

Comments

The statistical survey found that the **total generation of waste in the Czech Republic** was **24.2 million tonnes** in 2009. In comparison to 2008 (25.9 million tonnes) the generation **decreased by 6.3 %**. Hazardous waste generation made up 1 511 thousand tonnes in 2009, in relative values it means 6.2 % of total waste generation in 2009. From 2008 and 2009 data comparing is evident that share of hazardous waste in waste generation total did not remarkable change.

1. Waste generation by enterprises

Enterprises, which are main waste generators in the Czech Republic, **generated 20.5 million tonnes of waste** (22.2 million tonnes in 2008). Enterprises generated 1.5 million tonnes of hazardous waste; it is almost total production of hazardous waste in the Czech Republic in 2009.

By reason of the international comparability of statistical data the Czech Republic acceded to introduction of the new **Classification of economic activities CZ-NACE**, which is implementation of the European standard of the classification of economic activities NACE Rev.2. This year for the first time the data on waste are presented according to CZ-NACE instead of the previously used Industrial Classification of Economic Activities OKEČ. Data conversion for the last period according to CZ-NACE was used in order to calculate the indices.

Except for enterprises involved in wastewater, waste management and remediation, all branches recorded a decline in the waste generation. The most significant drop of generated waste was recorded in 'agriculture, forestry and fishing' (NACE 01-03) by 30.7%. Drops were further recorded in 'mining and quarrying' (NACE 05-09) by 21% and in 'manufacturing' (NACE 10-33) by 20 %. Reduction of the waste generation in agriculture was largely caused by the fact that many materials, formerly registered as the waste, were not considered as the waste by their originators in 2009. 'Mining and quarrying' shows a downward trend in the waste generation for a long time. The absolute majority of waste generated in mining and quarrying falls neither within the scope of the law on waste nor within this survey. The third branch recording a marked decrease of the waste generation was manufacturing. Although the relative decline was not the biggest, in absolute values the manufacturing contributed most markedly to reduction of the waste generation. In spite of the generally lower generation of commercial waste, enterprises involved in wastewater, waste management and remediation generated by 3.3% more waste in 2009 compared to 2008. Thus, NACE 37-39 was the only group, which recorded a growth in 2009.

By waste type, the most waste produced in 2009 across all sectors, was constructive and demolition waste similarly like in last years. In the observed year total production of waste group 17 made up 12.4 million tonnes (soil and stones 170504 – 7.3 million tonnes, iron and steel 170405 – 1.1 million tonnes, concrete 170101 – 0.8 million tonnes). See chart 8.

The statistical survey confirmed again that crucial share of waste production (75 %) is generated only by approximately 300 enterprises. It concerns enterprises with waste production volume more than 10 000 tonnes per year. Although these enterprises generated 3/4 of the total amount of commercial waste, they represented only 2.2% of the whole number of entities generating this waste. Chart 9 shows the share of enterprises on the total waste generation by volume of waste generated in enterprises in 2009.

2. Waste produced on the territory of municipalities

Municipalities registered 3.7 million tonnes of waste in 2009 (increase by 2.7 % on 2008). From the perspective of the inclusion of such waste to the Waste Catalogue it concerns almost exclusively waste group 20 – municipal waste, which made up 88.9 % (87.6 % in 2008). Next municipalities registered construction waste (group 17), end-of-life vehicles and their components and discarded equipment and its components (group 16).

Production of municipal waste was 3.3 million tonnes, out of that the major share of municipal waste was made up by standard collection of waste (71.7 % waste from dustbins, waste containers, waste bags), waste components collected separately (glass, paper, plastic) made up 12.2 % and bulky waste (carpets, furniture) 13.9 %. Table 6 and graph 3 show detailed information on trend in municipal waste production.

The amount of municipal waste generation in the long term has ranged around 3 million tonnes per year and has not recorded any significant changes. In detail view slightly increasing trend can be regarded every year in municipal waste production as well. Positive changes have come in ways of municipal waste collection. Inhabitants more often use separately collecting of waste components and collection of bulky waste in last years. On contrary, standard collection of waste relative to municipal waste production has decreased.

