

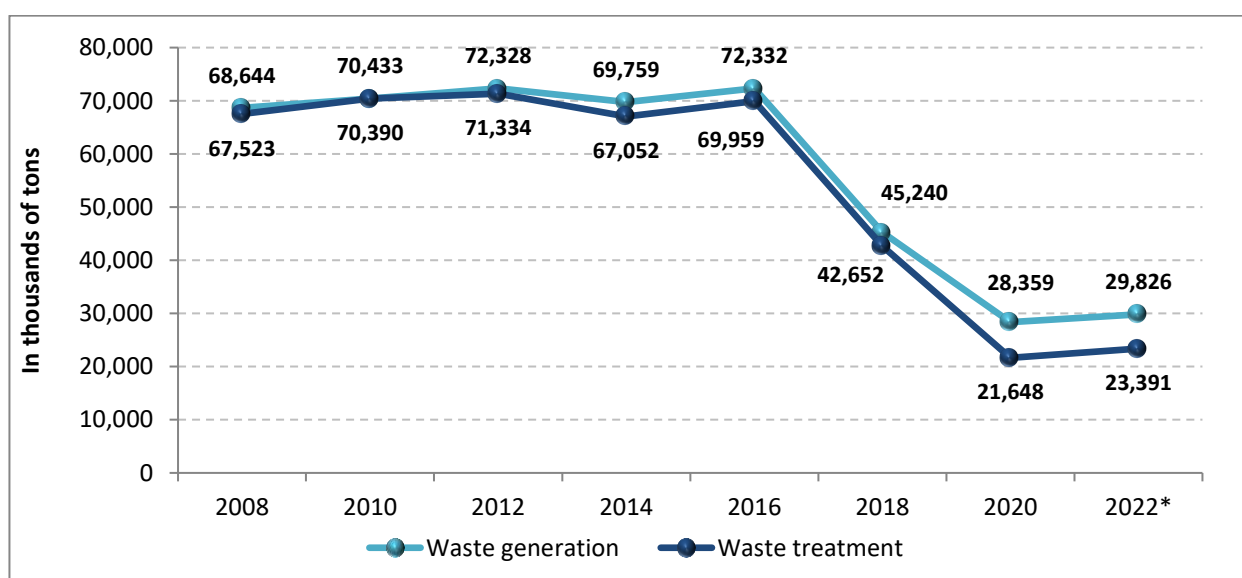


ANNOUNCEMENT WASTE STATISTICS: 2022

The Hellenic Statistical Authority (ELSTAT) announces the provisional data on the generation and treatment of waste for the year 2022, which are collected from administrative sources. During the reference year of 2022, the following are noticed:

- Waste generation amounted to 29,826,465 tons and increased by 5.2% compared to 2020. Respectively, waste treatment amounted to 23,391,272 tons and increased by 8.1% compared to 2020 (Table 1, Table 4, Graph 1).
- Regarding the categories of waste generated, "Mining and other waste activities" and "Municipal solid waste" account for 66.1% and 20.6% of total waste generated, respectively (Table 2, Graph 2).
- Concerning the generation of waste by sections of the statistical classification of economic activities (NACE Rev. 2) and households, "Construction" account for 33.5 % of the total generated waste, "Manufacturing" account for 14.5%, "Water supply, sewerage, waste management and remediation activities" account for 13.5% and "Households" account for 13.4% (Table 3, Graph 3).
- Regarding waste treatment by type of treatment, "Disposal - Landfill" accounts for 50% of the total treated waste, while "Recovery other than energy recovery - Recycling" account for 34.7% (Table 5, Graph 4).
- Regarding waste treatment by category of waste, "Mining and other waste activities" amounted to 15,660,548 tons and account for 67% of the total treated waste, while "Municipal waste" amounted to 4,540,816 tons and account for 19.4% of the total treated waste (Table 6, Graph 5).

