

Chapter 16

Circular Economy as a New Sustainable Development Paradigm: Some Open Questions and Issues

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ABSTRACT

This chapter examines the role and importance of the circular economy for achieving the goals of sustainable development. Accordingly, the direct and indirect impact of circular economy practices on the realization of the goals of sustainable development according to Agenda 2030 was analyzed. In particular, this chapter focuses on the relationship of the concept of circular economy and the Sustainable Development Goals defined in Agenda 2030 using the example of the Republic of Serbia. The key research findings in this chapter confirm the initial research question and provide the answers to the raised questions and issues. The recommendation is that the activities of the competent state authorities in the Republic of Serbia should be directed towards eliminating the information gap, strengthening institutional capacities, and creating strategic documents. This is a necessary prerequisite to enable a quantitative analysis of the verification of the results achieved in this area in the Republic of Serbia and to make comparisons with the best performing countries.

INTRODUCTION

Increasing global environmental problems, such as water, air, and soil pollution, loss of biodiversity, unprecedented natural resources depletion, and inefficient land use, are undermining the basic living conditions and setting limits on growth and development. In response to the global challenges of the 21st

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century, the circular economy has emerged as the only possible alternative to the current unsustainable linear business model. The circular economy is a new business model that shifts wealth and prosperity from the current means of consumption to a system that is continuous and long-lasting. It emphasizes the importance of abandoning the current economic practice of “take-make-dispose” model by reducing, reusing, and recycling products and materials in production, distribution, and consumption.

The whole circular system works in a way such that resources are not consumed but recovered in a system that is continuous and long-lasting, with the goal of keeping them functioning at their highest potential. Instead of destroying value after the use phase, value is retained through cycles of reusing, repairing, remanufacturing, or recycling. The circular economy is also an instrument for achieving the goals of sustainable development and it involves long-term investment in raw materials and energy efficiency, reduction of pollutant emissions, use of renewable energy sources, and implementation of sustainable production and trade models, thus closing the circle “product-waste-product”.

The concept of circular economy has attracted the attention of the scientific and professional public due to the increasingly accepted belief, identified in the development literature, that availability of natural resources and their efficient use are a factor in improving the development performance of any national economy. Economic policy makers around the world accept this concept as the basis for conducting economic policy and a prerequisite without which development would take place at the expense of environmental degradation. However, the transition from a linear to a circular economic model is no easy task. Radical change of current unsustainable models of production and consumption with the application of modern information and communication technology is only achievable with significant impacts on the economy, society, and the environment.

Bearing in mind the previously defined subject of research, the aim of this chapter is to contribute to a clearer understanding of its importance for achieving sustainable development, on the basis of a comprehensive analysis of the characteristics of the concept of circular economy. The main research question in the chapter is whether the concept of circular economy is an important instrument for achieving sustainable development goals and vice versa – whether the realization of sustainable development goals contributes to an efficient transition to a circular business model. The examination of the basic research question was performed using a combined system of several basic scientific methods, namely analysis, synthesis, abstraction, concretization, and generalization. The research was conducted by reviewing the available literature from 1990 to the present, i.e., using a set of relevant research on the topic of circular economy, which is available through Google search engines, Eurostat, and relevant databases from the Serbian-speaking area.

The chapter is structured as follows. After providing a brief background on the studied phenomenon, the third section of the chapter discusses the basic issues of the concept of circular economy with an emphasis on its conceptual definition and measurement methodology at the level of the European Union. The fourth section of the chapter provides a clearer insight into the importance of the concept of circular economy for achieving sustainable development, with special emphasis on progress in the implementation of this concept in the Republic of Serbia. Concluding remarks form the last section of the chapter, in which the research findings are synthesized and guidelines for future research are provided.

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