

7 October 2013

Collection and Treatment of Waste Survey
Survey over generation of waste in Services and Construction
Year 2011

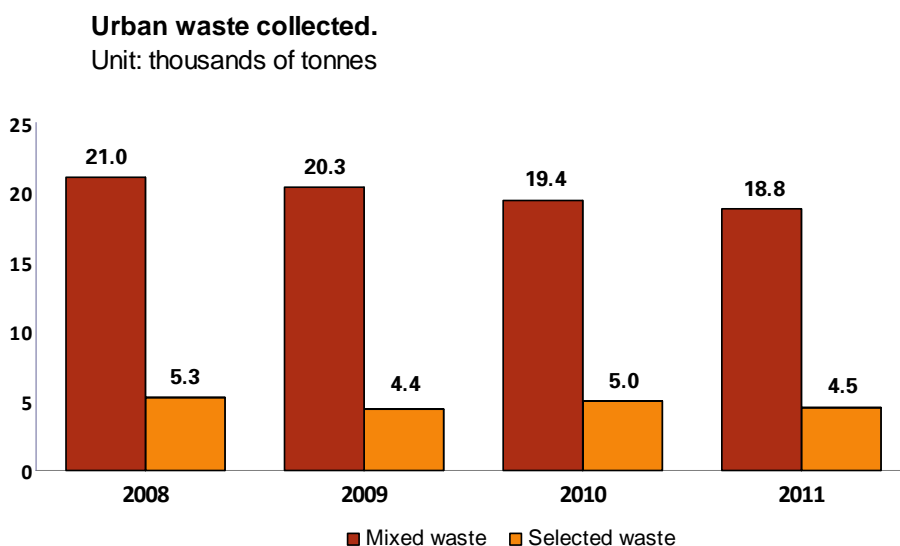
**23.3 million tonnes of urban waste are collected in 2011, that is,
4.5% less than in 2010**

**The final treatment of hazardous waste reaches 2.5 million tonnes,
0.7% less than the previous year**

**Services activities generated 7.9 million tonnes of waste and the
Construction sector did so by 32.7 million**

Urban waste collection

Urban waste management companies collected 23.3 million tonnes of waste in the year 2011, that is, 4.5% less than the previous year. Of this amount, 18.8 million tonnes corresponded to mixed waste and 4.5 millions to selected collection waste.



The main selected waste collection corresponded to Paper and cardboard (28,1%), Animal and plant (20,6%) and Glass (16,3%).

Selected urban waste collection. Year 2011

Unit: thousand of tonnes (Tn)