Graph 1: Evolution of waste generation and treatment 2008-2022



*Provisional data for year 2022

Information on methodological issues:

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Table 1: Generation of solid waste, by main waste category, 2008-2022

In tons

| Year | Chemical and Medical waste | Recyclable waste | Municipal waste | Sludge | Mining and other activities waste | Total | Percentage% change |
|-------|----------------------------|------------------|-----------------|---------|-----------------------------------|------------|--------------------|
| 2008 | 171,796 | 3,913,450 | 5,159,916 | 158,732 | 59,240,070 | 68,643,964 | 33.7% |
| 2010 | 202,070 | 2,849,335 | 5,922,904 | 117,789 | 61,340,607 | 70,432,705 | 2.6% |
| 2012 | 174,524 | 2,193,687 | 5,547,016 | 109,274 | 64,303,779 | 72,328,280 | 2.7% |
| 2014 | 251,623 | 1,313,524 | 7,495,065 | 138,035 | 60,560,621 | 69,758,868 | -3.6% |
| 2016 | 474,508 | 2,329,179 | 5,483,633 | 116,977 | 63,928,056 | 72,332,353 | 3.7% |
| 2018 | 846,129 | 2,816,572 | 5,319,260 | 120,663 | 36,137,709 | 45,240,333 | -37.5% |
| 2020 | 875,403 | 1,998,297 | 6,056,479 | 159,379 | 19,269,338 | 28,358,897 | -37.3% |
| 2022* | 1,185,668 | 2,436,593 | 6,158,662 | 340,927 | 19,704,615 | 29,826,465 | 5.2% |

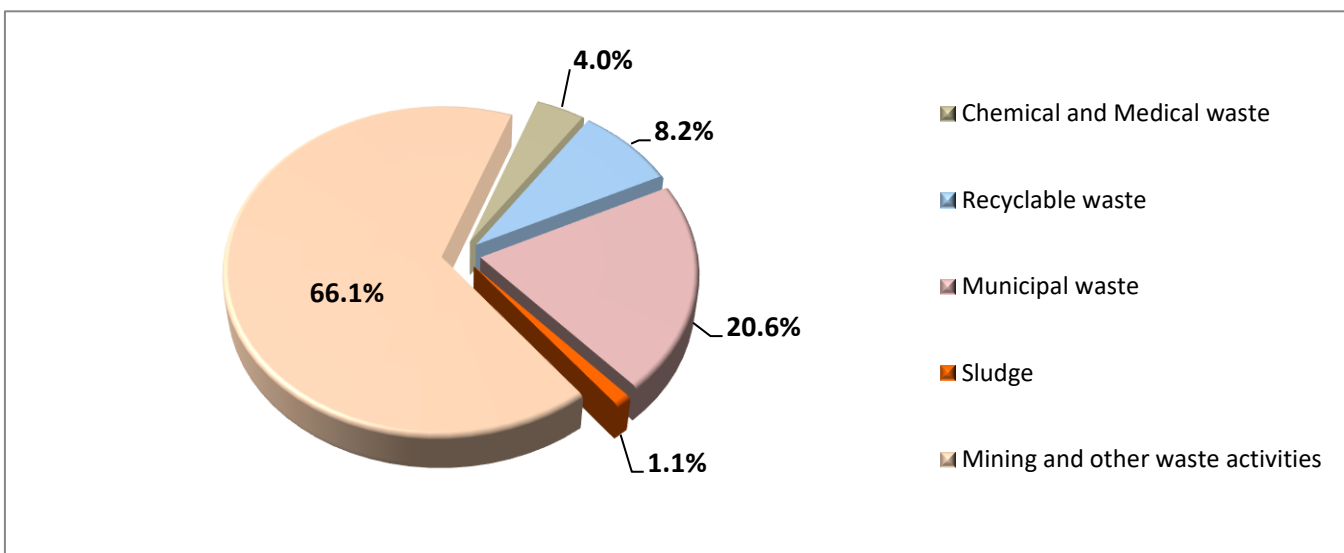
*Provisional data

Table 2: Percentage (%) distribution of waste generation, by main waste category, 2008- 2022

| Year | Chemical and Medical waste | Recyclable waste | Municipal waste | Sludge | Mining and other waste activities | Total |
|-------|----------------------------|------------------|-----------------|--------|-----------------------------------|-------|
| 2008 | 0.3 | 5.7 | 7.5 | 0.2 | 86.3 | 100.0 |
| 2010 | 0.3 | 4.0 | 8.4 | 0.2 | 87.1 | 100.0 |
| 2012 | 0.2 | 3.0 | 7.7 | 0.2 | 88.9 | 100.0 |
| 2014 | 0.4 | 1.9 | 10.7 | 0.2 | 86.8 | 100.0 |
| 2016 | 0.7 | 3.2 | 7.6 | 0.2 | 88.4 | 100.0 |
| 2018 | 1.9 | 6.2 | 11.8 | 0.3 | 79.9 | 100.0 |
| 2020 | 3.1 | 7.0 | 21.4 | 0.6 | 67.9 | 100.0 |
| 2022* | 4.0 | 8.2 | 20.6 | 1.1 | 66.1 | 100.0 |

