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CIRCULAR ECONOMY AS A DETERMINANT OF STRATEGIC MANAGEMENT

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Abstract
The article is devoted to the problem of the circular economy, which as a result of strategic management ensures social sustainable development due to the observance of the principles of the circular economy. The purpose of the study is to substantiate the principles of the circular economy as determinants of strategic management to ensure social development. The relevance of the application of determinism, as one of the main explanatory principles of scientific knowledge of the complex process represented by the circular economy, has been proven as a methodological basis of the research. Highlighting the principles of the circular economy made it possible to propose directions for the direction of strategic management efforts in accordance with the determinism of the circular economy. The outlined directions of strategic management are of practical importance, as proven by the experience of various countries of the world that are developing in the direction of observing the principles of the circular economy.

Keywords: *circular economy, sustainable development, strategic management, determinants of development, green economy, environmental safety, social development.*

JEL Codes*: M11, E32.*

Introduction

Today's social challenges increasingly emphasize the observance of the paradigm of sustainable development, in which attention is paid simultaneously to socio-economic and environmental problems. Accordingly, in order to reduce the burden on the environment, the introduction of the circular economy is timely, since the introduction of secondary processing contributes to the greening of production, socio-economic development and the increase of public welfare in general. The above determines the study of the circular economy as determinants of strategic management.

The purpose of the study is to substantiate the principles of the circular economy as determinants of strategic management to ensure social development. Achieving the set goal became possible due to the proposal and solution of the following tasks, which determine the logical structure of this research:

- substantiation of the relevance and timeliness of the research on the principles of the circular economy as determinants of strategic management;
- proof of determinism as a methodological basis of research, as one of the main explanatory principles of scientific knowledge of a complex process, a phenomenon which is represented by the circular economy and, thanks to the strategic management of the achievement of its principles, ensures social development;
- the multifacetedness of the circular economy is highlighted, which is simultaneously considered as a component of the strategy of sustainable development, an independent paradigm for the direction of economic development, a complex multi-level system, a global economic model, a strategy and a regenerative model;
- the course of development of the circular economy and changes in the principles of the circular economy formation are highlighted;
- strategic management directions are proposed in accordance with the determinism of the circular economy and its principles;
- the practical significance of the circular economy as a determinant of strategic management is highlighted using the example of some countries of the world;
- the conducted research and the achievement of the outlined tasks made it possible to substantiate the scientific novelty of the principles of the circular economy as determinants of strategic management.

Literature review

Many scientific publications of domestic and foreign scientists are devoted to the implementation of the concept of sustainable development (Popelo O. et al., 2023; Marhasova V. et al., 2023, Khrushch N. et al., 2022) and various aspects of the development of the circular economy (Sonar Harshad et al., 2022; Gruba Marcia Cristiane et al., 2022; Takacs Fabian et al., 2022; Chedrak Chembess et al., 2021; Tonelli Marcello et al., 2018; Barrie Jack et al., 2017; Wei Jinping, 2013). Also, issues of strategic management of economic systems of various levels (Lafioune Nawel et al., 2023; Ivanova N. et al., 2022; Tulchynska S. et al., 2021) are becoming extremely relevant.

Within the framework of the study (Sonar Harshad et al.,2022), the authors assessed and provided a concise understanding of the barriers to sustainable development in the automotive supply chain. The authors (Gruba Marcia Cristiane et al., 2022) analyzed the strategic consequences of circular economy initiatives, as well as their role in the co-evolution of the socio-technical system.

Scientists (Takacs Fabian et al., 2022) are convinced that the circular economy limits the consumption of primary resources, promotes cleaner production and promotes efficient use of resources. Article (Chedrak Chembess et al., 2021) examines the state policy mechanisms involved in the development of the cyclical economy.

The research paper (Tonelli Marcello et al., 2018) argues that strategic management and the circular economy aims to bridge the gap between theory and practice by offering a detailed step-by-step process of analyzing, formulating and planning circular economy strategies. The authors (Barrie Jack et al., 2017) declared the transition to a circular economy as a vision for overcoming the challenges of rapid population growth, economic stagnation, and environmental degradation. It is proved (Wei Jinping, 2013) that the circular economy has become an important economic form with the concept of sustainable development, plays a significant role in the field of strategic management of the enterprise, especially in the conditions of the market economy. Research paper (Gomes N.P. et al., 2024) aims to explore various possible connections between trend studies and cultural analysis for strategy within strategic management.

As a conclusion, it can be stated that the analysis of existing research once again confirms the relevance of the chosen topic of the articlesafety.