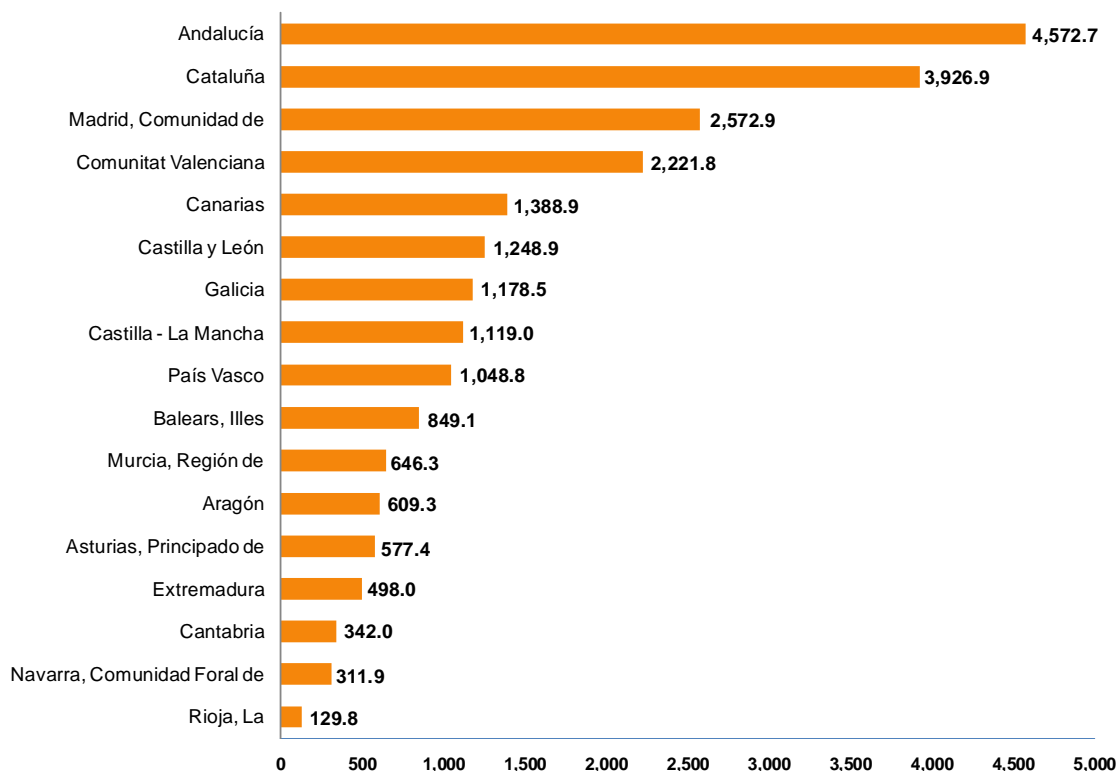
Selected waste collection	Quantity	% of the total
Total	4,508.4	100.0
Paper and cardboard	1,266.4	28.1
Animales and plant	930.5	20.6
Glass	733.7	16.3
Mixed containers and packaging	654.0	14.5
Other	609.6	13.5
Wood	127.5	2.8
Plastic	104.7	2.3
Metal	43.4	1.0
Electronic equipment	29.3	0.7
Textile	7.7	0.2
Batteries and accumulators	1.6	0.0

Results by Autonomous Community

Andalucía was the Autonomous Community that collected the most part of urban waste in 2011, with 4.6 million tonnes, followed by Cataluña, with 3.9 millions.

Collection of urban waste by Autonomous Community

Unit: thousand of tonnes



Regarding the separate waste collection, Cataluña was the Autonomous Community that collected the highest amount of *Paper and cardboard* (408.5 thousand of tonnes) and *Glass* (180.7 thousands). In turn, Comunidad de Madrid collected the highest amount of *Mixed packaging* (138.1 thousand of tonnes).

Urban waste collection by Autonomous Community. Year 2011
thousand of tonnes (Tn)

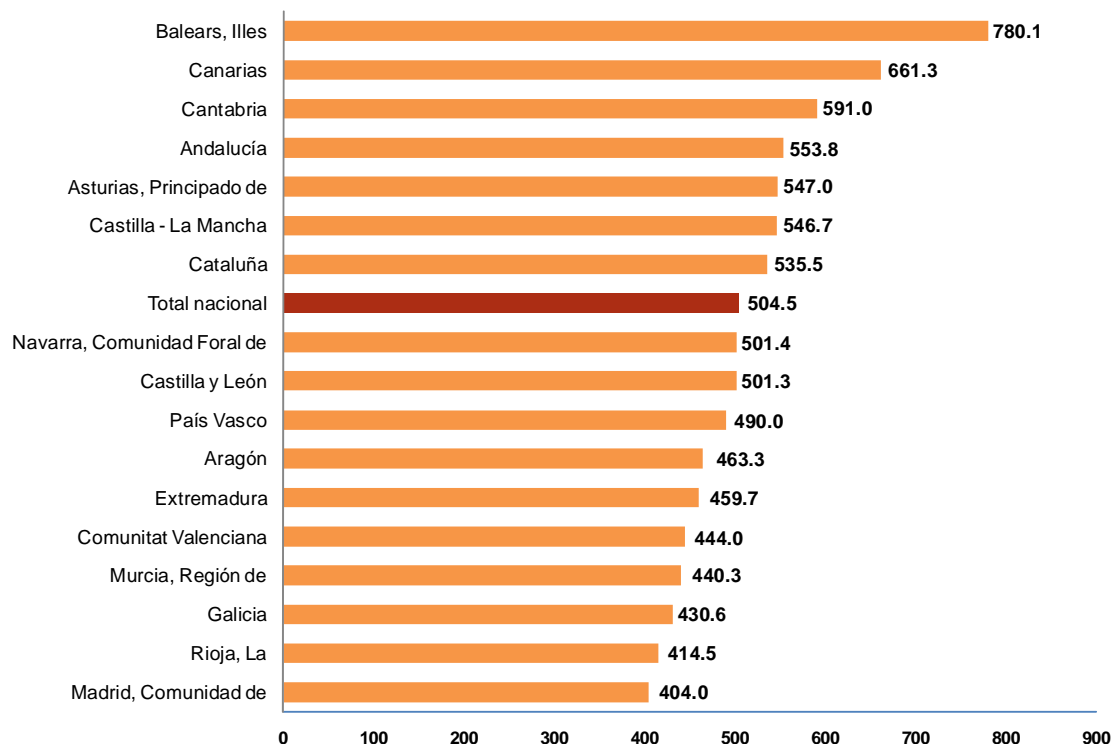
Unit:

	Mixed waste	Glass	Paper and cardboard	Mixed packaging	Total waste
National Total¹	18,773.6	733.7	1,266.4	654.0	23,282.0
Andalucía	3,948.3	74.8	118.2	136.1	4,572.7
Aragón	492.3	23.2	32.0	13.8	609.3
Asturias, Principado de	434.8	33.8	67.3	10.3	577.4
Balears, Illes	739.5	22.3	25.2	23.7	849.1
Canarias	1,181.4	29.0	34.0	14.8	1,388.9
Cantabria	274.2	10.4	13.4	5.1	342.0
Castilla y León	997.1	41.7	55.8	21.0	1,248.9
Castilla - La Mancha	1,021.9	21.3	30.7	17.8	1,119.0
Cataluña	2,626.2	180.7	408.5	127.7	3,926.9
Comunitat Valenciana	1,896.8	74.4	66.7	41.8	2,221.8
Extremadura	457.3	7.5	16.3	10.1	498.0
Galicia	1,005.0	36.4	38.2	22.2	1,178.5
Madrid, Comunidad de	2,093.1	82.7	136.2	138.1	2,572.9
Murcia, Región de	579.4	18.8	18.8	13.5	646.3
Navarra, Comunidad Foral de	189.9	16.2	25.9	22.4	311.9
País Vasco	692.0	54.2	165.2	30.8	1,048.8
Rioja, La	110.5	5.9	8.6	4.8	129.8

In per capita terms, 504.5 kilogrammes of mixed urban waste were collected per person and per year in Spain.

Collection of waste by Autonomous Community

Unit: kilogrammes per inhabitant



¹ Within the total, the data regarding the Autonomous Communities of Ceuta and Melilla are included, but it will not be published in order to preserve statistical secrecy.

Waste treatment

Waste treatment companies² both of urban and non-urban origin, managed 44 million tonnes of non-hazardous waste and 2.5 million tonnes of hazardous waste in the year 2011.

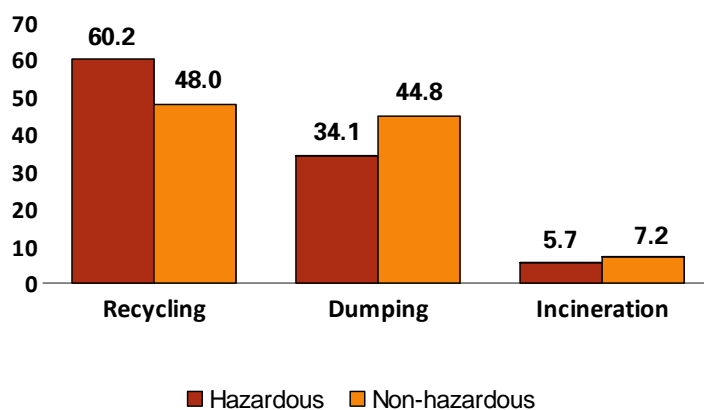
Regarding the hazardous waste managed, 60.2% was sent for recycling, 34.1% for dumping and 5.7% for incineration,

Of the total non-hazardous waste, 48.0% was sent for recycling, 44.8% was dumped and 7.2% was incinerated.

