

# IMPLEMENTATION OF THE BASEL CONVENTION IN UKRAINE: ECONOMIC AND INTERNATIONAL LEGAL ASPECTS

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**Abstract.** The establishment of international conventions in the domain of hazardous waste management is undoubtedly a valuable contribution, as it facilitates the formation of international standards in this field. The ratification of the Basel Convention by the majority of states is indicative of their interest in the unification of legislation in this area. However, in addition to the adoption of international conventions, their effective implementation is also a crucial aspect. The *objective* of this article is to conduct a comprehensive examination of the current status of the Basel Convention implementation in Ukraine, to identify the existing challenges, and to propose potential solutions. The statistical data on the management of hazardous waste were subjected to analysis. To gain a deeper insight into the situation, an analysis was conducted on the movement of hazardous waste between Ukraine and Slovakia. This revealed the extent of the issues that require attention in this area. *Methodology.* General theoretical methods were mainly used in writing the article. Analysis and synthesis, theoretical generalisation and systematic interpretation helped to assess the state of implementation of the Basel Convention in Ukraine. Results. The article considered both the content of the Basel Convention and the practice of its implementation in Ukraine. *Practical implications.* In light of doctrinal provisions and the norms of both international and national Ukrainian law, the authors have identified the principal range of issues pertaining to the implementation of the Basel Convention in Ukraine and have put forth potential solutions to these challenges. *Value / Originality.* It is determined that an important step to improve the implementation of the Basel Convention in Ukraine is to strengthen the cooperation of the responsible bodies in the field of hazardous waste management, to strengthen the responsibility of the institutions responsible for controlling the movement of hazardous waste, to improve the equipment for waste identification, to eliminate the monopolisation of the entities authorised to carry out activities involving hazardous waste.

**Keywords:** international law, hazardous waste, Basel Convention, international legal regulation of waste management, economic aspects of waste management.

**JEL Classification:** K00, K1, K3, K33

## 1. Introduction

The results of inspections of the implementation of the Basel Convention carried out by governmental inspectorates in Ukraine and Slovakia revealed significant shortcomings in the field of hazardous waste management. The inspection carried out in Slovakia revealed inadequate supervision of the movement of waste to and from Ukraine. The number of problems increased with the beginning of legislative reforms in the field of hazardous waste management in Ukraine. Therefore, it is important to study in detail the implementation of the Basel Convention in practice.

The study focused on the provisions of the Basel Convention and their implementation in practice in Ukraine. Particular attention was paid to the movement of hazardous waste between Ukraine and Slovakia. Proposals were made *de lege ferenda*. In writing this article, the authors partially relied on the scientific work of such scholars as P. Gailhofer, O. Gulac, N. Isarin, M. Islam, T. Puthucherril, S. Kidalov, J. Krueger, and others.

The objective of this scholarly work is to analyse the provisions of the Basel Convention and the national legislation of Ukraine with a view to their

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implementation, identify any shortcomings and make recommendations for improvement.

## 2. Hazardous Waste in Numbers

As evidenced by the statistics published by the European Commission, the volume of exports of hazardous waste from EU member states increased from 6.1 to 9.6 million tonnes between 2010 and 2021. This suggests a notable increase in the movement of hazardous waste. In 2021, 82.4% of the hazardous waste exported by EU Member States was treated through recovery processes, while 17.6% was treated through disposal. A review of the data reveals that, although not every year, the recovery of hazardous waste is increasing. In 2010, 4.3 million tons of hazardous waste were recovered, in 2013 and 2014 – 4.5 million tons, in 2017 – 5.6 million tons, in 2019 – million tons, in 2021 – 7.9 million tons (Eurostat. Waste shipment statistics, 2023). Notwithstanding the observed increase in the generation of hazardous waste, the rise in the recycling of such waste is notable. It is encouraging to note that the majority of hazardous waste is recycled. The majority of exported hazardous waste is derived from the construction and demolition industries, as well as civil engineering.

