29 November 2018

Other environmental accounts: Waste accounts Year 2016

The Spanish economy generated 129.0 million tonnes of waste in 2016, 0.1% less than the previous year

The final treatment of waste was reduced by 1.0% reaching 106.7 million tonnes

37.1% of treated waste was destined for recycling

Generation of waste in the Spanish economy¹

The Spanish economy generated 129.0 million tonnes of waste in 2016, 0.1% less than the previous year. Of these, 3.2 million corresponded to hazardous waste (5.8% less than in 2015) and 125.8 million to non-hazardous waste (a figure similar to that of the previous year).

Waste generated by type of waste². Year 2016 Unit: thousand tonnes

| | Total | Annual rate | Non- hazardous | Annual rate | Hazardous | Annual rate |
|---------------------|-----------|----------------|-------------------|-------------|-----------|-------------|
| Waste generated | 128,958.5 | -0.1 | 125,774.7 | 0.0 | 3,183.8 | -5.8 |
| Mineral | 67,033.0 | 1.2 | 66,424.7 | 1.3 | 608.3 | -5.4 |
| Mixed waste | 34,906.6 | 0.8 | 34,828.2 | 0.8 | 78.4 | 9.0 |
| Animal and vegetal | 9,135.7 | -1.5 | 9,135.7 | -1.5 | | |
| Metallic | 5,699.6 | -15.0 | 5,699.6 | -15.0 | | |
| Paper and cardboard | 3,531.1 | 1.2 | 3,531.1 | 1.2 | | |
| Chemical | 2,462.5 | -4.1 | 988.1 | -6.7 | 1,474.4 | -2.3 |
| Common sludge | 1,458.2 | -1.0 | 1,458.2 | -1.0 | | |
| Discarded equipment | 1,203.9 | -2.9 | 253.5 | 63.8 | 950.4 | -12.4 |
| Glass | 1,174.2 | 2.9 | 1,173.9 | 2.9 | 0.3 | 12.2 |
| Wood | 1,069.6 | -7.2 | 1,068.1 | -7.2 | 1.5 | 1.4 |
| Plastic | 731.1 | 9.2 | 731.1 | 9.2 | | ** |
| Others | 553.0 | 1.0 | 482.5 | 0.6 | 70.5 | 4.3 |

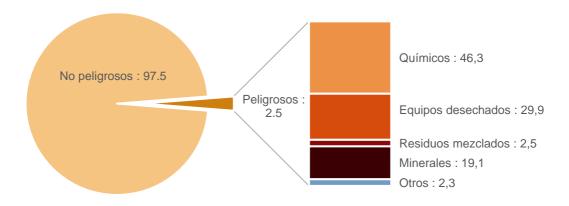
¹ A greater detail of the waste generated in the urban sphere can be consulted in the press release of the Statistics on the Collection and Treatment of Waste published today by the INE.

² The symbol ".." indicates the categories of waste not covered by Regulation (EC) No 2150/2002.

The most relevant categories of waste generated were *Mineral wastes* (67.0 million tonnes), *Mixed wastes* (34.9 million tonnes) and *Animal and vegetal wastes* (9.1 million tonnes).

In 2016, 97.5% of the waste generated was non-hazardous waste and 2.5% was hazardous waste. Of the total hazardous waste generated, 46.3% corresponded to *Chemical wastes*, 29.9% to *Discarded equipment* and 19.1% to *Mineral wastes*.

Waste generated in the Spanish economy (percentage). Year 2016



Generation of waste by activity sectors and households

83.2% of waste generated in 2016 corresponded to the *Economic Sectors* and 16.8% to *Households*.

The activities that experienced the greatest increases with respect to 2015 were *Agriculture, livestock, forestry and fishing* (1.7% more) and *Services* (1.4%). In turn, waste generation decreased by 6.8% in *Water supply; sewerage, waste management and remediation activities*.

On the other hand, *Households* as consumers generated 4.5% more waste.

Waste generated by activity sectors and households. Year 2016 Unit: thousand tonnes

| | Total | variation rate | Non hazardous | variation rate | Hazardou s | variation rate |
|---|-----------|-------------------|------------------|-------------------|---------------|----------------|
| Total | 128,958.5 | -0.1 | 125,774.7 | 0.0 | 3,183.8 | -5.8 |
| Agriculture, livestock breeding, forestry and fishing | 6,271.5 | 1.7 | 6,243.8 | 1.6 | 27.7 | 7.8 |
| Industry (Including mining and energy production) | 38,442.6 | 1.1 | 37,073.8 | 1.1 | 1,368.8 | -0.3 |
| Water supply; sewerage, waste management and remediation activities | 20,148.2 | -6.8 | 19,585.5 | -6.7 | 562.7 | -9.8 |
| Construction | 35,827.9 | -0.6 | 35,748.8 | -0.6 | 79.1 | 0.6 |
| Services | 6,578.9 | 1.4 | 5,458.9 | 4.0 | 1,120.0 | -9.7 |
| Households | 21,689.4 | 4.5 | 21,663.9 | 4.6 | 25.5 | 32.4 |

By type of waste, those generated by *Households* with the greatest weight were *Mixed waste* (86.4% of the total), *Paper and Cardboard* (4.7%) and *Glass* (3.7%).