Methodical approach

The COVID-19 pandemic proved that development is inherent in any system, but it occurs under the influence of a large number of factors that can stimulate or restrain development, preventing the activation of transformational and modernization processes and the birth of progressive changes in the development of the system. To ensure the development of systems of

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various levels, it is necessary to involve strategic management, which includes directing efforts to the determining factors of development. That is why the study of the circular economy requires the use of determinism as one of the main explanatory principles of scientific knowledge of the complex process, the phenomenon of which the circular economy stands for.

Determinism makes it possible to study the circular economy as a certain phenomenon of economic development based on the patterns of interaction available to empirical control and accounting for development factors. The determination of the circular economy includes causality as a set of circumstances that precede and cause an effect. Such an objective relationship can explain the interconnectedness of the phenomena of the material and immaterial world, economic, social and ecological development.

Determinism makes it possible to consider the circular economy as a single economic environment acting as a factor of historical social development. The laws of economic development act as universal laws for all social forms. The determinism of the development of the circular economy depends on the development of scientific and technical progress, at the same time, such influence is dual. This makes it possible to note that the use of the determinism methodology in relation to the circular economy involves proving that certain processes and events, are interdependent, that is, they depend on the influence of certain factors and causes.

Directing the efforts of strategic management on the determinants of the development of economic systems contribute to the acceleration of the pace of development and ensure the progressive nature of changes. The circular economy as a determinant of social development determines the course of processes and phenomena that cause them under the influence of strategic management.

Results

The development of the circular economy dates back to the 80s of the last century, when the concept of "green growth" and environmental sustainability of industrial production were introduced. Since the 1990s, more and more attention has been paid to the issue of environmental sustainability, which became the basis for the introduction of the concept of the closed cycle economy. Since the 2000s, there has been a transformation of the principles of green growth in accordance with the goals announced in the UN Millennium Declaration for 2000-2015. These initiatives are increasingly popularizing aspects related to the formation of a global green economy, the careful use of limited resources, the use of renewable energy sources, preservation of the environment, achievement of sustainable development goals, etc.

The circular economy is multifaceted, so it can be considered as (Fig. 1):

- a component of the sustainable development strategy aimed at increasing the efficiency and duration of product use and reducing waste;
- an independent paradigm for directing the development of the economy to ensure a quality environment and social justice in the interests of future generations;
- a complex multi-level system, which involves the implementation of a closed cycle of material flows in the economic system, a circular trajectory of business models for the organization of product production, reuse, recycling and recovery of materials and products in production processes;
- a global economic model that emphasizes the focus on sustainable economic growth and development of the economy, and not on increasing the consumption of finite resources in order to meet the growing needs of society;
- a strategy aimed at reducing the scarcity of resources and reducing the level of environmental pollution, which is based on the principles of saving resources and materials for the production of products by closing the economic and ecological cycles of resource flows;
- the regenerative model, the philosophy of which is that the maximization of well-being and the efficiency of the functioning of the ecosystem is achieved due to the fact that the consumption of resources, emissions and leakages of energy are

reduced to a minimum due to the termination, slowing down, elimination, narrowing of material and energy cycles.

Today, on the Ukrainian market, the majority of production enterprises produce their products from primary raw materials, and those wastes that remain are subject to disposal. This situation is characteristic of most countries of the world. The area of landfills, the amount of chemically hazardous substances, including nuclear waste, is growing every year. Establishing a system of waste control and processing, reducing the negative impact on the environment determines the urgency of implementing the principles of circular economy. In general, the circular economy is considered as a social comprehensive systemic process of adoption and implementation of strategic decisions aimed at solving global and local problems related to climate change, ecosystem preservation, pollution control, etc. The fundamental principle of the circular economy is the reuse of waste and the secondary processing of products.

Strategic management in accordance with the principles of the circular economy involves the introduction of secondary processing of all goods, taking into account the value component to ensure the development of enterprises. As well as establishing an appropriate waste disposal system containing toxic and hazardous substances. However, the most important thing is the formation of the established consumer behavior of society and the perception of the principles of the circular economy, their necessity and finality.