While in 2002 separately collecting of waste components made up 5.9 % of municipal waste generation, in 2009 it was collected separately 13.9 % (in absolute value i.e. 16 kg per habitants in 2002,

44 kg per habitants in 2009). In comparison to 2002 amount of separately collected waste increased almost three times, amount of bulky waste by more than one third.

3. Waste treatment

National legislation of waste management in the Czech Republic distinguishes three types of waste management – **recovery** (R-codes), **disposal** (D-codes) and **other types of waste treatment** (N-codes). Value of waste treatment is usually higher than value of waste generation. The difference is caused by inclusion of waste imported from abroad and waste taken from store in waste treatment. Value of the indicator is also higher because of multiple treatment and transfer to other authorised person.

A total of **27.7 million tonnes of waste was treated** in 2009. Out of that, 8.3 million tonnes was recovered, 5.6 million tonnes was disposed and other types of treatment treated 13.8 million tonnes of waste. It means that other types of waste treatment treated almost half (49.7 %) of total treated waste. Although total other types of waste treatment compared to 2008 decreased by 4.5 %, on the contrary use of waste for landscaping (N1) showed slight increase, by 3.2 %. Waste recovery increased compared to 2008 by 5.4 % and waste disposal decreased by 5.2 %.

Comparability of the summary values about waste management is rather complicated. First of all it must be realized that during the period of survey the number of other ways of waste management (N-codes) was gradually growing. The reason was that some specific ways of management were legislatively excluded from waste recovery and included among other ways of management. Nevertheless, pursuant to statistical data it is possible to observe marked development trends in individual ways of management. A significant increase is evident e.g. in processing of car wrecks (by 54.1% in 2009 compared to 2008) or in processing of electrical waste (by 38.3%), while the total amount of wastes managed in 2008 and 2009 is almost at the same level.

In total, 788.7 thousand tonnes of **hazardous waste** were disposed (34.9 % of total hazardous waste treatment). 22.1 % of hazardous waste was recovered (18.1 % in 2008). The remaining 43 % of hazardous waste was treated by other ways of waste treatment. Disposal (D1-D5) of hazardous waste recorded compared to 2008 decrease by 41.4 %. Table 9 gives the types of hazardous waste treatment in 2004 - 2009.

4. Consumption of wastes as secondary raw materials for producing selected products

The established consumption of **selected wastes as secondary raw materials for producing selected products** in observed enterprises (glassworks, metallurgical works, construction companies, etc., since 2004 including paper mills, cement mills and textile factories) was **3.6 million tonnes** in 2009, i.e. by 18.3 % more than in 2008. Table 13 shows for which selected products and in what amount was the waste used as a secondary raw material in 2003 - 2009.

5. Imports and exports of waste

Besides the information on generation and management of wastes, the survey also provides annual results about the cross-border movement of wastes. Exports and imports of waste have been monitored in the long term since 2004 according to basic categories of waste (hazardous and non-hazardous) and further from the perspective of the trade direction (within the EU, outside the EU).

According to the statistical waste survey, the **Czech Republic imported 350.5 thousand tonnes** of waste in 2009. Significant part of import was realized from the EU member states 348.5 thousand tonnes (99.4 %). It was predominantly metallic waste and metal alloy (group 17 and 19 Waste Catalogue), plastic and rubber waste. Beside waste originated from pulp, paper and paperboard manufacturing, discarded tyres, paper and paperboard wrapping and waste glass were also imported. Due to the fact that import of waste to the Czech Republic in order to disposal is not permitted, imported waste was recovered (57 % R-codes) or was treated by other types of waste treatment (N-codes).

In the observed year **export of waste** made up **1 540 thousand tonnes**, almost all (1 518 thousand tonnes) was exported to the EU member states (98.6 %). Compared to previous year amount of exported waste decreased by 17.7 %. Decrease of waste export copied decrease recorded in the waste import. The most exported waste was metallic waste, next packing paper and paperboard.

Explanatory notes

- no cases registered
- 0 figure smaller than a half of the unit of measure chosen
- i.d. confidential data