Final treatment of waste. Percentages by type of treatment. Year 2011

	Recycling	Dumping	Incineration	Total
Total waste managed	48.7	44.2	7.1	100.0
Hazardous waste	60.2	34.1	5.7	100.0
Non-hazardous waste	48.0	44.8	7.2	100.0

% of hazardous and non-hazardous waste by type of treatment



² Treatment of common sludge and of construction and demolition waste is not included

Waste generation in the Services sector

In 2011, 7.2 and 0.7 million tonnes of non-hazardous and hazardous waste were generated, respectively.

The categories of the main non-hazardous waste were *Paper and cardboard* (1.5 millions of tonnes), *Plastics* (0.6 millions) and *Mixed waste* (1.5 millions). Regarding the hazardous waste, it is worth highlighting *Chemical* (0.4 millions of tonnes) and *Discarded vehicles and electronic equipment* (0.2 millions).

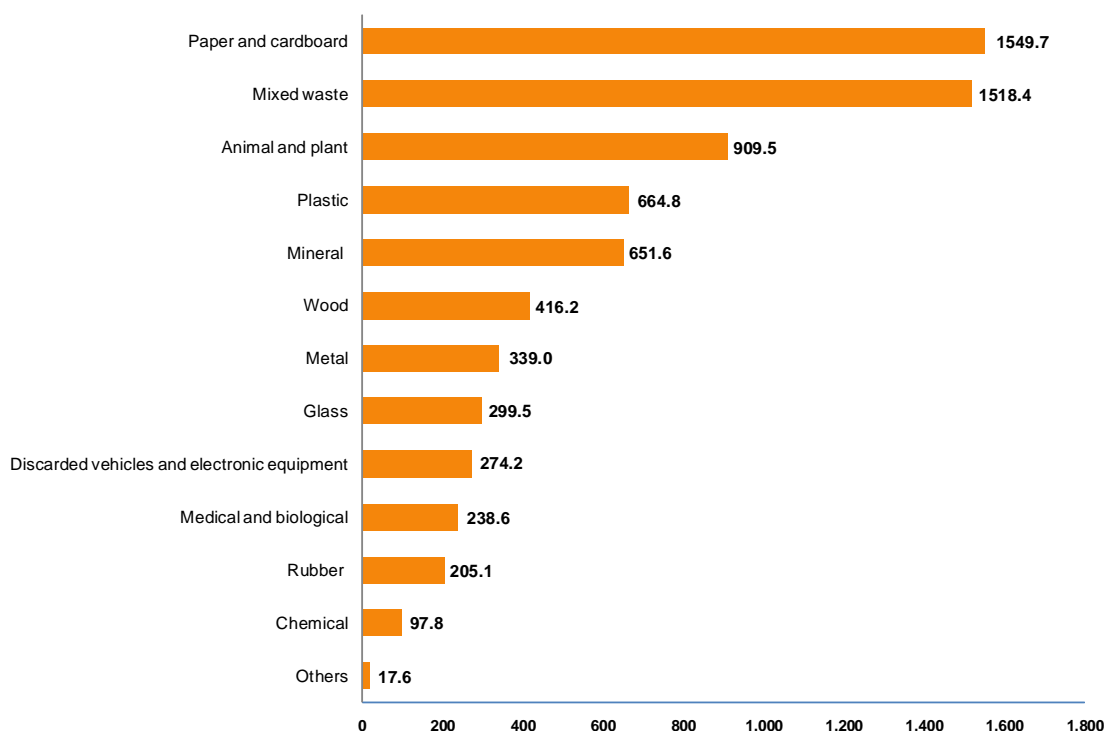
Waste generated in the Services sector. Year 2011

Unit: Thousands of tonnes

Waste generated (by type)	Non-hazardous	Hazardous	Total
Total	7,182.2	735.1	7,917.3
Paper and cardboard	1,549.7	..	1,549.3
Mixed	1,518.4	4.3	1,522.7
Animal and plant	909.5	..	909.5
Mineral	651.6	31.3	682.9
Plastic	664.8	..	664.8
Chemical	97.8	414.6	512.4
Discarded vehicles and electronic equipment	274.2	173.8	448.0
Wood	416.2	0.8	417.0
Metal	339.0	..	339.0
Glass	299.5	38.0	337.5
Medical and biological	238.6	70.9	309.5
Rubber	205.1	..	205.1
Others	17.6	1.4	19.0

Non-hazardous waste generated in the Services sector. Year 2011.