Landfilling of hazardous waste exported by EU Member States is decreasing. The peak of landfilling was in 2017 – 698 000 tonnes of hazardous waste. In 2021 – 576 000 tonnes, which is a positive trend. This is facilitated by the fact that a key objective of EU waste policy is to reduce the amount of waste going to landfills (European Environment Agency, 2024). By 2030, 60% of the waste collected and treated by municipalities must be reused or recycled, according to targets set by the EU (European Parliament, 2024). It also contributes to the achievement of sustainable development goals (Callao, 2021; Gulac, 2019; Yemelianenko, 2024).

Hazardous waste includes e-waste because it contains toxic substances. According to World Health Organization statistics, an estimated 53.6 million tonnes of e-waste was generated globally in 2019, but only 17.4% was documented as formally collected and recycled (World Health Organization, 2023). In 2021, EU Member States exported 125 451 tonnes of waste electrical and electronic equipment (WEEE) containing hazardous substances. At the same time, only 7 208 tonnes of exported WEEE were non-hazardous (Eurostat. Waste shipment statistics, 2023). This indicates that more attention needs to be paid to the management of WEEE movements.

Ukraine produces more than 500,000 tonnes of hazardous waste per year (30% of which is alkali, acid and salt waste, 13% is metal mining waste, 11% is mixed undifferentiated waste, 10% is other mineral waste and 9% is sediments). By 2024, 84% of the hazardous

waste management market will be made up of intermediary companies and companies that only process waste on paper. This means that out of 215 licensees "operating" on the market: 91 – only stored hazardous waste; 56 – carried out operations with oils, sludges, electrical and electronic equipment and other wastes; and 68 facilities had the capacity to dispose of hazardous waste. This is due to the fact that under the legislation that was in force before the reform began in 2024, a company could obtain a separate licence only for the collection and storage of hazardous waste, which led to many abuses in the market. A significant number of unscrupulous entities only dumped prices on the market. As a result, instead of being disposed of, hazardous waste ended up in landfills or in forests (The Ministry of Environmental Protection and Natural Resources of Ukraine, 2024). The subsequent section of this article will examine the implementation of international standards in the field of hazardous waste management in Ukraine.

## 3. Implementation of International Standards in the Field of Hazardous Waste Management in Ukraine

In order to generate profit, states frequently permit the importation of hazardous waste into their jurisdictions (Gailhofer, 2023; Kidalov, 2019; Krasnova, 2017). This is frequently undertaken by economically less developed countries (Gulac, 2022; Krueger, 1998; Puthucherril, 2012). N. Isarin and M. Islam highlight the absence of efficacious implementation mechanisms of the Basel Convention in numerous states (Isarin, 2023; Islam, 2020).

The Report of the Accounting Chamber of Ukraine on the results of the audit of Ukraine's compliance with the requirements of the Basel Convention on the control of transboundary transportation of hazardous waste and its disposal indicates that the requirements of the Basel Convention are not fully met. In particular, the control over the transboundary movement of waste, its identification and removal, as well as the coordination of the activities of the responsible executive authorities and the exchange of information, is not adequately ensured. This creates a risk of uncontrolled importation of hazardous waste into Ukraine. Since 2016, the environmental control of waste at checkpoints across the state border has been conducted in the absence of a relevant regulatory framework. Furthermore, the list of waste with established hazard classes (classifier) has not been approved at the state level. The order of interaction between the Federal Tax Service and the Ministry of Natural Resources regarding the selection of samples for laboratory analysis to ascertain the compliance of the cargo composition with the available documentation is not governed by legislation.

Regulatory acts do not define the procedure for sealing containers with hazardous waste by the State Environmental Inspectorate at the state border crossing point at the entrance to Ukraine. As a result, the containers are not sealed, which creates risks of not ensuring the safety of hazardous waste during their transit through the territory of Ukraine (Accounting Chamber, 2016). As can be seen, the report reveals a significant number of problems in Ukraine in the area of implementation of the Basel Convention. Attempts to improve the situation were made by adopting the Law of Ukraine "On Waste Management".

