

## WASTE MANAGEMENT: EUROPEAN EXPERIENCE FOR UKRAINE

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Some years ago Ukrainian government made separate efforts to implement the household waste sorting in our country but they were unsuccessful. The last try took place in October 2011 when Ministry Of Regional Development Construction And Housing Of Ukraine introduced Resolution approving the Methodology separate collection of household waste.

According to the Resolution, separate collection of household waste is collection of household waste by individual components, including the sorting of household waste for further processing and recycling.

This Resolution has already come into force but Ukraine is still overflowing with garbage. It happens because of the problems in waste management. Many countries of Europe have huge experience in waste collecting, sorting and recycling that can be successfully used in Ukraine.

Developed countries such as Germany, Austria and Sweden made waste recycling a priority and now they deposit onto or into land less than 1% of all garbage generated.

Here is more information about waste management in 2011 in some European countries according to Eurostat statistics (Table 1).

There is no such data available about Ukraine but most sources report that almost 80-90% of waste in the country is deposited into land. Other garbage is incinerated and only 3-5% of all waste is sorted and recycled.

Table 1 – Waste statistic information (selected Europe countries)

GEO/WASTE (1000 tonnes)	Generated	Deposit onto or into land	Incine- rated	Material recycling	Other recycling including composting
Czech Republic	3 334	2 162	497	452	76
Germany	47 691	186	18 020	21 251	8 234
France	34 535	10 745	11 730	6 143	5 917
Hungary	4 129	2 838	406	737	148
Austria	4 960	35	1 465	1 495	1 965
Poland	12 038	7 369	102	1 783	790
Sweden	4 364	42	2 124	1 560	587
United Kingdom	32 450	15 870	3 750	8 050	4 550

Today there are approximately 30 plants on the territory of Ukraine that utilize waste. But that's not enough because of the old technology they use. Incinerating of non-sorted garbage is also not a way to solve the problem. That's why 10 modern plants are planned to be built in different cities of Ukraine. Construction must start from 4 recycling plants near Kyiv in 2013. But waste must be sorted to be recycled or burned. It can be done in different ways (Fig. 1).

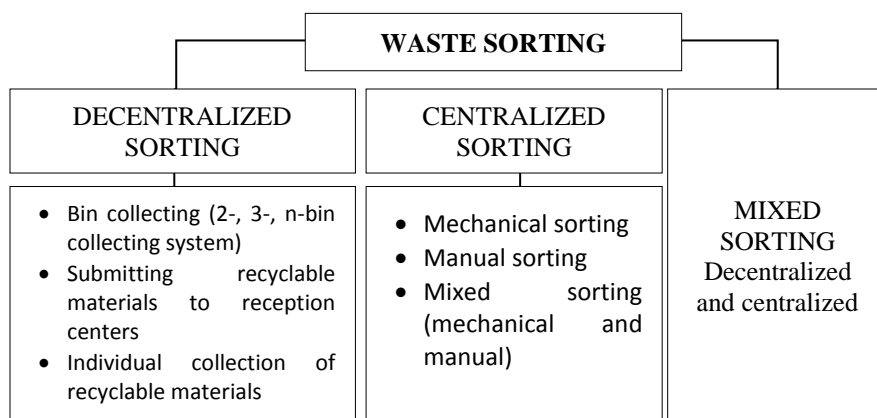


Figure 1. Different ways of waste sorting

The easiest way to reduce the cost of waste sorting is to sort it at home and put it separately into specialized bins. Germany is one of Europe's leaders in sorting. People there don't only separate paper and glass from plastic and food. They also sort bottles and jars by color, separate paper tissues from magazines and newspapers and rinse cans before throwing them away. It's much work to do but the aim is to prevent as much garbage as possible. People understand that most garbage is then resorted at the plant manually that's why they take home sorting very seriously.

Another way to reduce waste is reuse. Many people in Europe use baskets for markets and cotton bags for supermarkets every time they go shopping instead of using the plastic carry bags provided by the store. Returnable product options and refill packs are also very popular. For example, egg cartons can be reused and beverage bottles can be refilled at the shop.

There is also a program in Germany called the Green Dot. If you buy a product with a Green Dot on it, which means the manufacturer is assisting in financing the recycling of the packaging, you help to solve the waste problem.

In Austria the focus is also on prevention of waste. State and local programs are aimed at measuring packages and hazardous substances' limitation in waste used as fuel and promotion of recycling.

Speaking about Ukraine it's hard to guess how much time it will take to teach people to sort waste and reuse things. The country desperately needs a whole system including regulation, education and special funds in this field. The government needs to do more than just offering free categorized garbage bins and posters. A lot of work must be done including visiting people, giving them enough information and showing them how to behave with the garbage.