Unit: thousand of tonnes



By activities, *Wholesale Trade* and *Retail Trade* were the activities that generated the most amount of waste (3.4 millions of tonnes), followed by *Real estate, professional and scientific activities*, *Accommodation* and *Human health and social work activities (including veterinary activities)*, with quantities around three millions of tonnes.

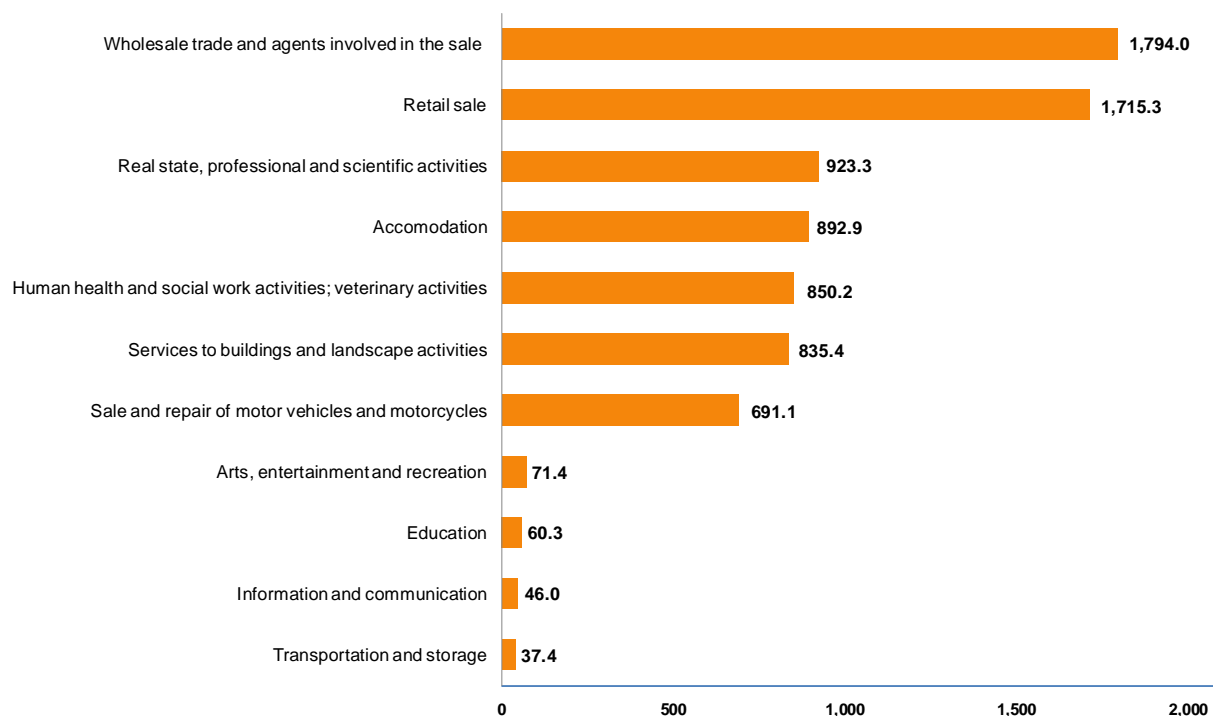
Waste produced by activities of the Services sector. Year 2011

