EFFECTIVE WASTE MANAGEMENT AS A TOOL FOR SAFE AND SUSTAINABLE ENERGY RENEWAL

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As a result of the full-scale war, the energy infrastructure of Ukraine has suffered catastrophic destruction. Electricity generation, transformation and transportation facilities, as well as other elements of critical infrastructure, have been destroyed or damaged. At the same time, the volume of industrial, construction and hazardous waste generated has increased significantly, arising both as a result of the destruction and during the restoration of energy facilities. In this context, the need for comprehensive and strategic management of the energy waste management system becomes obvious. This management must take into account not only environmental and health requirements, but also institutional, investment, tax and organizational and managerial factors, without which effective restoration is impossible.

A key challenge for waste management in the energy sector after the war is the lack of a coordinated management model capable of making timely decisions, integrating data from different sources, ensuring monitoring and control, and effectively using resources — both human and financial. First of all, institutional coordination is needed between central executive bodies, local governments, operators of energy facilities, and the private sector. The lack of coordinated interagency interaction leads to duplication of functions, dispersion of powers, and inefficient use of funds. Second, the strategic planning system needs to be revised. In the context of post-war reconstruction, it is necessary to create a national energy waste management strategy that will be integrated into the overall framework of state reconstruction. This document should identify priorities, sources of funding, distribution of responsibilities, and also contain criteria for assessing the effectiveness of management decisions (Okhrimenko, 2022).

In addition, the digitalization of management processes is an important direction. The creation of a national information system for energy waste management will ensure transparency, accounting, geolocation of waste, control over its movement, processing or disposal. This will also open up opportunities for more effective planning of logistics, procurement and monitoring of environmental and health risks. It is equally important to implement a risk-based management model that involves a systematic assessment of hazards, prioritization of areas for environmental intervention and prompt response. Social risks should also be taken into account, especially in communities where energy facilities are being restored or waste is being stored or processed (Lutsiv, 2024).

Recovery management should also be based on the principles of public-private partnerships, which allow for the mobilization of not only funds, but also management competencies, technologies, and innovative business approaches. This requires ensuring stable rules of interaction, effective control, and risk sharing between the state and the investor.

Effective waste management has a direct impact on the state of the environment, the quality of people's lives, and the attractiveness of the investment climate. Thus, systemic management taking into account the health of the population makes it possible to prevent mass chronic poisoning, deterioration of health, and the growth of diseases. Institutional management in the field of ecology should also ensure control over the implementation of waste processing and disposal technologies, in particular through certification of enterprises, environmental supervision, licensing, and regular audits.

At the tax level, management decisions should be focused on environmental tax reform, the creation of incentive tools — in particular, tax breaks for environmentally responsible companies, accelerated depreciation of waste processing equipment, reduced VAT rates on imports of eco-technologies, etc.

Thus, management efficiency is the key to implementing any policies in the field of ecology, energy and health. Successful restoration of Ukraine's energy sector requires an integrated approach to waste management, based on coordination, digitalization, transparency and effectiveness. It is not only about a technical solution to the problem, but also about a new management culture focused on sustainable development, partnership and safety for people and the environment.

References

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