* Provisional data

Graph 2: Percentage (%) distribution of waste generation, by main waste category, 2022*



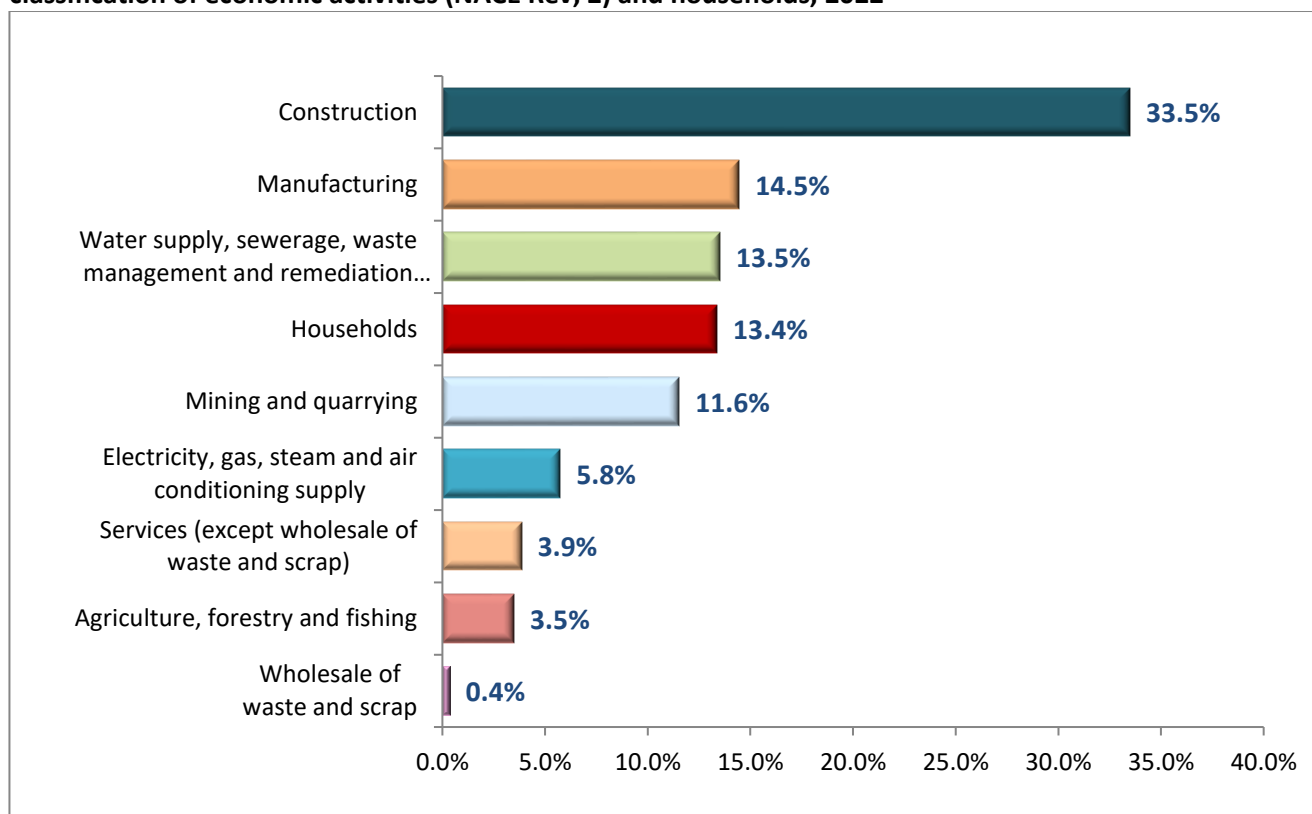
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Table 3: Waste generation by sections of the Statistical Classification of Economic Activities (NACE Rev, 2) and households, 2022*

