

Міжнародна науково-практична конференція «Актуальні аспекти сталого розвитку в умовах глобальних викликів»



Bratishko Viacheslav, ScD, Professor, Khmelovskyi Vasyl, ScD, Professor, Achkevych Oksana, PhD, Associate Professor,

National University of Life and Environmental Sciences of Ukraine

ANALYSIS OF REGULATORY APPROACHES OF THE EU AND UKRAINE IN THE FIELD OF ORGANIC WASTE MANAGEMENT

Regulation in the field of organic waste management in European Union countries is multi-level and based on established principles of environmental policy. Among them, the hierarchy of waste management, the principles of the circular economy, the concept of extended producer responsibility and systemic coordination based on a unified legislative approach occupy a central place. Analysis shows that these principles are implemented in EU legislation through directives that are binding on member states and regulate all stages of organic waste management: from its generation to final processing or disposal (Gómez Palacio, 2002).

In the context of Ukraine, there is a gradual adaptation to European environmental standards, but harmonisation with EU norms is uneven. The National Waste Management Strategy declares a waste management hierarchy, but its implementation faces systemic problems: insufficient infrastructure, limited investment resources, and a fragmented regulatory framework (Elrabay'a, 2021). In particular, there is a low level of integration of circular economy principles into practical policy. Ukrainian strategic documents proclaim the importance of reuse and recycling, but their practical implementation is only just beginning (Melnyk, 2021).

The regulation of the biogas industry deserves special attention. In the EU, the biogas production process is regulated in great detail. This includes requirements for process control, sanitary standards, transportation and disposal of by-products, including digestate. In Ukraine, however, the relevant regulatory framework is still being developed. Some provisions on the handling of biogas and digestate are declarative in nature and are not backed up by effective control mechanisms (Shapovalov, 2018). Research indicates the need to create a system for the certification and quality control of digestate, as it is increasingly used as a fertiliser in the agricultural sector (Honcharuk, 2023).

An analysis of current regulations reveals a gap between strategy and practice in the implementation of extended producer responsibility. Unlike the EU, where this concept has long been a mandatory part of household waste management, in Ukraine it is only gaining legislative force. However, the first steps have been taken, in particular by amending the Law on Waste and adopting secondary legislation that defines the responsibility of packaging manufacturers for the collection and recycling of used materials (Melnyk, 2021).

СЕКЦІЯ 1



Тенденції розвитку агропромислового розвитку



In summary, it should be noted that Ukraine is on the way to establishing an organic waste management system that would comply with EU standards and principles. Although certain aspects, such as the waste management hierarchy and extended producer responsibility, are already reflected in legislation, their full implementation still requires the creation of appropriate infrastructure, control and coordination mechanisms, and institutional support.

Thus, the European Union has a systematic, regulatory and institutionally coordinated policy in the field of organic waste management. Ukraine has demonstrated progress towards harmonisation, but lags behind in the practical implementation of the declared principles. The most pressing tasks remain infrastructure modernisation, legislative unification and the implementation of EU standards in the field of organic waste management.

List of sources used:

- 1. Elrabay'a, D., Marchenko, V. (2021). The Legal Support of Organizational and Economic Processes of Municipal Waste Management in the European Union and Ukraine. *Economics & Law.* https://doi.org/10.15407/econlaw.2021.03.074
- 2. Gómez Palacio, J.M., Ruiz de Apodac, A., Rebollo, C., & Azcárate, J. (2002). European Policy on Biodegradable Waste: A Management Perspective. *Water Science and Technology*. https://doi.org/10.2166/WST.2002.0362
- 3. Honcharuk, I. (2023). European Regulatory Practices and Handling of Digestate in the Context of Agro-Ecological Transition of EU Countries within the European Green Deal. https://doi.org/10.37128/2411-4413-2023-3-10
- 4. Melnyk, O., Scliar, V., Sabadash, S., & Butova, V. (2021). EU Municipal Organic Wastes Management and Its Implementation Prospects in Ukraine. https://doi.org/10.2478/rtuect-2021-0014
- 5. Shapovalov, Y. B., Shapovalov, V., Salavor, A., & Yakymeko, I. (2018). Comparison of EU and Ukraine Regulatory Framework for Biogas Production. *Scientific Works National University of Food Technologies*. https://doi.org/10.24263/2225-2924-2018-24-5-9

Zabolotko Oleh, Ph.D**,** Associate Professor, **Gavrilyuk Dmutro,** Master's student,

National University of Life and Environmental Sciences of Ukraine

ANALYSIS OF MEANS FOR CREATING A MICROCLIMATE IN THE BARN

Considerable attention is paid to the issue of microclimate. The optimal microclimate in the barn ensures the health of the animals, the maximum feed conversion, and therefore productivity. Extreme temperatures and humidity have a