste Management Plan 2020-2035) published by GIZ in collaboration with the Ministry of Tourism and Environment, the main aim, mentioned the very beginning of the document is the transition from a linear economy to a circular economy. This document develops on the vision or perception of the "zero waste" concept, that waste is collected and treated as raw material and management is to be done by the concept of circular economy systems, to benefit the standardized use and preservation of raw material resources. The specific objectives of the Strategic Policy Paper aim to provide practical solutions to:

- Address issues in the current management system
- Implement the legal framework in force

Make the necessary preparations to meet the obligations arising from the amendments stipulated in EU Directives, including the ambitious objectives of the Circular Economy Package.

### Methodology

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The present study is a result of a thorough analysis of the existing literature. Therefore, the methodology used is a literature review. It is a type of academic writing, which helps in understanding a subject in detail. In this article, the sources of information were collected through a search engine named Google Scholar by searching the following keywords: Circular economy, waste management in Albania, x. The data are mainly extracted from local municipalities and the National Environment Agency and Institut of Statistics in Albania and also the Co-plan Report 2020 by the European Commission about Albania.

### Results

Accurate and easily accessible data is necessary to assess the growth of the country's circular economy, particularly in key sectors. The evaluation of the current status of circular economy components in Albania is based upon the structure of the Monitoring framework and indicators put forward by the EU.

#### **Production and consumption**

Albania has had limited success in reducing waste output through circular economy manufacturing and consumption trends. When you expand this phase, the four indicators described in The monitoring framework will be discussed more below (QAK, 2020).

According to data from the Institute of Statistics, the flow of goods increased by 1.2% to 25 billion ALL in September 2020, compared to the same month the previous year. In 2019, the flow of products decreased.

Approximately 4% higher than in 2018. However, imports have consistently climbed by 19% between 2015 and 2019.29 Imports increased by 0.3% compared to the same time last year. During the first nine months of 2020, exports declined by 13.6% and imports by 10.9% compared to the previous year (INSTAT, 2020).

According to 2019 statistics from the Institute of Statistics, there were about 1.2mil. ton of urban waste generated, where the dominant constituent is organic waste which counts for about 58.4% of total waste. The rest is a mixture of wood, paper/paperboard, glass plastics, textiles, metals, etc. listed in descending order. The major waste generators include the oil industry, cement production, steel and mining, and households. (Ibid)

Food production generates waste throughout the manufacturing and delivery process. The majority of food waste comes from home cooking, restaurants, catering, and retail establishments. Food waste occurs when manufacturing resources, such as water, energy, and limited environmental resources, are wasted. Food waste undermines the circular economy concepts. Managing food waste properly is challenging due to a lack of data and variable waste generation sources. This would assist both societal budgets and the environment. (European Parliament, 2021).

### Waste management

Sustainable waste management in Albania remains at a relatively low level, with urban waste management services only covering about 87.9% of the resident population, residing

mainly in urban areas (referring to INSTAT in 2019), marking an increase of 22.2% compared to the previous year. The National Territory Council approved the National Plan for Solid Waste Management33 on January 1, 2020. The strategy aims to provide sustainable Solid garbage Management services across the country, including minimizing and recycling garbage, reducing uncontrolled and unsanitary deposits/landfills, and protecting the environment. The current strategy aims to standardize national waste management guidelines to align with EU legal frameworks, similar to the previous one (Qarkonomi, 2020). The approach aims to preserve both the environment and human health and can promote sustainable waste management by implementing policies, financing efficient practices, separating waste streams at the source, and encouraging businesses to recycle and reduce waste output. (World Bank, 2019) Albania lacks the necessary infrastructure to manage waste in an environmentally acceptable manner, including decreasing, reusing, collecting waste separately, and recycling, which are the most ecological activities according to the waste hierarchy pyramid. With linear Economy being our current economy model, every product we buy and consume, for instance, smartphones, is mostly purchased with the sole purpose of replacing old ones. The latter gets disposed of and creates waste, resulting in larger issues for a planet with finite resources (Taylor, 2020).

### Secondary raw materials

The usage of secondary raw materials accounts for a low or insignificant number of materials used for making new products, considering that the amount of recycled and reused wastes constitutes a small portion of the total waste volume.

*Metals*: Scrap metal recycling is prevalent in Albania. Steel, aluminum, copper, and other metals are collected, processed, and reused in various industries.

*Plastics*: Plastic recycling efforts have been increasing in Albania to mitigate environmental pollution. PET bottles, HDPE containers, and other types of plastics are collected and recycled into new products or materials.