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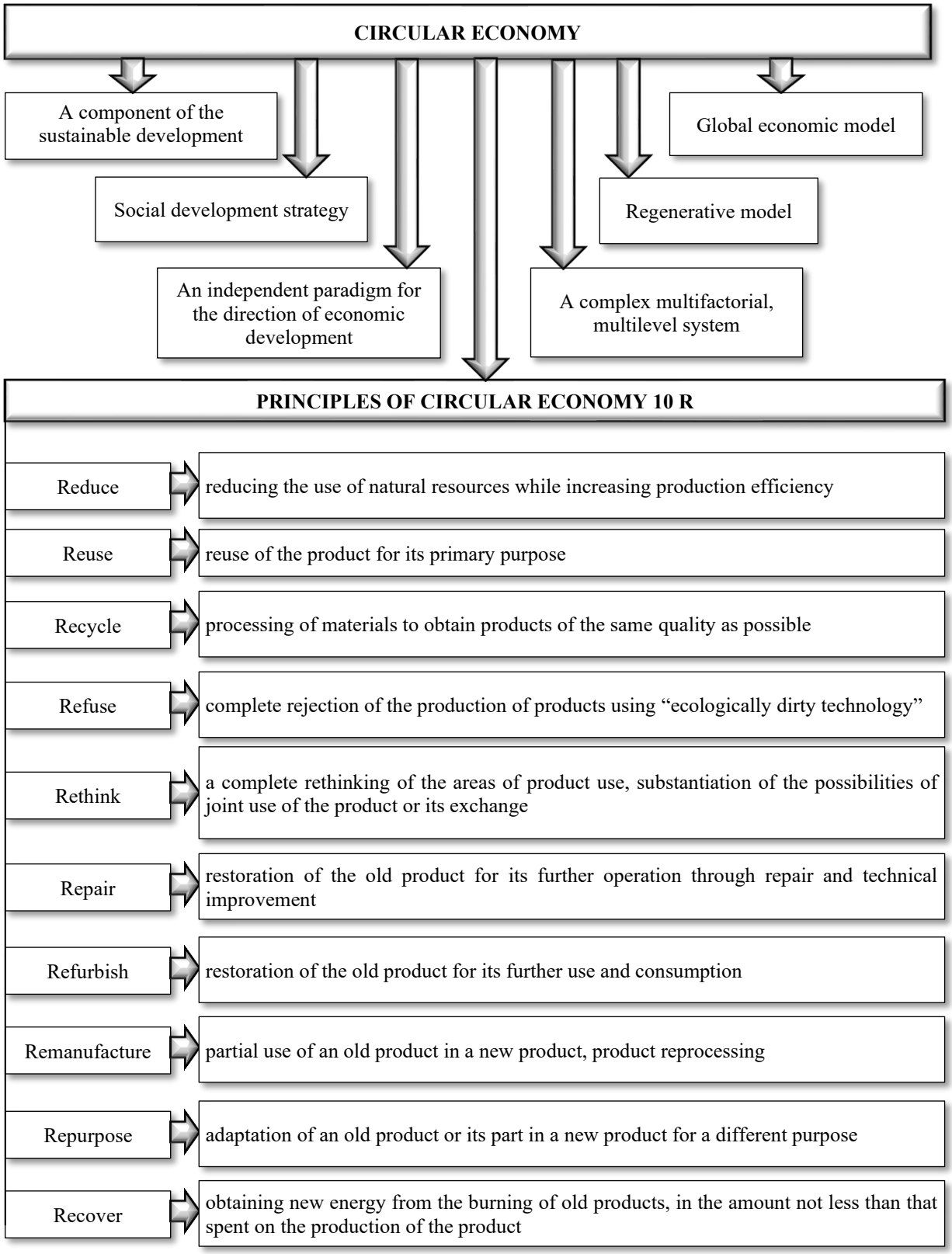

Figure 1. Principles of the circular economy

**Source: constructed by the authors.*

The circular economy paradigm was initially based on the 3 R principles, which included: Reduce, Reuse, Recycle. But in accordance with the resolutions adopted in 2018 at the World Economic Forum, the principles of the circular economy were expanded to the 10 R principles, including:

- *Reduce* - consists in reducing the use of natural resources, including non-renewable ones, with a simultaneous increase in production efficiency;
- *Reuse* - involves the reuse of the product for its main purpose;
- *Recycle* - expresses the philosophy of the circular economy regarding the processing of materials to obtain products of the same or lower quality if possible;
- *Refuse* - advocates complete rejection of the production of products using "ecologically dirty technology", this causes the need to replace the production technology with an environmentally safe one or reject the product;
- *Rethink* - involves a complete rethinking of the areas of product use, substantiation of the possibilities of joint use of the product or its exchange, which will ultimately make it possible to reduce its production and extend its useful life;
- *Repair* - refers to the restoration of an old product for its further operation and consumption through repair and technical improvement or repair;
- *Refurbish* - is based on restoring an old product for its further use and consumption;
- *Remanufacture* - involves the partial use of an old product in a new product, reprocessing of the product;
- *Repurpose* - refers to the adaptation of an old product or its part in a new product for a different purpose, i.e., reorientation of the use of the old product in a new area;
- *Recover* - involves obtaining new energy from the burning of old products.