Unit: thousand of tonnes

CNAE2009		Non-hazardous	Hazardous	Total
45-96	Total Services	7,182.2	735.1	7,917.3
45	Sale and repair of motor vehicles and motorcycles	366.7	324.4	691.1
46	Wholesale trade and agents involved in the sale	1,701.2	92.8	1,794.0
47	Retail sale	1,674.2	41.1	1,715.3
49-53	Transportation and storage	34.3	3.0	37.4
55-56	Accommodation	886.8	6.1	892.9
58-63	Information and communication	43.7	2.2	46.0
68-74	Real state, professional and scientific activities	826.1	97.2	923.3
81	Services to buildings and landscape activities	834.4	1.0	835.4
85	Education	55.3	5.0	60.3
86-88,75	Human health and social work activities;veterinary activities	689.9	160.3	850.2
	Arts, entertainment and recreation	69.4	2.0	71.4

Waste generated by the Services activities. Year 2011

Unit: thousand of tonnes



Generation of waste in the Construction sector

Construction generated 32.7 million tonnes of waste in 2011, as compared with 40.1 million in 2009 ³.

The greatest quantity of waste generated corresponded to *Mineral waste* ⁴, in both the *Non-hazardous* and in the *Hazardous* (31.8 and 0.1 million tonnes, respectively)

Within the Non-hazardous waste it is worth highlighting *Mixed waste* and *Metal waste* (0.2 millions of tonnes), followed by *Wood* (0.1 millions).

Waste generated in the Construction sector. Year 2011

Unit: Thousand of tonnes (Tn)

Waste generated by type	Non-hazardous	Hazardous	Total
Total	32.526,7	154,9	32.681,6
Mineral	31.808,7	132,4	31.941,1
Mixed	226,2	0,0	226,2
Metal	193,8	..	193,8
Wood	133,4	0,5	133,9
Plastic	83,1	..	83,1
Paper and cardboard	67,4	..	67,4
Chemical	5,8	19,4	25,2
Discarded vehicles and electronic equipment	2,3	2,2	4,5
Others	2,8	0,2	3,0
Glass	2,1	0,2	2,3
Rubber	0,5	..	0,5
Animal and plant	0,3	..	0,3
Medical and biological	0,2	0,0	0,2

³ This activity is analysed every two years

⁴It includes waste of construction and demolition, asbestos, sands, clays, waste from combustion, soils, drainage sludge, as well as diverse minerals, among others.

Methodological note

The INE performs annually the Collection and Treatment of Waste Survey with the aim of measuring the management of the waste. Within said management the collection of urban waste and final treatment of the generated waste and imported, regardless of whether this is urban or not. The framework of reference is updated annually from the Central Companies Directory (DIRCE) and list of registries (licences) of waste managers supplied by autonomous communities and cities at the request of the INE.

For the study of collection of urban waste that dealt with a municipality with more than 20,000 inhabitants were investigated. The total results were obtained by means of ratio estimators according to the population seen. For the study of waste treatment (urban or non-urban) an *ad hoc* stratification was designed.

The estimates corresponding to mixed domestic waste, glass, paper and cardboard, animal and vegetable waste and containers, of urban origin, were obtained considering the data supplied by the Ministry of Agriculture, Food and the Environment. The estimates corresponding to the remaining categories come exclusively from the aforementioned survey.

For the purposes of the reporting obligations in respect of International organisations: (OECD Eurostat, ..) they consider: *municipal waste* those originated from the urban collection, which are the competence of the local entities or Autonomous Delegations, when appropriate, and that correspond to the following categories: metal, glass, paper and cardboard, plastic, wood, textile, discarded equipment, batteries and accumulators, animals and mixed food products, vegetables, domestic and similar, other mineral waste and soil.

The INE studies every twice years the generation of waste by the different activity sectors, so that during the odd reference years they study the Services and Construction sectors (divisions 41 a. 96 of the CNAE-2009) and during the even years they studied the rest of the sectors and households.

The Survey on generation of waste in 2011 is directed to the Services and Construction sectors. The companies with more than 200 employees are investigated in depth, whereas those with less than 10 employees are not object of the mentioned statistical operation, and they are estimated through the models of generated waste. The framework for the said survey is the DIRCE.

The study of the generation and treatment of the waste follows the guidelines designed in the European Parliament and Council Regulation 2150/2002 of 25 November on waste statistics, modified by virtue of the UE Regulation 849/2010.