In 2017, the Ministry of Environmental Protection and Natural Resources of Ukraine published the findings of an inspection of licensees. The results revealed that a third of licensees authorized to carry out activities with hazardous waste were not found at the place of activity specified in the license. Furthermore, more than 50% of business entities did not possess the material and technical base declared in the documents used to obtain a license. In 2016 and 2017, the Ministry of Natural Resources inspected 102 economic entities in the field of hazardous waste management for compliance of the material and technical base and documents with the licence conditions. As a result of the inspections, 56 licences issued to enterprises for hazardous waste operations were cancelled, and another 46 enterprises received orders to eliminate violations (Analytical note, 2021). There is a clear need to reform the hazardous waste management system in Ukraine. This is evidenced by the results of the Ministry's inspection of the activities of entities authorised to carry out activities in the field of hazardous waste management. However, there are big questions about how these reforms will be implemented in Ukraine.

The Law of Ukraine "On Waste Management", adopted in 2022 by the Verkhovna Rada of Ukraine, defined a new type of licensing – licensing for hazardous waste management. According to the new legislation, companies wishing to operate in the field of hazardous waste management must not only collect and store hazardous waste, but also carry out its treatment (recovery or disposal). This requirement reflects the main objective of the legislator to radically change the situation in the country, where some unscrupulous companies had been collecting and storing hazardous waste for years, and then such waste was found in forest strips, abandoned premises and rivers. At the present time, business entities engaged in the collection and processing of hazardous waste are obliged to obtain a licence. Prior to this, they are required to undergo a mandatory audit of their material and technical base to ascertain its compliance with the established requirements.

The initial focus is on the loading and unloading equipment, containers and other means provided for in the License Terms approved by the Government on December 5, 2023. Henceforth, such equipment shall be the exclusive property of a single subject, and shall no longer be transferable between subjects prior to unscheduled or scheduled inspections conducted by official bodies. The collection and storage of hazardous waste is permitted solely for the purpose of subsequent export for processing or disposal. Furthermore, the Ministry of Environmental Protection and Natural Resources of Ukraine has highlighted that the processing capacities of certain types are only available abroad (The Ministry of Environmental Protection and Natural Resources of Ukraine, 2024).

As correctly highlighted by experts, the previous licences for hazardous waste management businesses expired on January 9, 2024. Consequently, there are currently only nine companies in Ukraine with licences for hazardous waste management business activity. Of these, six have narrowly targeted actions or have been issued for the own needs of enterprises. This represents a significant reduction from the 216 companies previously licensed for this activity. It is beyond dispute that in the context of an ongoing armed conflict, three enterprises are unable to cope with the volume of hazardous waste generated. This leads to the question of where the waste from more than 70,000 medical facilities and hospitals, as well as the above fifty dispensaries, is disposed of. Additionally, medical waste has the potential to transmit dangerous diseases, such as tuberculosis or hepatitis, and must therefore be sent to specialised enterprises for processing (Cyhanok, 2024). In accordance with the Basel Convention, medical waste can be designated as a hazardous material. The consolidation of the market for the management of hazardous waste has resulted in an increase in the price of hazardous waste removal services. A significant number of budgetary institutions, particularly those in the medical sector, lack the financial resources to procure these services.

According to the law, producers of hazardous waste have the right to store it for up to one year before processing it. There is a provision that the activity of receiving and collecting hazardous waste does not require a licence if such waste is transferred to treatment facilities during the year. At the same time, such a company has to report. This means that today the waste producer has the right to transfer his hazardous waste to economic entities that carry out activities of its reception and storage. However, the accumulation of waste is not a solution to the problem, as it can harm the environment and the life and health of the population.

#### 4. Trade in Hazardous Waste Between Ukraine and Slovakia

The Basel Convention represents the most comprehensive global environmental agreement, with the objective of protecting the environment and human health against the adverse effects resulting from the management and transboundary movement of hazardous waste. Its provisions are binding for 191 states, including Ukraine, which acceded to it in 1999. The Convention regulates the movement of hazardous and other waste across national borders, and obliges the contracting parties to ensure that such waste is disposed of in an environmentally appropriate manner.

According to the Basel Convention, the shipment of hazardous waste is only possible if the country from which the waste is exported does not have the necessary technical capacity to treat this type of waste in an environmentally sound manner, or if the hazardous waste is needed as a raw material for processing in the importing country. At the same time, the Convention is based on a procedure of prior informed consent, based on four stages: notification by the exporting country, consent of the countries concerned and issue of movement documents, transboundary movement and confirmation of disposal. On a positive note, the Basel Convention has been ratified by the overwhelming majority of states. However, in addition to ratification, it is crucial to ensure the effective implementation of international conventions.