*Paper and Cardboard*: Recycling paper and cardboard is another significant aspect of waste management in Albania. These materials are collected from households, businesses, and industries, processed, and reused to produce new paper products.

*Glass*: Glass recycling programs exist in Albania, focusing on collecting glass bottles and containers. Recycled glass is melted down and used to manufacture new glass products.

*Organic Waste*: Organic waste, such as food scraps and yard waste, is often composted to produce organic fertilizers or biogas for energy generation.

*Textiles*: Textile recycling initiatives are emerging in Albania to address textile waste from clothing and other textile products. Used textiles are collected, sorted, and either recycled into new fabrics or repurposed for various applications.

*Electronics*: E-waste recycling programs aim to collect and properly dispose of old and obsolete electronic devices, such as computers, smartphones, and appliances. Valuable materials like metals and plastics are extracted for reuse, while hazardous components are disposed of safely.

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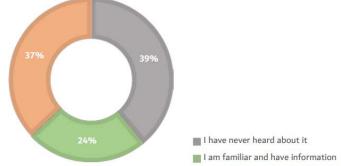
Efforts to improve recycling infrastructure and promote sustainable practices are ongoing in Albania, driven by both government initiatives and private sector involvement.

### **Competitiveness and innovation**

Albania is at an early stage of ensuring competitiveness and innovation, as seen by its numerous circular economy initiatives. Albania has been gradually enhancing its competitiveness and fostering innovation in recent years. Efforts include improving infrastructure, investing in education and skills development, and promoting entrepreneurship. Initiatives like the National Strategy for Development and Integration aim to strengthen the business environment and attract foreign investment. Additionally, the government has been focusing on digitization and promoting research and development to spur innovation across various sectors. However, challenges such as bureaucracy and limited access to finance still need to be addressed to further stimulate competitiveness and innovation in Albania. Advance sustainable practices for all parts of the circular economy. The Institute of Statistics collects data on creative contributions from small and medium-sized businesses in technology, telecommunications, and optical, electronic, and computer device manufacturing.

The Centre for Competitive Skills in Albania conducted a quantitative study on Circular Economy Awareness and Sensitivity among the general public and businesses. (Qarkonomi 2020). Questionnaires were distributed to the public and businesses to assess their familiarity with the term "circular economy."

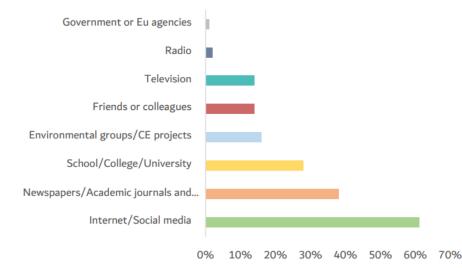




\*Source: Study Report on Circular Economy Awareness & Sensitivity among General Public and Businesses (2020)

Based on the Study Report on Circular Economy in Figure 1 about Public Awareness & Sensitivity 24% of the population are familiar with Circular Economy and have information, 37% are familiar and do not have any information and 39% have never heard about it.

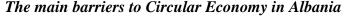
# Figure 2 Business Awareness on Circular Economy in Albania

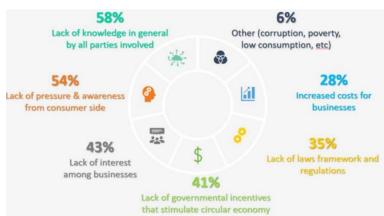


\*Source: Study Report on Circular Economy Awareness & Sensitivity among General Public and Businesses (2020)

The data in Figure 2 represent that Online marketing, especially social media, is the main source of information among Albanians about the Circulating Economy, a finding which is consistent with the general information behavior of the country in recent years. Traditional media such as TV and Radio, have little role in this matter due to their low concentration in sustainability and chronicles of international development, and high concentration in the news local and daily. The audience complains about the lack of documentaries about science, technology, and new economic trends on Albanian television platforms. Newspapers, magazines, and academic publications are an important source of information for 37% of those familiar with the circular economy, followed by the educational system and groups of the environment.

### Figure 3





\*Source: Study Report on Circular Economy Awareness & Sensitivity among General Public and Businesses (2020)

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Figure 3 above summarizes the perceptions of citizens and entities on the main barriers of circular economy implementation in Albanian to be lack of knowledge in general by all parties involved (58%); lack of pressure and awareness from the consumer side (54%); lack of interest among businesses (43%); lack of government incentives (41%); lack of laws framework and regulations (35%); increased costs for businesses (28%); corruption, poverty, low consumption (6%). Improving the circular economy in Albania involves a multi-faceted approach that addresses various sectors and stakeholders. Here are some strategies to enhance the circular economy in Albania:

*Policy Framework Enhancement*: Strengthening policy frameworks to support circular economy principles is crucial. This includes implementing regulations and incentives to promote waste reduction, recycling, and sustainable production practices. Additionally, integrating circular economy principles into national development plans and strategies can provide a cohesive roadmap for sustainable growth.

