# **Commentary**

It was found in the statistical survey Odp 5-01 that the **total amount of waste generated in the Czech Republic** was **26.9 million tonnes** in 2015. In comparison to 2014, when the waste generation reached 23.8 million tonnes, this means significant increase by 13%. The hazardous waste generation accounted for 1 131 thousand tonnes, which expressed in the relative value means that the share of hazardous waste was 4% of the total amount of waste generated in 2015. Compared to 2014 the amount of hazardous waste in the total share of waste generated decreased by 1%.

### 1. Waste generation by enterprises

Activities of enterprises, which are the main waste generators in the Czech Republic, generated 23.2 million tonnes of waste in 2015. In 2015 enterprises generated 1 116 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).

The major portion (24%) of waste was generated by enterprises of activities consisted of water supply, sewerage, waste treatment and remediation activities. In this area of the National economy, number of large enterprises won major contracts, which affected the total amount of the waste generation. Further, construction companies (by 20%) and companies focused on electricity, gas, steam and air conditioning supply (by 15%) significantly contributed to the increase of enterprises waste generation. Decrease of enterprises waste generation was recorded in companies dealing with agriculture, forestry and fishing, where some materials were no longer considered as waste and were recorded as secondary raw materials (i. e. bark, wood shaving, wood, etc.), in 2015. In comparison to the previous year, smaller amount of waste generation were recorded in companies dealing with transport and storage, decrease was 8% to compare year 2014. Significant decrease of waste generation to compare previous year was recorded in companies dealing with mining and quarrying. This was caused by higher waste generation which was not typical for this sector in 2014.

The major portion (67%) of waste generated by enterprises of all activities in 2015 consisted of construction and demolition wastes as in the previous years. In the reference year the generation of waste of Group 17 was in total 15 million tonnes and was dominated by soil and stones, iron and steel, and concrete. See Graph 3.

The statistical survey confirmed again that a vast majority of waste from enterprises (77%) is generated in activities of approximately 350 waste generators. These are enterprises with the waste production volume more than 10 000 tonnes per year. Although these enterprises generated 3/4 of the total amount of waste from enterprises, they represented only 2.8% 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 2015.

## 2. Waste generated on the territory of municipalities

According to the Decision 2011/753/EU municipal waste shall means 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 of the List of Waste.

Municipalities reported 3.7 million tonnes of waste generated in the reference year. Compared to 2014, the generation of waste from municipalities increase by 4%. From the standpoint of waste assignation to groups of the List of Waste they were almost exclusively waste of Group 20 – Municipal waste, which accounted for 90% (92% in 2014). 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).

From the long-term point of view the generation of municipal waste has been around 3 million tonnes per year. In 2015 the **generation of municipal waste was 3.3 million tonnes** (317 kg per capita). Out of that the major portion of 62% 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 9%. 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 2015, it was 46 kg per capita. Being concrete, the generation of components collected separately per capita consisted of 15 kg of paper, 11 kg of glass, 11 kg of plastics, 3 kg of metals and 6 kg of other waste (see Table 6 and 7 and Graph 5 - 8).

#### 3. Waste management

The Czech Republic legislation of waste management distinguishes three groups of **waste management operations** – **recovery** (R-codes), **disposal** (D-codes), and **other operations of waste treatment** (N-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.

Comparability of the summary values on the waste management is rather complicated. First of all, it must be realized, that during the whole period the survey on waste has been carried out, the number of other operations of waste management (N codes) has been gradually growing. These codes are outside of the European legislation framework.

In 2015 there were 34.2 million tonnes of waste managed in total. Out of that, 15 million tonnes (43.4%) were recovered, 5 million tonnes (13.3%) were disposed, and 15 million tonnes (43.4%) of waste were processed by other management operations. In comparison to 2014 the total amount of waste managed increased by 11%.

Positive direction is the increase of the amount of the recycling waste (R2-R6), from 6.9 million tonnes in 2014 to 8.5 million tonnes in 2015, it means increase by 23%. The amount of waste deposited into or onto land (D1-D5) was 3.5 million tonnes in 2015. It means increase by 2.4% in comparison 2014. The significant increase goes to processing of electrical waste. In 2015 in manufacturing ended 119 thousand tonnes electrical waste, which means increase by 18.6% compare to those in 2014.

## 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 2015 the **Czech Republic imported 1.8 million tonnes** of waste. A vast majority (98%) of import originated from the EU Member States. Compared to 2014 import of waste rose by 11% namely due to increased import of metallic waste from construction (Group 17) and from iron and steel industry (unprocessed slug). Other significant imported article was waste from the mechanical treatment of waste (Group 19), this is especially adjusted waste suitable for incineration (refuse derived fuel), wood, waste packaging of paper and cardboard, plastic and glass waste.

In the reference period **exports of waste** amounted to **2.6 million tonnes** and almost all the exports were heading to some of the EU Member States (94%). Compared to 2014 export decreased by 11%. The largest portion of export consisted of ferrous metals from construction (Group 17), from industrial activity (Group 12), from the mechanical waste treatment (Group 19) and metals from processing of end-of-life vehicles (Group 16). Other important export commodities were reworked glass (Group 19) and waste packaging paper and cardboard (Group 15).

# 5. Generation of secondary raw materials

In 2015 the statistical survey revealed the **generation of secondary raw materials in the amount of 20.4 million tonnes**. These were, first of all, side products from energy industry, which comprised nearly half of the total generation of secondary raw materials. Furthermore, secondary raw materials were produced from ferrous and non-ferrous metals (16.4%) and building materials (24%). Concrete values of the production of surveyed secondary raw materials can be found in Table 13 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. individual data

