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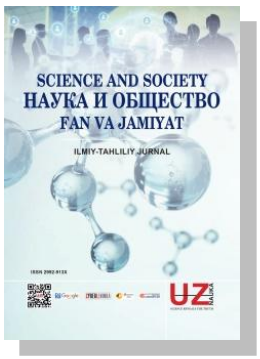

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WASTE PROBLEM IN THE EUROPEAN UNION AND ASIAN COUNTRIES

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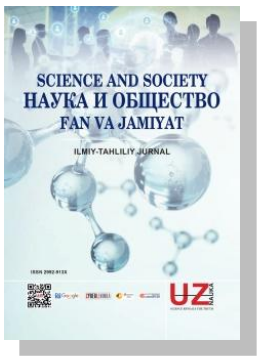
Abstract: *this article investigates issues related to waste in European Union countries. Factors contributing to the significant accumulation of waste are analyzed separately, and statistical data is provided. Drawing on the experience of the European Union, several solutions to the problem are proposed.*

Keywords: *recycling, industrial infrastructure, household waste, energy efficiency, water and soil pollution, directive.*

Introduction. The rapid growth of the global population and the active development of industry are inevitably linked to an increase in the volume of municipal and industrial waste. The improper selection of methods for waste disposal and neutralization leads to environmental harm and deteriorates the ecological state of countries. The European Union and Asia are large integrated economic regions that have been demonstrating leadership in production, industry, and processing sectors. However, the EU and Asian countries also faces environmental challenges. Over the past decade, the waste problem has emerged as one of the most significant ecological issues confronting Asia and EU member states. The proper management of waste generated by large-scale industrial operations, high population density, and consumption is seen as a primary task through recycling back into the economy. Effective waste management is crucial for ecological sustainability and efficiency in the economy, as it directly impacts public health. Therefore, the EU is developing integrated strategies and concepts in



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collaboration with various regional states while implementing reforms to improve ecological sustainability.

Main Section. The statistics on waste generated in EU and Asian countries member states can be categorized as follows:

1. Industrial Waste: This arises from activities in construction, chemicals, and mining sectors. Construction and demolition waste (C&DW) constitutes the largest waste stream in EU and Asian countries. According to statistical data, this is primarily due to significant growth in industry and reconstruction activities. However, the materials from old demolished buildings and structures are often unsuitable for recycling, complicating this waste issue.

2. Municipal Waste: This consists of waste generated from consumer activities, packaging operations, or discarded products. On average, EU and Asia citizens produce about 5 tons of waste annually. Approximately 38% of this waste is recycled. However, over 60% of waste still remains in landfills across European countries [1]. This situation poses ecological problems due to the lack of effective waste transportation and recycling.

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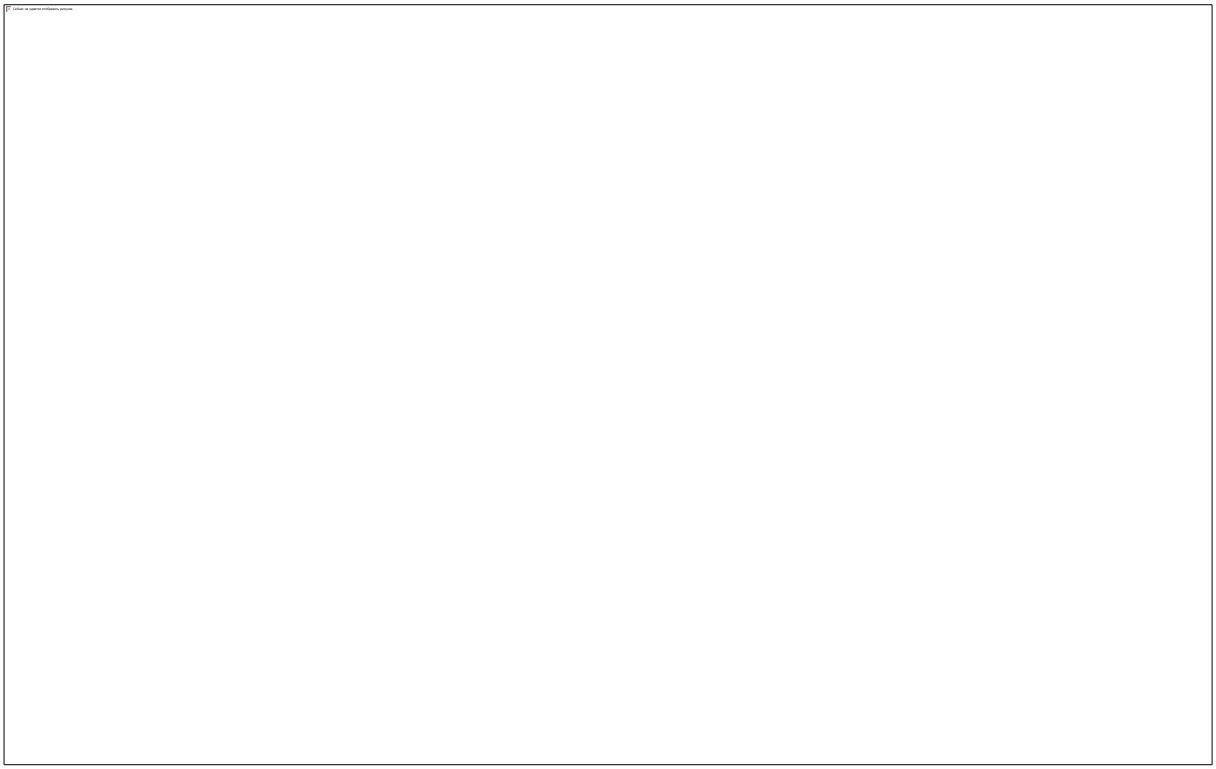