| Economic activity | Total waste (in tons) | Percentage distribution |
|---|-----------------------|-------------------------|
| Agriculture, forestry and fishing | 1,048,826 | 3.5% |
| Mining and quarrying | 3,446,304 | 11.6% |
| Manufacturing | 4,317,212 | 14.5% |
| Electricity, gas, steam and air conditioning supply | 1,718,617 | 5.8% |
| Water supply, sewerage, waste management and remediation activities | 4,036,929 | 13.5% |
| Construction | 9,992,997 | 33.5% |
| Services (except wholesale of waste and scrap) | 1,157,828 | 3.9% |
| Wholesale of waste and scrap | 112,269 | 0.4% |
| Households | 3,995,483 | 13.4% |
| Total | 29,826,465 | 100.0% |

* Provisional data

Graph 3: Percentage (%) distribution of Waste generation by main sections of the statistical classification of economic activities (NACE Rev, 2) and households, 2022*



* Provisional data

Table 4: Waste treatment by type of treatment and hazardousness, 2022*

In tons

| | Incineration | | Recovery other than energy recovery | | Disposal | | Total |
|---------------|-----------------|--------------|-------------------------------------|------------------|-------------------|--|-------------------|
| | Energy recovery | Disposal | Recycling | Backfilling | Landfill | Other (land treatment and release into water bodies) | |
| Non-hazardous | 676,489 | 3,545 | 7,571,104 | 2,850,000 | 11,616,159 | 64 | 22,717,360 |
| Hazardous | 29,894 | 4,059 | 556,647 | 0 | 83,313 | 0 | 673,912 |
| Total | 706,383 | 7,604 | 8,127,750 | 2,850,000 | 11,699,471 | 64 | 23,391,272 |

