

Construction waste processing in Ukraine

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Construction waste processing projects have traditionally attracted investors' attention. In the context of Ukraine's reconstruction, such projects not only become appealing to investors, but also have a crucial social purpose.

Destroyed infrastructure should become a significant source of building materials for reconstruction.

Whereas before the war, more attention was paid to the processing and disposal of household waste, now there is a clear need to introduce technologies for processing, recovering and reusing construction waste.

However, the implementation of such projects in Ukraine comes with a number of significant peculiarities that need to be taken into account when planning this business.

1. Peculiarities of construction waste processing in Ukraine

Ukraine's waste management legislation is relatively new and is constantly being updated and supplemented. At the same time, changes in waste management legislation are part of the unification and adaptation of Ukrainian legislation to the legal acts of the European Union.

Construction waste recycling is part of the waste treatment and recovery stage of the waste management system.

Ukraine's waste management system has a number of features that need to be taken into account at the level of basic definitions. First of all, it is necessary to understand the basic concepts of this system.

In particular, it is important to understand the meaning of the following terms in Ukraine:

- construction and demolition waste – waste generated as a result of activities related to major repairs, construction or demolition of buildings and structures;
- material recovery – any operation for the recovery of materials (except for energy production and conversion of waste into materials that can be used for energy production), which may include preparation of waste for reuse, recycling, backfilling and other operations;
- waste owner – an individual or company that generates waste or owns, uses and disposes of it;
- waste treatment – an operation for recovery or disposal of waste as well as preparation of waste for such operations;
- waste management business entity – a company or an individual entrepreneur that collects, purchases, stores, transports, restores or disposes of waste in accordance with the law;
- waste management operations – collection, transportation, recovery, and disposal of waste;
- recycling – a recovery operation, as a result of which waste is processed into products, materials or substances for their use for the initial purpose or for another purpose;
- temporary storage sites for demolition waste – specially equipped or adapted land plots intended for temporary storage of demolition waste prior to its recovery or disposal;
- hazardous waste – waste that has one or more properties that make it hazardous. The list of such properties is established by the legislation.

2. What is needed for processing construction waste

A company that intends to start processing construction waste must obtain the status of a waste management entity.

To do this, the following steps must be taken:

- establishing a legal entity in Ukraine; the prospects for the availability of construction waste in the required quantity within the radius of logistical accessibility;
- finding a location with optimal business opportunities, taking into account the following: support from local authorities;
- prospects for concluding contracts with construction waste generating and storage companies;
- availability of the necessary infrastructure;
- the site's compliance with sanitary and environmental standards;

creating a material base for construction waste processing activities;

obtaining a permit for waste processing operations from the Ministry of Environmental Protection and Natural Resources of Ukraine;

ensuring the preparation of an expert study of environmental impact assessment in conducting business activities related to construction waste processing;

obtaining a conclusion on the possibility of carrying out activities from the relevant territorial body of the State Environmental Inspectorate of Ukraine;

concluding contracts for the acceptance of construction waste with local authorities and entities generating construction waste;

if necessary (in the presence of hazardous waste among construction waste), obtaining a licence to carry out economic activities for hazardous waste management.

Ukrainian legislation does not clearly regulate the financial issues of accepting construction waste by construction waste processing companies. Construction waste can be accepted free of charge or at the expense of the supplier or the waste processing company. It all depends on the situation in the market for these services and the level of control over waste management by the authorities.

In general, Ukrainian legislation obliges owners of construction waste to ensure its mandatory subsequent disposal, including processing. These requirements apply to all owners of construction waste. Similar requirements for the mandatory disposal of construction waste are set out in the Ukrainian legislation regulating construction activities.

3. The process of construction waste processing

The process of construction waste processing and its recovery or creation of new construction products involves the following stages:

- construction waste acceptance;
- construction waste storage;
- construction waste processing or recovery;
- recording the termination of waste status for recycled waste;
- storage and disposal of the part of waste that cannot be recycled;
- accounting for new marketable products resulting from the processing of construction waste.

In the process of accepting construction waste, it may also be necessary to accept hazardous waste (e.g., asbestos materials). In this case, it is

necessary to ensure a separate process for the processing and disposal of this waste.

It is mandatory to maintain constant contact with the authorities in terms of their control over the disposal of construction waste. This is necessary to ensure that construction waste owners are committed to strict compliance with the legal requirements for the mandatory transfer of construction waste for processing and disposal.

4. Construction waste processing during martial law

During martial law in Ukraine, there are two main ways to conduct business activities related to construction waste processing:

- The first one – the traditional way – is to recycle construction waste as part of the overall waste management structure.
- The second way is the processing of construction waste generated in connection with the damage (destruction) of buildings and structures as a result of hostilities, terrorist acts, sabotage or the liquidation of their consequences.

A company that processes construction waste can conduct its business activities in parallel with either of these options.

Given the large number of destroyed buildings and buildings to be dismantled as a result of hostilities, the Ukrainian government has separately regulated the mechanism for managing the waste generated as a result.

According to the established procedure, such waste management operations can be organised in areas where there are no active hostilities or the active phase of hostilities has been completed.

Such operations may be carried out by:

- owners of the facility that generated such waste as a result of damage;
- the authorised body (in relation to demolition waste placed on the streets and roads of settlements, public roads, and public places).

If the owner of the demolition waste has not been identified, it shall be established by the relevant state authorities. If the owner cannot be identified, the state manages the waste.

Also, if the owner fails to remove the waste within 90 calendar days after the termination or cancellation of martial law on the territory of Ukraine, the authorised government body shall decide on the management of such waste. In other words, in this case, regardless of whether

the owner of the waste is identified, the state assumes the obligation to dispose of it.

The processing of construction waste generated in connection with the hostilities has certain peculiarities and benefits, in particular:

- no need to conduct an expert study of environmental impact assessment in the course of construction waste processing activities;
- no need to obtain a conclusion on the possibility of carrying out activities from the State Environmental Inspectorate of Ukraine. These simplifications significantly reduce the amount of time required to start construction waste processing activities;
- a simplified system for allocating land plots and changing their designated purpose to accommodate temporary storage sites for demolition waste (including construction waste) is in place. This allows for a significant reduction in the time required to create sites for the disposal of such waste, which are actually warehouses for construction waste;
- areas intended for processing and temporary storage of recyclable materials should be located in places of temporary storage of waste;
- organisation of construction waste recycling is mandatory;
- state authorities and local governments are required to take measures to reuse the main components of demolition waste (after their treatment or processing, if necessary) in the implementation of construction projects.

It should also be borne in mind that the process of processing demolition waste is somewhat different from the general one.

The main differences include:

- high level of construction waste accumulation and the need to quickly implement the processing procedure;
- the possibility of locating construction waste processing facilities directly at temporary storage sites for demolition waste;
- direct access to a large amount of construction waste;
- increased control by the authorities over the need for construction waste processing;
- the need for a more thorough sorting of construction waste before its recycling;
- in the absence of a waste owner, it is possible to conclude contracts for construction waste processing with the authorities.