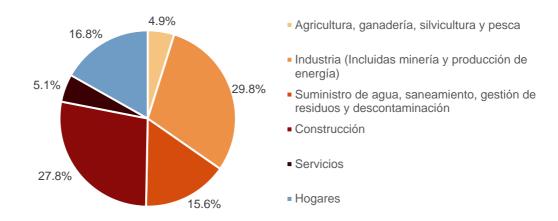
On the other hand, the main wastes generated by the *Economic Sectors* were *Mineral wastes* (62.1% of the total) and *Mixed wastes* (15.1%).

Types of wastes generated by activity sectors and households. Year 2016 Unit: thousand tonnes

| | Total | % | Economic sectors | % | Households | % |
|---------------------|-----------|------|------------------|------|------------|------|
| Waste generated | 128,958.5 | 100 | 107,269.1 | 100 | 21,689.4 | 100 |
| Mineral | 67,033.0 | 52.1 | 66,737.9 | 62.1 | 295.1 | 1.4 |
| Mixed waste | 34,906.6 | 27.1 | 16,155.8 | 15.1 | 18,750.8 | 86.4 |
| Animal and vegetal | 9,135.7 | 7.1 | 8,538.8 | 8.0 | 597.0 | 2.8 |
| Metallic | 5,699.6 | 4.4 | 5,679.2 | 5.3 | 20.4 | 0.1 |
| Paper and cardboard | 3,531.1 | 2.7 | 2,510.0 | 2.3 | 1,021.2 | 4.7 |
| Chemical | 2,462.5 | 1.9 | 2,458.3 | 2.3 | 4.2 | 0.0 |
| Common sludge | 1,458.2 | 1.1 | 1,458.2 | 1.4 | | |
| Discarded equipment | 1,203.9 | 0.9 | 1,155.9 | 1.1 | 48.0 | 0.2 |
| Glass | 1,174.2 | 0.9 | 376.3 | 0.4 | 797.9 | 3.7 |
| Wood | 1,069.6 | 0.8 | 974.5 | 0.9 | 95.1 | 0.4 |
| Plastics | 731.1 | 0.6 | 705.9 | 0.7 | 25.1 | 0.1 |
| Others | 553.0 | 0.4 | 518.3 | 0.4 | 34.6 | 0.2 |

The activities that generated the greatest amount of waste in 2016 were *Industry* (29.8% of the total) and *Construction* (27.8%).

Waste generated by activity sectors and households (percentage). Year 2016



Types of wastes generated by activity sectors. Year 2016

Unit: thousand tonnes

| | Total sectors | Agriculture, livestock breeding, forestry and fishing | Industry (Including mining and energy production) | Water supply; sewerage, waste management and remediation activities | Construction | Services |
|---------------------|------------------|---|---|---|--------------|----------|
| Waste generated | 107,269.1 | 6,271.5 | 38,442.6 | 20,148.2 | 35,827.9 | 6,579.0 |
| Minerals | 66,737.8 | 12.8 | 29,718.2 | 1,441.7 | 35,412.9 | 152.2 |
| Mixed waste | 16,155.8 | 390.9 | 1,115.7 | 13,511.0 | 27.4 | 1,110.7 |
| Animal and vegetal | 8,538.8 | 5,730.1 | 1,528.6 | 12.4 | 12.3 | 1,255.4 |
| Metallic | 5,679.2 | 8.9 | 1,954.4 | 3,061.3 | 132.7 | 522.0 |
| Chemical | 2,458.3 | 32.1 | 1,823.5 | 412.6 | 9.1 | 180.9 |
| Paper and cardboard | 2,510.0 | 14.2 | 916.0 | 237.4 | 35.3 | 1,307.0 |
| Common sludge | 1,458.2 | 5.0 | 304.8 | 1,138.6 | 2.1 | 7.8 |
| Discarded equipment | 1,155.9 | 7.6 | 27.6 | 89.4 | 5.3 | 1,026.0 |
| Wood | 974.5 | 19.9 | 586.7 | 45.0 | 141.6 | 181.5 |
| Plastic | 705.9 | 38.5 | 260.8 | 149.6 | 39.7 | 217.3 |
| Others | 518.3 | 10.2 | 82.4 | 8.5 | 0.5 | 416.8 |
| Glass | 376.3 | 1.2 | 123.9 | 40.8 | 9.1 | 201.3 |

By sectors, *Mineral wastes* were mainly originated by *Construction* (35.4 million tonnes) and *Industry* (29.7 million). And *Mixed wastes* by *Water supply; sewerage, waste management and remediation activities* (13.5 million).