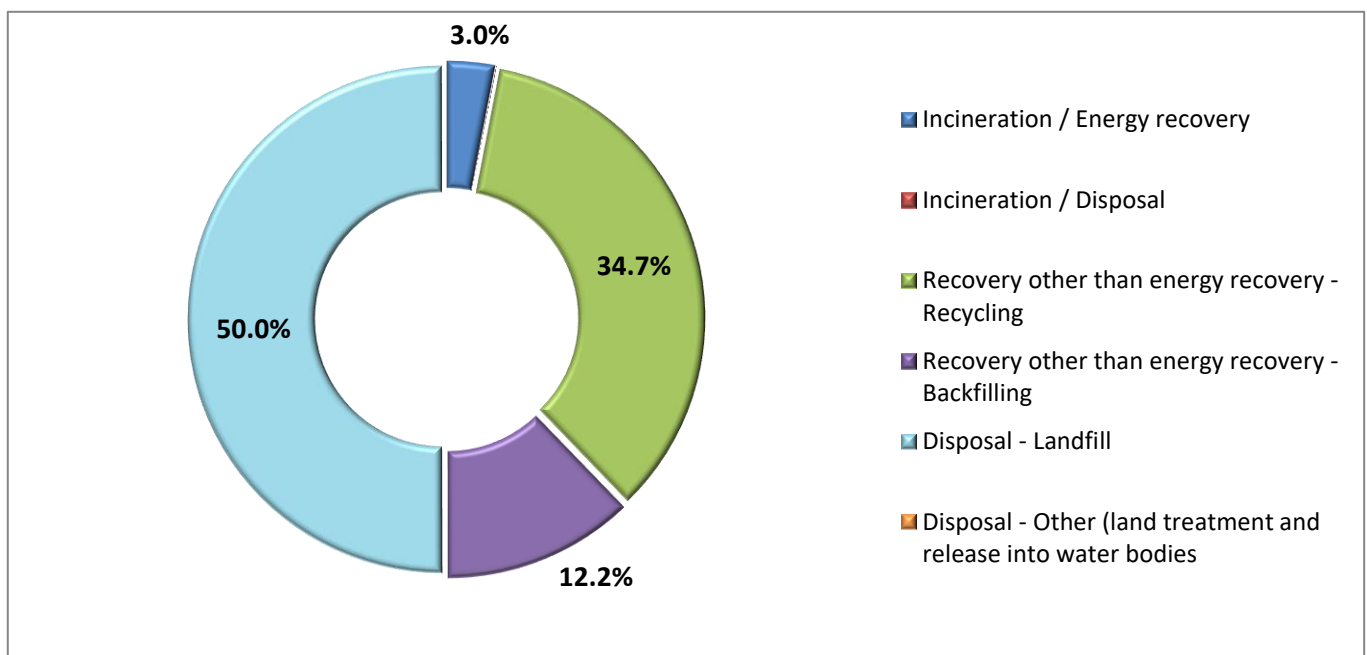
* Provisional data

Table 5: Percentage (%) distribution of waste treatment by type of treatment and hazardousness, 2022*

| | Incineration | | Recovery other than energy recovery | | Disposal | | Total |
|---------------|-----------------|-------------|-------------------------------------|--------------|--------------|--|---------------|
| | Energy recovery | Disposal | Recycling | Backfilling | Landfill | Other (land treatment and release into water bodies) | |
| Non-hazardous | 3.0% | 0.0% | 33.3% | 12.5% | 51.1% | 0.0% | 100.0% |
| Hazardous | 4.4% | 0.6% | 82.6% | 0.0% | 12.4% | 0.0% | 100.0% |
| Total | 3.0% | 0.0% | 34.7% | 12.2% | 50.0% | 0.0% | 100.0% |

* Provisional data

Graph 4: Percentage (%) distribution of waste treatment by type of treatment, 2022*



* Provisional data

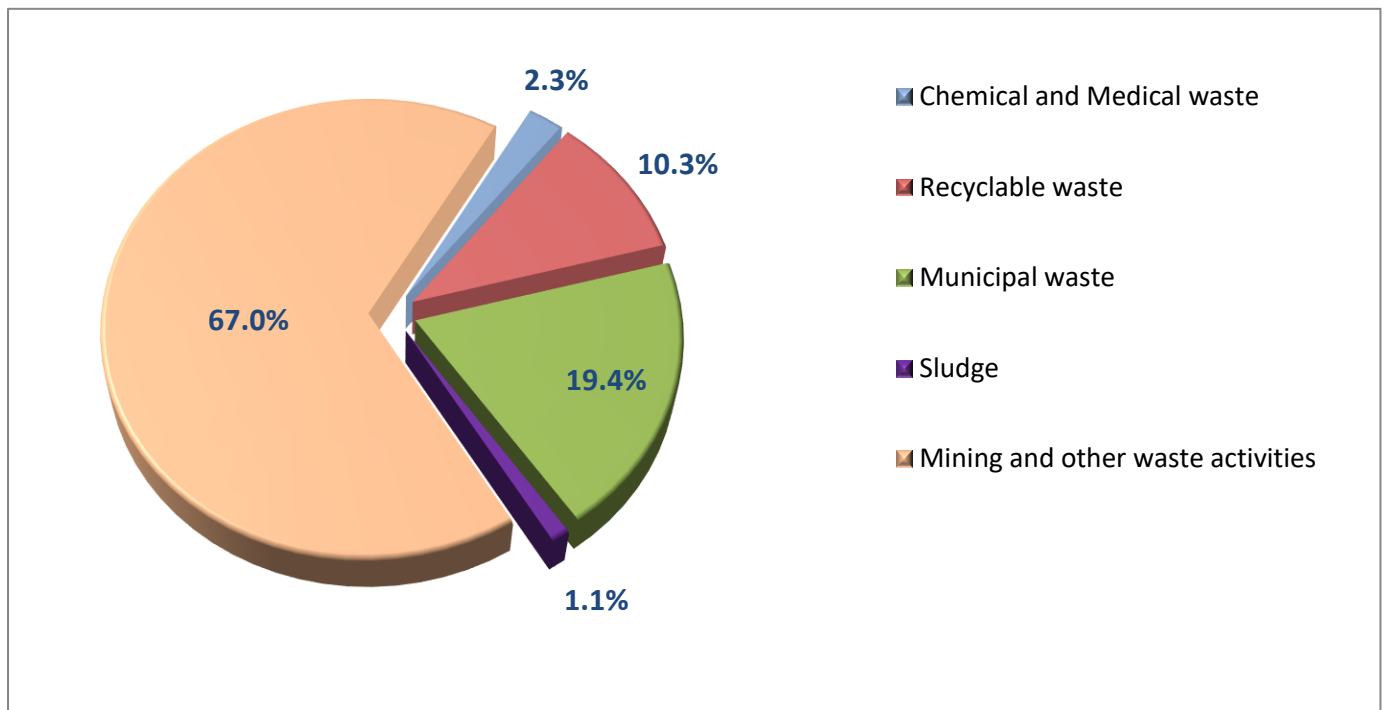
Table 6: Waste treatment by treatment category and type of waste, 2022*