The diagram above shows the distribution of waste generation across various sectors. The construction sector is the largest waste producer, accounting for a significant portion of total waste. Additionally, the mining and extraction sectors also generate substantial waste. Waste from water, household waste, and manufacturing processes are also important contributors.

By 1995, a four-year reduction period was set for EU member states to dispose of more than 80% of municipal waste. These states include Russia, Uzbekistan, Kazakhstan, Arab countries, as well as Greece, Ireland, Italy, Portugal, Spain, the United Kingdom, Cyprus, Estonia, Hungary, Poland, and Slovenia. These measures are being implemented to manage waste efficiently and maintain environmental balance. Such initiatives can help reduce waste and improve

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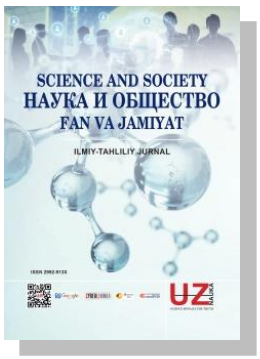

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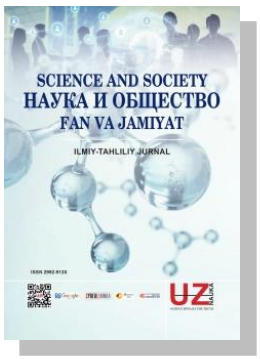
recycling processes. This, in turn, not only helps protect the environment but also enhances economic efficiency [2].

Solutions to the waste problem

1. WtE - Waste-to-Energy Method. As production and industrialization rapidly grow in EU countries, the waste problem remains one of the most pressing issues. Today, due to cost-saving measures in production and some ecological concerns, many EU countries are focusing on WtE (waste to energy), a method of converting waste into energy sources. However, in many EU countries, WtE is managed by the private sector, leading to artificially increased production and consequently, a large amount of waste. "Denmark, understanding this problem correctly, fully transferred WtE from the private sector to state control to improve waste prevention and recycling. In contrast, Germany and Sweden face some difficulties due to WtE being privatized. Therefore, to combat waste today, EU countries should support the WtE method and place its control under government authority" [3].

2. Preventing or minimizing waste production, recycling waste, converting waste into raw material sources, incinerating waste to bury it through energy means, burying without energy consumption, and incinerating without energy consumption are some of the most effective hierarchical methods of combating waste in the EU. There are three main principles for solving the waste problem:

- recycling or reusing waste as secondary raw materials.
- if the waste is unsuitable for this, using it as a secondary energy source.
- if this is also not possible, sending the waste to landfills.



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Countries like Germany, Switzerland, Austria, Denmark, Belgium, the Netherlands, and others have successfully utilized this practice" [**4**].

3. In addition, raising public awareness and encouraging proper waste separation in household consumption or daily expenses are crucial. Otherwise, the establishment of legal measures by the government and constant public monitoring and warnings are also effective methods for solving this issue. Germany, Sweden, Austria, and France, as well as several Asian countries, have successfully implemented this practical experience.

References:

1. https://environment.ec.europa.eu/topics/waste-and-recycling.en.

2. Design and Use of Municipal Solid Waste Landfills. Study Guide. For Master's Students: 70710406-Waste Management.

3. Waste Management. Vera Weghmann Public Service International Research Unit February 2023.

4. Proceeding Paper European Experience in Waste Management Tetiana Vitenko, Nataliia Marynenko and Iryna Kramar. Citation: Vitenko, T.; Marynenko, N.; Kramar, I. European Experience in Waste Management.