



Circular economy toward a sustainable concept in the wood processing sector in Albania

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Abstract

Economic circulation is a concept that is closely aligning with sustainability. For this reason, various stakeholders strive to collaborate in defining basic concepts, analyzing key issues, and directing solutions to these problems. In this study, we have attempted to address the challenges of the wood processing sector in Albania concerning the increase in the use of wooden products and the potential export of these products. During the last years, the concept of the circular economy has taken an important role in the literature, as well as in the production sector all over the world. Saying this, in Albania we are facing the same problem. The concept of the circular economy in our country was introduced lately. The companies that operate in the wood processing sector must step forward from a linear economy to a circular one as soon as possible. This material presents some information collected based on interviews conducted with some of the wood processing companies in Albania. For this study we prepared a closed answer questionnaire in order to have a simple analysis of the results gathered. As a result of this interview, skills and competencies supporting the transformation to circular business models were presented. The companies need some innovative design idea for the reuse of their basic products.

Introduction

The concept of CE is a new concept but if we speak about applying CE and sustainability in the wood industry it is even newer. A circular economy (CE) is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products for as long as possible (Iacovidu et al, 2021). The concept of the circular economy in Albania, was previously used in the draft of the National Integrated Waste Management Strategy (2018-2023). The main goal of the document is to introduce this concept to the interested parties with the transition needs and requirements to move from a linear economy toward a circular one [1].

Material and Methods

This research began with the need to identify strategies related to CE that could stimulate wood processing in companies. First of all, we decided to select some of the biggest companies that operates in the wood industry all over the country. Some of them are already part of the WICA (Wood Industry Cluster of Albania). It is worth mentioning the fact that we have a very good institutional relationship with WICA, which is also expressed in various collaborations and different projects with our Slovenian partners too. Saying that, for us it has been quite easy to identify major actors of the market and the also to gather the full information we need for this study [2].

After the identification and setting up meeting schedule, we had a face-to-face interview with each one of them to adapt and to identify all their efforts to go from a linear economic production into the circular economy.

The study aims to increase the recognition of opportunities in the wood processing industry as a phenomenon and watching these opportunities under the circular economy optics. The interviews were semi-structured with categorized thematic topics, which were entrepreneurship, business opportunity, CE and business idea. The topics and questions were structured and formulated all by the authors [3-5].

Results and Discussions

After the analysis of all the interviewed entrepreneurs the result obtained was that the market for production of recycled wood production was not ready and unsatisfied. These companies are not focused on this process but they are willing to go further this process if they have some inputs from the government or even the help of the WICA (which is a new entity by still is operational in supporting the wood industry sector) [6-8].

Conclusion

Looking at the development of the activity of the wood industry also in terms of climate change, we must say that we still have a lot of work to do.

Some measures, such as extending the life of products, reusing them, recycling them and using them for energy production are known in the industry practice. Other activities like waste management, needs further promotion and creating some facilities for the companies.

Most important, a systemic change of mindsets and an integrated management of all process (which is not so easy to achieve) and activities by which companies add value to their construction materials and services along value chains are needed. This implies a new perspective on processes of furniture production redefining relations among different value chains' actors, from concept through completion to demolition and recovery of materials.

They need some qualified and specialized people in their structure with ideas on reusing the wood material and for sure a big step in innovation of the machineries. Nowadays we are hearing for some successful implementations of Industry 4.0 examples in our country. Industry 4.0 can be defined as the integration of intelligent digital technologies into manufacturing and industrial processes. It encompasses a set of technologies that include industrial IoT networks, AI, Big Data, robotics, and automation. It should be emphasized that the transition to a circular economy also requires continuous staff training, which still presents some challenges for our companies [9].

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