In tons

| | Incineration | Recovery other than energy Recovery | Disposal | Total | Percentage (%) Distribution |
|--|--------------|-------------------------------------|------------|------------|-----------------------------|
| Chemical and Medical waste | 8,697 | 514,142 | 11,654 | 534,494 | 2.3% |
| Recyclable waste | 22,903 | 2,375,878 | 5,093 | 2,403,874 | 10.3% |
| Municipal waste | 238,751 | 108,602 | 4,193,463 | 4,540,816 | 19.4% |
| Sludge | 57,825 | 163,506 | 30,209 | 251,540 | 1.1% |
| Mining and other Activities waste | 385,811 | 7,815,622 | 7,459,116 | 15,660,548 | 67.0% |
| Total | 713,986 | 10,977,750 | 11,699,535 | 23,391,272 | 100.0% |

* Provisional data

Graph 5: Percentage (%) distribution of Waste treatment by type of waste, 2022*



* Provisional data

EXPLANATION NOTES

Legal Framework: Waste Statistics are compiled every second year, based on Regulation (EC) No 2150/2002 of the European Parliament and of the Council, as amended by Commission Regulation (EU) No 849/2010.

Methodology: Primary data on production and treatment of waste are collected mainly through administrative data provided to ELSTAT. The main administrative sources of waste statistics are: a) Electronic Waste Register (EWR): an electronic service provided by the Ministry of Environment and Energy that maintains the electronic register of the obligated bodies (Companies and Organizations), followed by the declaration of the waste they manage, b) Alternative Treatment System (ATS), approved by the Hellenic Recycling Agency (HRA) : Data collection relative to special streams of wastes such as Waste electrical and electronic equipment (WEEE), End-of-life vehicles (ELV), accumulators, etc., c) Municipal Waste Statistics compiled by Ministry of Environment and Energy, d) Data on generation and treatment of mineral wastes provided by the Greek Mineral Enterprises Association e) Other administrative data for certain remaining waste categories.
Possible small deviations in sums are due to rounding.

Concepts and Definitions: Waste generation and treatment statistics include the following categories of waste:

1. Chemical and medical waste: this category includes chemical wastes, used oils, spent solvents, sludges and solid residues from industrial wastewater treatment, sludges and liquid wastes from waste treatment, health care and biological wastes.
2. Recyclable waste: this category includes any kind of waste that can be recycled, such as metals, glass, paper, wood, plastic, discarded electronic equipment and electrical appliances, car batteries, used tires and other similar materials.
3. Solid municipal waste: this category includes household and similar wastes such as mixed municipal waste, bulky waste, street cleaning waste, kitchen waste, etc. They originate mainly from households but can also be generated by all economic activities as consumption residues. This category also includes mixed and undifferentiated materials and sorting residues.
4. Sludges: this category includes common sludges, which are wastewater treatment sludges from municipal sewerage water and organic sludges from food preparation and processing. They mainly originate from households and industrial branches with organic wastewater (mainly pulp and paper as well as food preparation and processing). All common sludges are non-hazardous.
5. Mining and other waste activities: this category includes wastes from mining activities, construction and demolition wastes, dredging spoils, as well as animal and plant residues commonly used as soil conditioners, and animal by-products covered by Regulation (EC) No 1069/2009 of the European Council and Parliament.

Types of waste treatment are included in Waste framework Directive 2008/98/ (EC), as amended by Directive 2018/851 (EU) of the European Parliament and of the Council and Law 4042/2012 - Government Gazette 24/A/13-2-2012.

References: More information on waste statistics can be found on the website of the Hellenic Statistical Authority (www.statistics.gr) at the link: <http://www.statistics.gr/en/statistics/-/publication/SOP06/->