*Investment in Infrastructure*: Investing in infrastructure for waste management, recycling facilities, and renewable energy is critical. Building a strong infrastructure network will make it easier to gather, classify, and process resources, increasing resource efficiency and lowering environmental impact.

*Promotion of Innovation and Technology*: Encouraging innovation and technology adoption can boost efficiency and sustainability across a variety of industries. Supporting research and development projects for eco-friendly materials, waste-to-energy technology, and circular business models can boost economic growth while reducing environmental impact.

*Capacity Building and Education*: Providing training and educational programs on circular economy ideas can increase awareness and capacity among enterprises, government organizations, and the general public. Workshops, seminars, and vocational training can all help to promote sustainable practices and develop a culture of resource conservation.

*Encouragement of Circular Business Models*: Encouraging enterprises to use circular business models such as product-as-a-service, remanufacturing, and sharing platforms can help to improve resource efficiency and reduce waste generation. Incentives, tax benefits, and financial support for companies that embrace circularity can help to drive adoption.

*Public-Private Partnerships (PPPs):* Encourage collaboration among the government, private sector, and civil society organizations to drive circular economy initiatives. PPPs can use their resources, skills, and networks to create novel solutions and expand successful interventions.

*Consumer Awareness and Behavior Change:* It is critical to educate customers about the benefits of circular economy practices and encourage them to adopt sustainable purchasing habits. Public awareness efforts, eco-labeling schemes, and green procurement rules can help customers make educated decisions and support firms that are committed to sustainability.

Integration with Regional and Global Initiatives: Aligning Albania's circular economy goal with regional and global initiatives has the potential to improve cooperation, information exchange, and resource sharing. Participating in circular economy-focused international forums, collaborations, and networks can help you gain access to best practices, funding

possibilities, and technical assistance. By implementing these strategies in a coordinated manner, Albania can advance its transition towards a circular economy, fostering sustainable growth, environmental protection, and social well-being.

### CONCLUSIONS

The need to implement and promote sustainable economic activity in the global market is increasing limited resources. The primary purpose of this research was to better understand what the Circular Economy is and how it benefits the Albanian market. CE attempts to preserve raw materials and keep them at their best value while minimizing pollution, which includes gas emissions, energy leakage, and water contamination. Circular Economy's business model is concerned with the sustainability of the environment. CE is not very common in Albanian business. The lack of local government to push the implementation of the circular economy business model is discouraging, however, it is willingness and determination to implement green behavior from companies in Albania and the said business model is only beginning to develop. The circular economy can address the problems of waste pollution and the depletion of raw materials from an environmental perspective. In terms of business, the circular economy may be very advantageous and opportune for enterprises; it can help with brand extension and new market expansion.

Improving the circular economy in Albania necessitates a multifaceted strategy combining governmental policy initiatives, private sector engagement, public awareness campaigns, and collaborative efforts among stakeholders. Key measures include the development and implementation of comprehensive policies promoting recycling, waste reduction, and sustainable production methods, alongside the establishment of Extended Producer Responsibility (EPR) programs. Investment in recycling and waste management infrastructure, coupled with the promotion of green technologies, will be crucial.

Additionally, raising public awareness through education campaigns and integrating circular economy concepts into educational curricula are essential steps. Supporting circular businesses with financial incentives and fostering collaboration among various sectors will further accelerate progress. Monitoring progress and adapting strategies based on evaluation findings are vital for sustained success in transitioning Albania toward a more circular economy. The linear model of consumption and production predominates, leading to resource depletion, environmental pollution, and landfill overflow. However, there is growing recognition among policymakers, businesses, and civil society of the need to transition towards a circular economy model. Efforts are underway to improve waste management practices, promote recycling initiatives, and encourage the adoption of sustainable production methods. Despite challenges such as limited financial resources and institutional capacity, there is a burgeoning interest in circular economy principles, driven by the potential for job creation, resource efficiency, and environmental preservation. As Albania endeavors to align with European Union sustainability goals and enhance its competitiveness on the global stage, the promotion of circular economy practices is becoming increasingly integral to its development agenda.

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