On the other hand, *Animal and vegetal wastes* were generated mostly by *Agriculture, livestock, forestry and fishing* (5.7 million tonnes).

Final waste treatment in the Spanish economy

Waste treatment companies³ managed 106.7 million tonnes of waste in 2016, 1.0% less than the previous year.

Specifically, they treated 104.6 million tonnes of non-hazardous waste (0.9% less than in 2015) and 2.1 million tonnes of hazardous waste (7% less).

Final waste treatment Year 2016

Unit: thousand tonnes

| Treated waste (by type of management) | Quantity | Annual rate | |
|---------------------------------------|-----------|-------------|--|
| Total waste managed | 106,715.3 | -1.0 | |
| Non-hazardous | 104,596.8 | -0.9 | |
| Hazardous | 2,118.5 | -7.0 | |
| Recycling | 39,581.4 | -4.1 | |
| Non-hazardous | 38,011.2 | -4.3 | |
| Hazardous | 1,570.2 | 1.8 | |
| Disposal | 57,250.6 | 6.9 | |
| Non-hazardous | 56,851.5 | 7.3 | |
| Hazardous | 399.1 | -29.6 | |
| Incineration | 3,842.7 | 5.1 | |
| Non-hazardous | 3,693.5 | 5.9 | |
| Hazardous | 149.2 | -10.8 | |
| Backfilling operations | 6,040.6 | -34.8 | |
| Non-hazardous | 6,040.6 | -34.8 | |
| Hazardous | 0.0 | | |

Of the total waste treated, 53.7% ended up in landfill, 37.1% was recycled, 5.7% was reused in backfilling operations and 3.5% was incinerated.

Final waste treatment (percentage). Year 2016



³ Only final treatments are included.

In 2016, 39.6 million tonnes of waste were recycled, 4.1% less than in 2015. 40.8% of this figure corresponded to *Mineral wastes* (40.8%), 23.0% to *Metallic wastes*, and 10.3% to *Paper and cardboard*.

Recycled wastes showing the highest growth rates in 2016 were *Discarded equipment* (16.8%) and *Plastics* (12.3%). In turn, *Metallic wastes* decreased by 17.9% compared to 2015.

Recycling by waste category. Year 2016

Unit: thousand tonnes

| Recycled waste (by type) | Recycling | % | Annual rate | |
|--------------------------|-----------|-------|-------------|--|
| TOTAL | 39,581.4 | 100.0 | -4.1 | |
| Mineral | 16,175.0 | 40.8 | 4.2 | |
| Metallic | 9,089.5 | 23.0 | -17.9 | |
| Paper and cardboard | 4,071.2 | 10.3 | -0.1 | |
| Mixed waste | 3,027.2 | 7.6 | -8.6 | |
| Animal and vegetal | 1,620.9 | 4.1 | -7.3 | |
| Chemical | 1,223.4 | 3.1 | 0.9 | |
| Common sludge | 1,136.5 | 2.9 | -2.3 | |
| Glass | 991.9 | 2.5 | 4.6 | |
| Wood | 977.5 | 2.5 | -6.5 | |
| Plastic | 594.8 | 1.5 | 12.3 | |
| Discarded equipment | 496.4 | 1.3 | 16.8 | |
| Others | 177.1 | 0.4 | -21.7 | |

Review and update of data

The data published today are provisional and will be revised when the data for 2017 are released. The results are available at INEBase.

Methodological note

The Environmental Accounts (EA) is a synthesis statistical operation whose general objective is to integrate environmental information in a coherent way into the central system of National Accounts, following the methodology of the System of Environmental-Economic Accounting (SEEA) developed by the United Nations, which constitutes the conceptual framework of the EA.

The Waste Accounts are useful for organising information on the generation of waste and the management of its flows to recycling facilities, backfilling operations, incineration and controlled landfills. From this information, important indicators can be obtained to measure the pressure that the economy exerts on the environment. They also make it possible to monitor the objectives of waste reduction policies and evaluate improvements in management for the recovery of materials.

The study of waste includes the generation and treatment of waste in accordance with the guidelines established in Regulation (EC) 2150/2002 of the European Parliament and of the Council of 25 November on waste statistics, as amended by Regulation (EU) 849/2010.

The INE annually carries out the Statistics on Generation, Collection and Treatment of Waste with the aim of quantifying the origin and treatment thereof. This information, together with information from other bodies, mainly that provided by the Ministry of Ecological Transition, provides the basis for the preparation of the Waste Accounts.

For more information you can access the methodology at:

http://www.ine.es

And the standardised methodological report at:

http://www.ine.es/dvnt3/metadatos/en/RespuestaDatos.htm?oe=30087

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Press office: Telephone numbers: (+34) 91 583 93 63 /94 08 – gprensa@ine.es Information Area: Telephone number: (+34) 91 583 91 00 – www.ine.es/infoine/?L=1