

Survey on Water Supply and Sewerage
Year 2013

Average household water consumption stood at 130 litres per inhabitant per day, that is, 3.7% less than in 2012

The unit value of water increases 5.8%, standing at 1.83 euros per cubic metre

4,324 cubic hectometres (Hm³) of water were supplied to public urban supply networks during the year 2013 in Spain. Three quarters of this amount (3,211 Hm³) were registered as water distributed for household consumption, that is to say, they were measured in the water meters of the users. The remainder (1,113 Hm³) were unregistered volumes of water (rather than being measured, these were estimated using capacities).

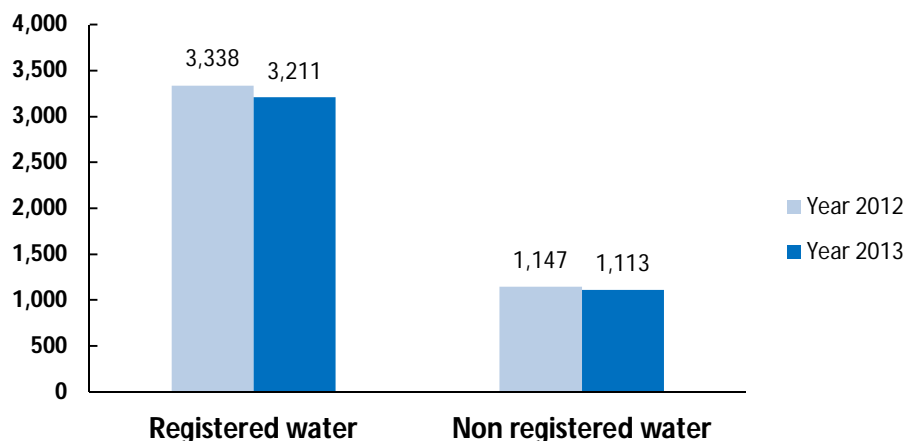
Volume of water supplied to the network

Unit: hm³

	Year 2013	% Annual variation
Registered water	3,211	-3.8
Non registered water	1,113	-3.0
Total water supplied to the network	4,324	-3.6

Volume of water supplied to the network

Unit: cubic hectometres



The volume of water registered and supplied for household consumption was 2,218 Hm³, which represented 69.1% of the total. The sectors of the economy used 695 Hm³ (21.6%), whereas municipal consumption (garden irrigation, street cleaning and other uses) reached 298 Hm³ (9.3%).

As compared with the previous year, household water consumption decreased 3.9%. The sectors of the economy decreased the use of water by 2.3% and that of municipal consumption did so by 6.3%.

Non registered water was divided into actual and apparent losses. Actual losses (leaks, breaks and breakdowns in the supply networks) were estimated at 678 Hm³, which represented 15.7% of the total water supply in those networks. In turn, apparent losses (estimated consumption, measurement errors, fraud or other causes) were estimated at 435 Hm³.

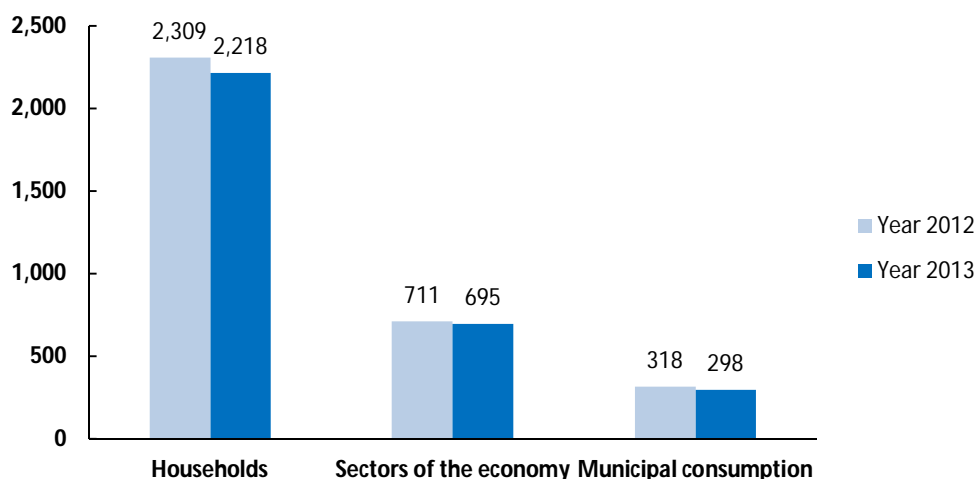
Volume of water registered and supplied to users

Unit: cubic hectometres

	Year 2013	% of the total	% annual variation
Households	2,218	69.1	-3.9
Sectors of the economy	695	21.6	-2.3
Municipal consumption	298	9.3	-6.3
TOTAL	3,211	100	-3.8

Volume of water registered and supplied to users

Unit: cubic hectometres



Results by Autonomous Community

In 2013, the greatest volume of water was supplied by the Autonomous Communities of Andalucía (17.1% of the total), Cataluña (14.4%) and Comunidad de Madrid (12.9%). In turn, La Rioja (0.7%), Cantabria and Comunidad Foral de Navarra (both 1.5%) registered the lowest volume.

