



**Energodar
City Council**

PRESENTATION OF THE PROJECT

**COMPLEX FOR THE COLLECTION
AND PROCESSING OF MUNICIPAL
SOLID WASTE, CONSTRUCTION
WASTE, WOOD AND USED TYRES**

Enerhodar city, Ukraine





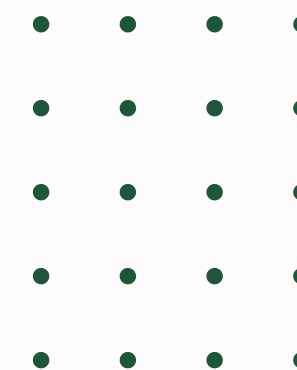
LANDFILL

is located on a plot of total area of

**7,119
HECTARE**



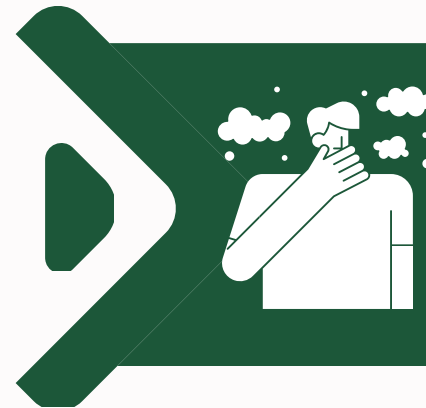
(5 sections)



CONSEQUENCES

of operating solid waste landfills and subsequent disposal of waste

01



the release of biogas and other gases into the atmosphere, which harm the environment

pollution of soil and groundwater with leachate formed in the body of the landfill - a liquid component of solid waste formed at all stages of its movement from the bucket in the apartment to the landfill inclusively. Growth of the area of "poisoned" lands



02

03



pollution of surface waters by storm and melt runoff flowing from the territory of the landfill





GOALS:

OF THE PROJECT: “COMPLEX FOR THE COLLECTION AND PROCESSING OF MUNICIPAL SOLID WASTE, CONSTRUCTION WASTE, WOOD AND USED TYRES”



Conservation

of energy, support and secondary raw materials market recovery



Decrease

of landfilled waste amount, environmental improvement as a consequence



Maximization

of waste processing, and the growth of valuable materials' collection



Stimulation

of innovation and investment



Conservation

of natural resources, sustainable development

Enerhodar has excellent potential for the construction of a modern sorting line. Its strategic location and developed infrastructure make it an ideal place for this type of infrastructure project:



 **Developed infrastructure**



 **Transport accessibility**



 **Favorable cooperation**



 **Economic potential**

of Multi-flow, semi-automatic sorting line for MSW



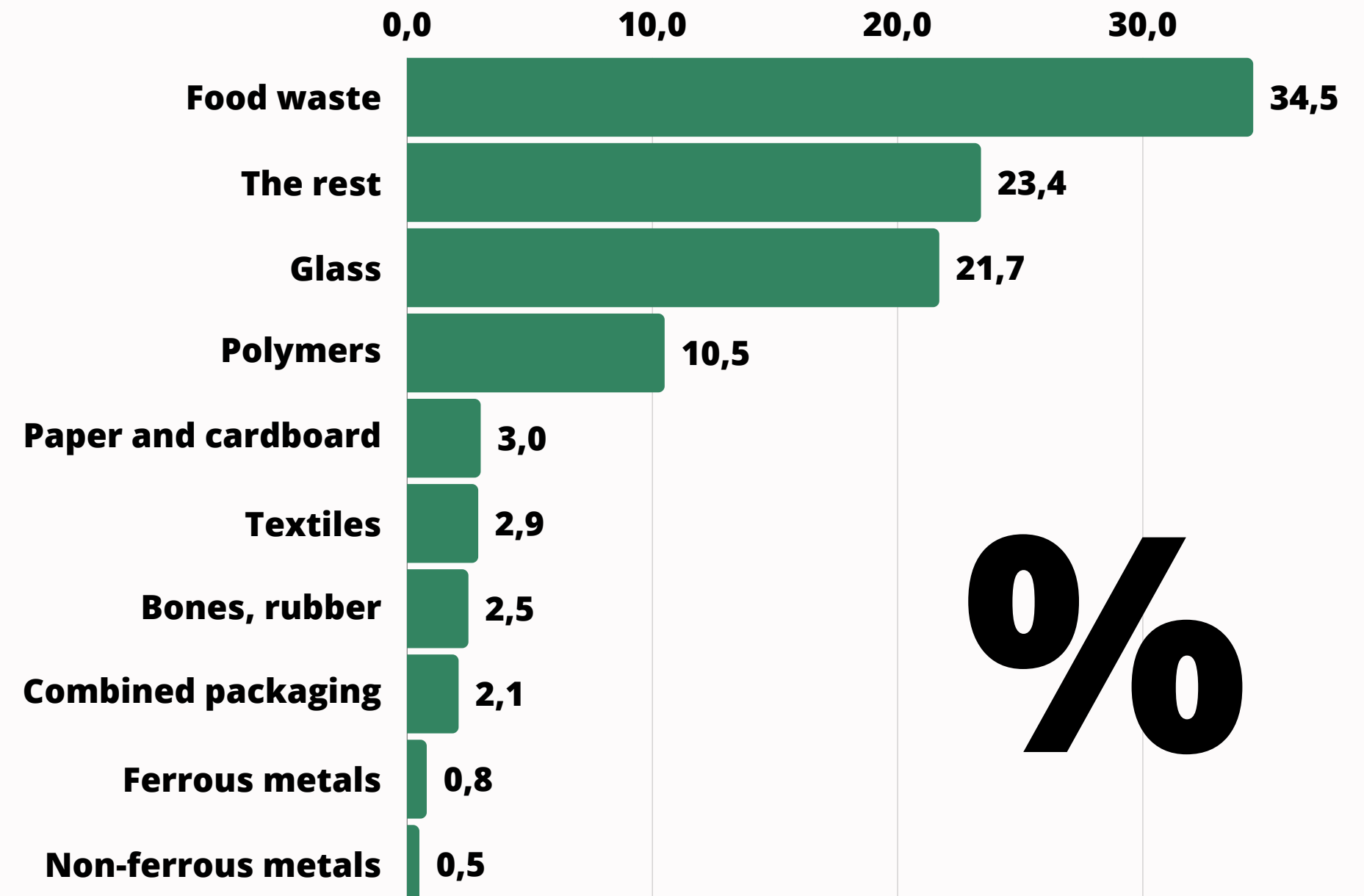
- 01** Location of the Project is the city of Energodar (industrial zone), Vasyliv district, Zaporizhzhia region
- 02** Assistance in obtaining permits for the installation of containers for the MSW separate collection in the city of Energodar
- 03** The project includes the construction of a new sorting line with a capacity of 30,000 tons/year.
- 04** An increase of separate collection share will be achieved by installing new containers in places not covered by the separate collection system (condominiums, parks, high-rise buildings), as well as by increasing the efficiency of separate collection (educational, explanatory and campaigning work to raise awareness of the ecological lifestyle)



MORPHOLOGICAL COMPOSITION OF MSW IN HOUSING SYSTEM CONTAINERS, ENERGDAR (AUTUMN SEASON), % BY MASS

A significant part of the waste has great potential for reprocessing and reuse. Among these valuable waste are:

- Food waste - 34.5%**
- Glass - 21.7%**
- Polymers - 10.5%**
- Paper and cardboard - 3.0%**
- Textiles - 2.9%**
- Bones, rubber - 2.5%**
- Combined packaging - 2.1%**
- Ferrous metals - 0.8%**
- Non-ferrous metals - 0.5%**
- Hazardous waste - 0.2%**
- The rest - 23.4%**



SCHEME OF THE SORTING COMPLEX AND CAPITAL EXPENDITURE:



1. Multi-flow, semi-automatic sorting line – 580 000 \$
2. Hydraulic press – 80 000 \$
3. Waste recycling fiberglass "bell" containers (2.5 cubic meters) - 420 containers. Total cost: 294 000 \$
4. Vehicles - 3 pcs. Total cost: 450 000 \$
5. Sorting line building (metal structure and corrugated board): 100 meters long, 9 meters high and 30 meters wide. Total cost: 690 000 \$
6. Front loader - 1 pc (2-2.5t) and truck - 1 pc. Total cost: 100 000 \$
7. Briquetter. Total cost: 50 000 \$
8. Shredder for polymer waste: 70 000 \$
9. Shredder for grinding "tails" for better briquette production : 70 000 – 100 000 \$
10. Shredder for construction waste : 450 000 \$

TOTAL COST OF THE PROJECT: 2 880 500 \$

GARBAGE ISSUE SOLUTION

Implementation of the hierarchy of waste management and the best practices of European countries with a high competitive status



Complex for the collection and processing of municipal solid waste, construction waste, wood and used tyres



Separate collection, processing of solid waste, European waste management system





THANK YOU

FOR YOUR ATTENTION