An impartial source for evaluating the implementation of the Basel Convention is the reports of state bodies on the control of waste crossing state borders. In March 2000, the Supreme Audit Office of the Slovak Republic published the "Final report: Cross-border movement of waste in accordance with the provisions of the Basel Convention", which is the result of the joint international inspection carried out by three states – Slovakia, Poland and Ukraine at the turn of 2019 and 2020. This inspection covered the period from 2015 to the first half of 2019. A comprehensive control of the movement of all types of waste across the border was carried out. The main purpose of the inspection was to verify the implementation of the provisions of the Basel Convention on the territory of all three countries. The results of the inspection were unexpected.

The inspection found insufficient supervision over the movement of waste travelling from and to Ukraine. The Slovak-Ukrainian border is the border of the Schengen area. At the border, the states must guarantee security and are jointly responsible for the external border of the European Union. Permits for waste transit through Slovakia are issued by the Ministry of the Environment. In several cases,

it did not have accurate, complete and reliable information about the planned and carried out transports to Ukraine. Business entities that transported waste did not provide the Slovak Ministry of the Environment with information on all planned transports. Waste recipients did not inform the Ministry about all transports, which led to the acceptance and assessment of waste. The Ministry did not evaluate the documentation on waste transfers, but only archived it. In several cases, the information on the actual transportation of waste did not correspond to the data provided in the documentation submitted to the Ministry of Ecology as the competent transit authority. In the control group, transports with a higher weight than declared in advance were found. It also identified shipments of significantly less weight than previously declared by the informant, while the data on waste accepted and evaluated did not correspond to reality but to the condition declared in the documentation. It was not possible to determine whether all the waste actually left the European Union or whether it remained in the EU and was disposed of or processed in violation of the permits issued and the Waste Shipment Regulation. The control procedures used allowed waste to be transported without the required accompanying documentation (Mitrík, K. Final report, 2020).

In certain instances, the carrying agent failed to submit the requisite accompanying documentation to the customs office in Slovakia, which constituted the final control before departure from the European Union. The customs authorities did not even request this documentation, as the shipment was not identified as waste based on the information provided. Consequently, the customs authorities did not apply the requisite control procedures to verify the actual contents of the shipment and compare them with the information provided in the accompanying documentation. Accordingly, the customs authorities were unable to fulfil their obligation, as set forth in the pertinent regulation, to transmit to the country of dispatch a duly certified copy of the waste movement document attesting to its departure from the European Union. One example of such an action was the transportation of cartridges. The business company in question did not provide the requisite accompanying documentation to substantiate the transportation of the waste in question. The customs document did not identify the shipments as waste. During the physical inspection, the shipments were observed to be free of any indications of waste, as they were packaged in their original boxes. Each individual cartridge was contained within a single original box. The control group thus concluded that Slovakia did not guarantee the monitoring of all forms of waste crossing the border with Ukraine, which is transported within and beyond the European Union (Mitrík, K. Final report, 2020).

The results of the inspection demonstrate that there has been a failure to exercise appropriate control over the movement of waste across the Ukrainian-Slovak border, in contravention of the provisions set out in the Basel Convention.

## 5. Conclusions

In order to enhance the implementation of the Basel Convention, it is imperative to reinforce the monitoring of waste trafficking along the Ukrainian-Slovak border, with the objective of preventing the inadvertent classification of hazardous waste as safe. Additionally, in the context of hazardous waste management, it is crucial to underscore the dearth of effective hazardous waste collection systems for the general population, coupled with the absence of a robust accounting system. This has resulted in a significant gap in the availability of comprehensive

data on the generation of hazardous waste. The situation that has developed in Ukraine since June 2024 in the field of hazardous waste management as a result of legislative reforms threatens national security. A sudden significant reduction in the number of entities authorised to carry out hazardous waste management activities has led to a monopolisation of the market, an increase in prices for services provided, and the accumulation of hazardous waste that affects the environment, human life and health. It is necessary to eliminate the monopolisation of entities authorised to carry out activities in the field of hazardous waste management. Ukraine also lacks accurate, complete and reliable hazardous waste accounting. This also weakens the implementation of the Basel Convention.

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