

## Commentary

In 2017 the **total amount of waste generated in the Czech Republic was 24.9 million tonnes** by the statistical survey Odp 5-01, which is carried out according to the Eurostat methodology. In comparison to 2016, when the waste generation reached 25.8 million tonnes, this means decreases by 3.2%. The hazardous waste generation accounted for 1 180 thousand tonnes, which expressed in the relative value means that the share of hazardous waste was 4.7% of the total amount of waste generated in 2017. Compared to 2016 generation of hazardous waste increased by 7.8%.

### 1. Waste generation by enterprises

**Activities of enterprises**, which are the main waste generators in the Czech Republic, **generated 20.9 million tonnes of waste** in 2017. The enterprises generated 1 167 thousand tonnes of the hazardous waste, which is almost the total production of the hazardous waste in the Czech Republic in that year (Table 1).

Higher waste generation was recorded in manufacturing (in comparison 2016 by 11%). This increase is caused by positive development of the Czech economy. On the contrary there was decrease, more than 1/4, by enterprises with energy activities (electricity, gas, steam and air conditioning supply). This dwindling was caused by waste ceased to be waste (some type of fly ash). Decrease of waste generation by enterprises was mainly affected by construction sector, by 1.2 million tonnes (by 11.4%) in these activities compared to 2016. The most significant decreased of waste generation was recorded in mining and quarrying activities (compared to previous year by 1/3), but the amount of waste was not so high. The decline of construction mixed waste caused reduction of waste generation in this sector.

The major portion (61%) of waste generated by enterprises of all activities in 2017 consisted of construction and demolition wastes as in the previous years, see Graph 3. In the reference year the generation of waste of Group 17 of the List of Waste was in total 12.7 million tonnes and was dominated by soil and stones, iron and steel, and concrete.

The statistical survey confirmed again that a vast majority of waste from enterprises (71%) is generated in activities of 345 waste generators. These are enterprises with the waste production volume more than 10 000 tonnes per year. Although these enterprises generated nearly 3/4 of the total amount of waste from enterprises, they represented only 2.6% of the whole population of entities generating this type of waste. Graph 12 shows the share of enterprises in the total waste generation by volume of the waste generated in the enterprise in 2017.

### 2. Waste generated on the territory of municipalities

According to the Decision 2011/753/EU municipal waste shall mean household waste and similar waste, its composition is comparable to household waste, excluding production waste and waste from agriculture and forestry. In methodological line with the Decision mentioned above, municipal waste includes all waste generated by activity of natural persons within the municipalities. It includes Group 20 of the List of Waste and waste generated by entities involved in municipal waste collection system, e. g. schools, offices and small traders and waste which is separately collected, Group 15 01 of the List of Waste.

Municipalities reported 4 million tonnes of waste generated in the reference year. Compared to 2016, the generation of waste from municipalities increase by 2.2%. From the standpoint of waste assignment to groups of the List of Waste they were almost exclusively waste of Group 20 – Municipal waste, which accounted for 90% (as in the previous year). Furthermore, municipalities reported construction and demolition waste (Group 17), waste from end-of-life vehicles (Group 16), and discarded electrical and electronic equipment and components (Group 16).

In 2017 the **municipal waste generation was 3.6 million tonnes (344 kg per capita)**. Out of that the major portion of 57% was the common collection of waste (waste from dustbins, containers, or waste bags), waste components collected separately (glass, paper, plastics) contributed by 15%, and bulky waste (carpets, furniture) accounted for 10%. The share of waste components collected separately in the total generation of municipal waste has been permanently growing since 2002. While in 2002 there were altogether separately collected 16 kg of plastics, glass, paper, and metals per capita, then, in 2017, it was 53 kg per capita. Being concrete, the generation of components collected separately per capita consisted of 16 kg of paper, 13 kg of glass, 13 kg of plastics, 3 kg of metals and 8 kg of other waste (see Table 6 and Graph 5 and 6).

### 3. Waste management

According to the European legislation (the Regulation of the European Parliament and Council No 2150/2002/EC on waste statistics) waste management distinguishes two groups of **waste management operations: recovery (R-codes) and disposal (D-codes)**. The amount of waste managed in the reference period is, as a rule, higher than the amount of waste generated during the same period. This is, first of all, due to waste imported from abroad and waste taken from storage. The indicator value is also increased because of multiple management operations and transfers to other persons.

In 2017 there were 35.1 million tonnes of waste managed in total. Out of that, **18.9 million tonnes were recovered**. 1.2 million tonnes of waste were used as a fuel, or for another energy recovery. 6.3 million tonnes of waste were used for backfilling (mostly excavated soil and construction and demolition waste Group 17 of the List of Waste). 11.5 million tonnes of waste were recovered (excluding energy recovery), from which 8.6 million tonnes were recycled and 518 thousand tonnes of biodegradable waste were used for composting.

In comparison to 2016 the amount of the energy recovery waste increased by 12.8% and composting by 8.4%. On the contrary there was year-to-year decrease of the backfilling by 5.2%.

In 2017 **3.6 million tonnes of waste were disposed** in total. The major part 3.5 million tonnes of waste were landfilled, it means year-to-year decrease by 7.5%. For more details, see Table 8.

### 4. Import and export of waste

Besides the information on the generation and treatment of waste, the survey also every year provides annual results on the cross-border movement of waste. Since 2004 export and import of waste have been long-term monitored by basic categories of waste (hazardous and non-hazardous) and, furthermore, from the view of the trade direction (within the EU, outside the EU).

In 2017 the **Czech Republic imported 2.3 million tonnes** of waste. A vast majority (98%) of import originated from the EU Member States. Compared to 2016, the import of waste rose by 5%.

In the reference period **exports of waste** amounted to **3.1 million tonnes** and almost all the exports were heading to some of the EU Member States (99%). Compared to 2016 export increased by 6%. The largest portion of export (42%) consisted of ferrous metals from construction (Group 17 by the List of Waste). 23 % represented waste from the mechanical waste treatment (Group 19), mainly treated ferrous metals, plastics, paper and cardboard. Other important export commodities were packaging waste, especially paper and cardboard (Group 15), see Graph 11.

### 5. Generation of secondary raw materials

Since 2011 the Czech Statistical Office has been monitoring the secondary raw material generation in the Czech Republic. The survey on secondary raw materials is selective as the most statistical surveys. For this reason, the possibility of connection with other fractional statistical surveys, e. g. industry, construction, energy industry, etc., is very complicated.

In 2017 the statistical survey revealed the **generation of secondary raw materials in the amount of 21.8 million tonnes**. Compared to 2016 the secondary raw material generation was almost the same, 21.6 million tonnes. These were, first of all, side products from energy industry (ash, slag, bottom ash), which comprised nearly half of the total generation of secondary raw materials. The amount of these materials was 10.3 million tonnes in 2017. The second significant share of secondary raw material generation was recorded in construction materials. Their generation was 4.8 million tonnes. Higher amount of generation was recorded for plastic (by 5.3%) and metals (by 6.7%) compared to 2016. Concrete values of the production of surveyed secondary raw materials can be found in Table 15 and in Graph 14.

### Explanatory notes

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

