

СЕКЦІЯ 1.
ЕКОЛОГІЗАЦІЯ ЕКОНОМІКИ ТА ОСВІТИ ЯК ЧИННИК СТІЙКОГО
РОЗВИТКУ СУСПІЛЬСТВА

BIOECONOMY: SUSTAINABLE DEVELOPMENT IN THE
CONDITIONS OF EUROPEAN INTEGRATION

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In the European Union, scientists from the European Commission's Knowledge Center for Bioeconomy are most active in implementing the bioeconomy. The long-term development of the bioeconomy in the European Union is determined by the Bioeconomy to 2030 Strategy – The Bioeconomy to 2030: Designing a Policy Agenda [1]. According to the forecast «Organizations of economic cooperation and development» in 2030, the share of the bioeconomy will be about 3% of GDP in developed countries and the share will be much higher in developing countries.

The European Union is a leader in the development of the bioeconomy in the world. The very realization of this concept was largely due to the countries of the European Union, when they were in the mid-2000s. Relevant programs have been prepared at both the European and national levels. The first pan-European strategy, Innovating for Sustainable Growth: A Bioeconomy for Europe, was adopted in 2012, and an updated version was released in 2018 [2].

The bioeconomy is an important part of the way the future European Union is. One of the priorities of the current European strategy is to strengthen the bioeconomy sectors, including attracting additional investment and creating markets. This strategy also involves the deployment of technological and economic solutions based on biotechnology and environmental technologies. To create a new type of economy, the European Union provides significant financial support to projects in this area. For example, Horizon Europe (2021-2027) plans to allocate € 3.85 billion and € 10

billion respectively to bioeconomy projects. It is also planned to create an investment platform of 100 million euros to support bioprocessing, making such projects more financially sustainable.

The bioeconomy is seen in the European Union as an effective tool for solving environmental problems, as it allows to reduce the negative impact on the environment and more efficient use of available resources. It is important that the implementation of bioeconomy policy leads to significant synergies with other environmental policies. For example, the bioeconomy meets the paradigm of low-carbon development, which minimizes the impact on the climate in accordance with the goals of sustainable development. The development of the bioeconomy also has a synergistic effect with efforts to achieve the UN Sustainable Development Goals. For example, the bioeconomy offers a solution to the problem of water pollution, the development of responsible consumption, ensuring the sustainability of cities. Examples of bioeconomic technologies include the use of plastic bio-substitutes or the disposal of food waste for biogas. The latest measure is to reduce food waste in European landfills by 50% by 2030 compared to 2018, as well as to create € 75 billion a year in added value annually in Europe's 50 largest cities while reducing greenhouse gas emissions by 30 million tonnes CO₂ [3].

Considering the environmental aspects of the bioeconomy, it should also be noted that the updated EU strategy in this area in 2018 is called "Sustainable Bioeconomy for Europe: Strengthening the links between the economy, society and the environment" (A sustainable Bioeconomy for Europe: Strengthening the connection between economy, society and the environment). The strategy closely integrates the tasks of the cyclical economy, and the official slogan of the bioeconomy in Europe sounds like "Bioeconomy: European way to use our natural resources" [3]. Overall, the role of the bioeconomy in the European Union is expected to grow. It will contribute to the achievement of social, environmental and economic goals through the creation of new products and technologies with high added value. It should also help increase competition in the market for energy generation and production of raw materials (through the emergence of medium and

small enterprises processing biological mass), as well as increase the diversity of economic activities. The development of the bioeconomy is inextricably linked with the use of new technologies and best management practices, which should lead to increased business competitiveness.

The experience of the European Union confirms that the primary tasks of the state in the field of bioeconomy are the formation of conceptual foundations for its development, legislative control, adjustment and promotion of this process at all stages, and assistance in adapting to domestic producers and consumers. The concept of sustainable economic development in Ukraine should be based on the principle of sustainable development. This approach actually involves expanding the adaptive capacity of the national economy, primarily by ensuring integrated, efficient and economical use of production resources, increasing the competitiveness of products in terms of quality and price, improving the living environment.

Thus, the concept of bioeconomy in the European Union contributes to solving different tasks. On the one hand, the bioeconomy in the European Union is a new type of economy that involves the production of new goods and services based on biotechnology and sustainable use of biomass. On the other hand, the bioeconomy in the EU is a tool for achieving the goals of sustainable and low-carbon development, as well as contributing to the implementation of other areas – social, integration and regional policy. This creates a common European integration for the whole of Europe, which at the same time provides opportunities for individual development for member states and other countries.

References

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