The implementation of the principles of the circular economy will contribute to the sustainable development of the economies of the world, but this requires the governments of the countries to implement strategic management measures at all levels of economic systems.

Absence of waste, which is achieved due to the production of goods using high-quality materials that can ensure long-term reuse. This philosophy of the circular economy makes it possible to reduce labor costs and the use of electricity, which distinguishes the principle of the circular economy from the established process of recycling and disposal.

According to the principles of the circular economy, the raw materials used for the production of the product are not primary because the technical cycles make the products part of the process, which makes it possible to restore and use this product as a raw material for creating new products again and again. As a result of this circular value chain, the product and its life cycle maintain the highest value and quality for as long as possible, as well as reducing the consumption of raw materials and the accumulation of waste.

The distribution of biological and technical cycles in the processing of products is characteristic of the circular economy. Thus, biological cycles during product processing produce composting products, nucleation, which further participate in biological processes. Technical cycles using the concept of full use, repair, recycling and use of old parts in new products. Important in the circular economy is the use of energy from renewable sources to ensure the environmental friendliness of biological and technical circulation processes.

Using the philosophy of determinism, strategic management in accordance with the principles of the circular economy should be aimed at (Fig. 2):

- minimization of waste in all areas of life to ensure reduction of environmental pollution, this positively affects the quality of life of the population;
- improvement of the legislative framework in the field of waste management in the direction of increasing the responsibility of producers and consumers;
- improving the culture of citizens with household and industrial waste;
- stimulating and encouraging the creation of new, creative approaches to minimizing the negative human impact on the ecosystem;
- direction of scientific developments and implementation of the results of innovative activities in production aimed at increasing the environmental safety of chemical production, development of environmentally friendly

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technologies, technologies for processing household and industrial waste;

- improving the control system and ensuring proper disposal of waste;
- assistance in the reuse of waste as secondary raw materials and energy;
- introduction of motivational measures to prevent and reduce waste generation;
- storage of waste taking into account the prevention of potential dangerous consequences for the environment and human health;
- use of waste as secondary raw materials;
- improvement of logistics routes for household waste management at the level of various hierarchical economic systems;
- formation of the concept of responsibility of manufacturers in the development of products, their utilization and processing;
- activation of the development of energy-saving, regenerative and ecologically clean production;
- ensuring the spread of the use of electricity from renewable sources.

Such strategic management determines the determinants of the circular economy on the basis of concreteness, objective certainty and reality, which is directly related to the formation of the circular economy in practice. Thus, the basic determinants of the circular economy, which include economic, social and environmental factors, are complemented by determinants that include informational, technical-technological, knowledge, organizational, institutional and other factors that act as complementary determinants of the circular economy development.

Implementation of the principles of circular economy thanks to strategic management, which is based on deterministic factors of social, economic and ecological development, is an important step for the countries' development and preservation of the environment.

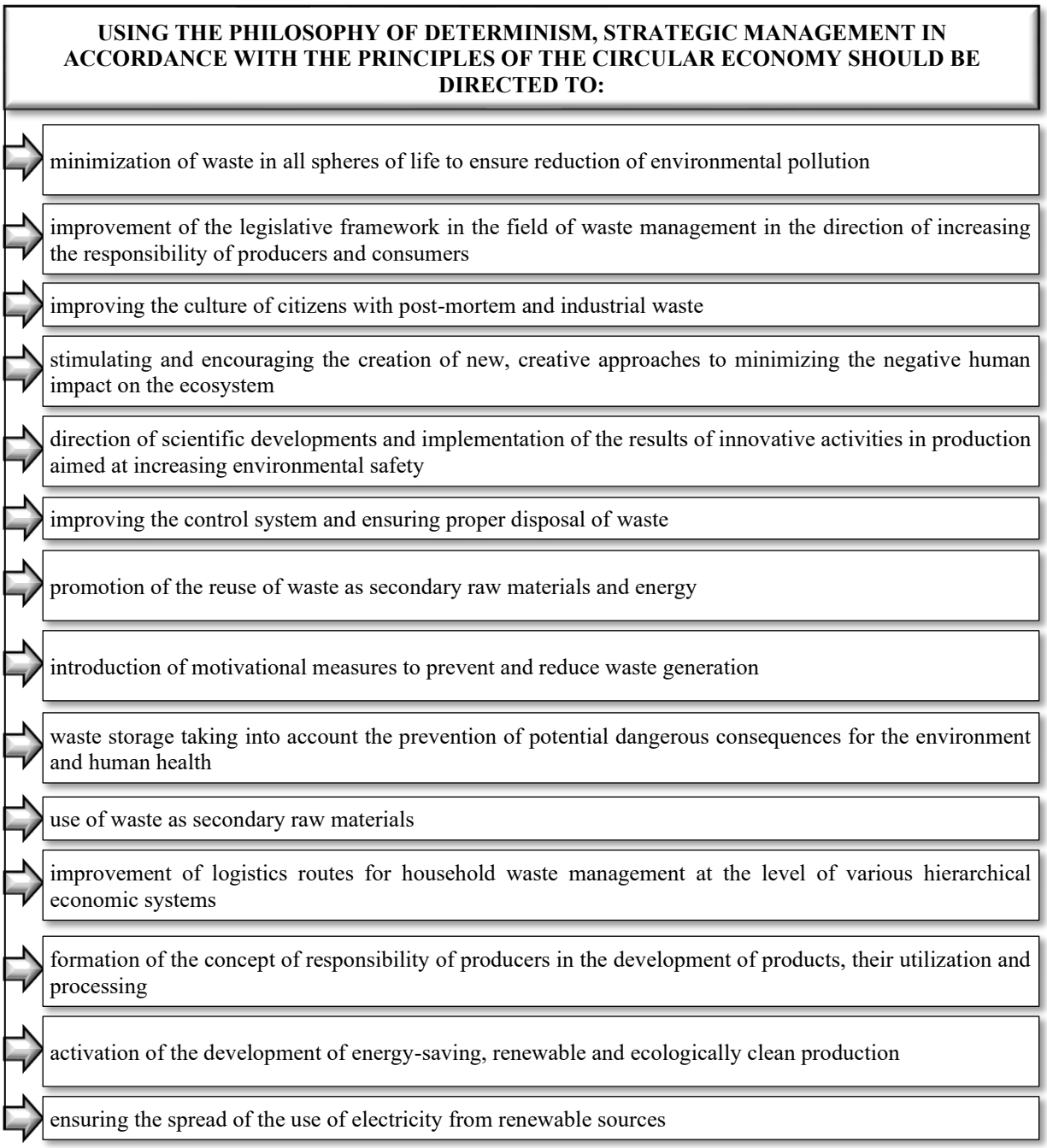

Figure 2. Directions of strategic management in accordance with the principles of the circular economy

**Source: constructed by the authors.*

Each country should have its own way of building a circular economy and its own adopted strategic measures. Thoroughly justified strategic management is already giving its positive results, as an example, the strategies and practical experience of such countries as:

- Germany, formed a circular economy strategy due to the revitalization and simultaneous improvement of the efficiency of the circulation of material flows and the availability of resources and materials for companies in accordance with the principles of the circular economy;

- Scotland – created a special background for financing circular economy projects to intensify the promotion and implementation of its principles;

- The Netherlands - focus on innovative developments and their implementation regarding more efficient and repeated use of resources and products;

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- China – built a system of eco-industrial parks operating on the principles of circular economy;
- Finland – introduced a national road map for the transition of the country's economy to a circular economy.

So, the circular economy is a certain philosophy, model, strategy, system, which is much more thorough than increasing the resource efficiency of resource use and waste disposal due to the construction of technical and biological closed cycles.

Conclusion

Strategic management regarding the introduction of the principles of the circular economy into the everyday life of economic subjects will contribute to the globalization concept of the development of the world economy. But this requires consistent work on managing the implementation of measures to comply with the principles of the circular economy, starting from changing the mentality of ordinary citizens regarding the culture of separation of household waste to business perception of possible losses and not receiving additional benefits from waste processing, rather than its disposal, establishing additional cladding for repair and recycling of secondary raw materials with further use in subsequent cycles of product production.

The scientific novelty of the study consists in substantiating the principles of the circular economy as a determinant of strategic management, which is based on the methodology of determinism as one of the main explanatory principles of scientific knowledge of a complex process, a phenomenon which is represented by the circular economy and makes it possible, thanks to strategic management, to achieve the fulfillment of the ten principles circular economy and ensure social development.

Questions related to the development of an organizational and economic mechanism for the implementation of the circular economy concept at the level of various economic systems require further research.

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