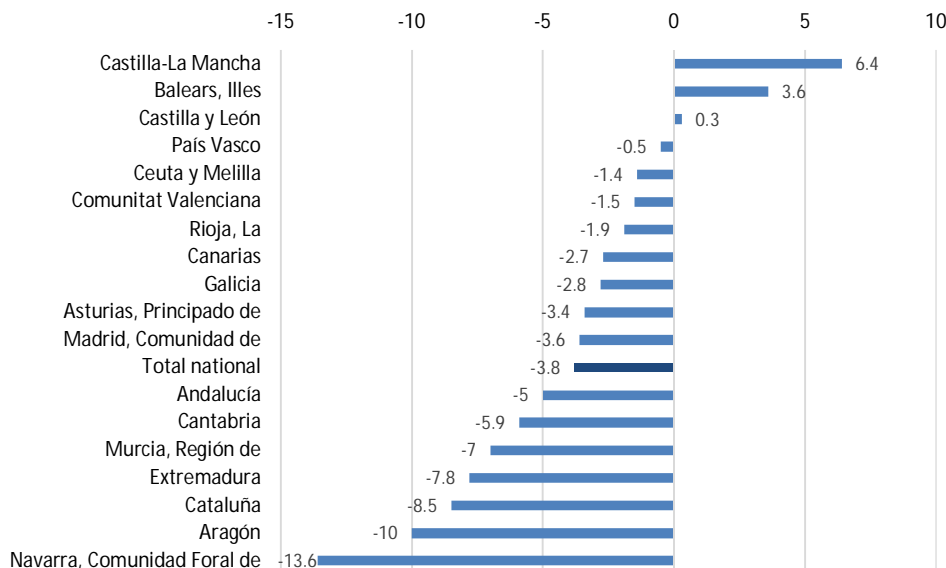
The Autonomous Communities that registered the greatest increase in the volume of registered and supplied water were Castilla-La Mancha (6.4%), Illes Balears (3.6%) and Castilla y León (0.3%). In turn, the greatest decreases were registered in Comunidad Foral de Navarra (-13.6%), Aragón (-10.0%) and Cataluña (-8.5%).

Volume of water registered and supplied to users by Autonomous Community

Unit: thousands of m³

	Year 2013	% of the total	% annual variation
Andalucía	547,493	17.1	-5.0
Aragón	95,406	3.0	-10.0
Asturias, Principado de	74,885	2.3	-3.4
Balears, Illes	84,969	2.6	3.6
Canarias	158,521	4.9	-2.7
Cantabria	47,767	1.5	-5.9
Castilla y León	213,035	6.6	0.3
Castilla-La Mancha	160,503	5.0	6.4
Cataluña	461,504	14.4	-8.5
Comunitat Valenciana	364,059	11.3	-1.5
Extremadura	69,626	2.2	-7.8
Galicia	184,559	5.8	-2.8
Madrid, Comunidad de	414,258	12.9	-3.6
Murcia, Región de	99,241	3.1	-7.0
Navarra, Comunidad Foral de	48,260	1.5	-13.6
País Vasco	154,091	4.8	-0.5
Rioja, La	23,896	0.7	-1.9
Ceuta y Melilla	8,770	0.3	-1.4
Total national	3,210,843	100	-3.8

Percentage structure of the volume of water registered and supplied to users by Autonomous Community



The Autonomous Communities with the greatest consumption of water registered and supplied to households in 2013 were Andalucía (16.5%), Cataluña (14.3%) and Comunidad de Madrid (13.8%).

Regarding water consumption of the sectors of the economy, the Autonomous Communities with the greatest volume were Andalucía (18.0%), Cataluña (16.2%) and Comunidad de Madrid (11.4%).

The Autonomous Communities with the greatest volumes of water supplied for municipal consumption were Andalucía (18.8%), Comunitat Valenciana (11.3%), and Cataluña (10.9%).

Volume of water registered and supplied by type of user and Autonomous Community

Year 2013

Unit: thousands of m³

	Households	% of the total	Sectors of the economy	% of the total	Municipal consumption	% of the total
Andalucía	366,154	16.5	125,289	18.0	56,050	18.8
Aragón	62,913	2.8	24,577	3.5	7,916	2.7
Asturias, Principado de	47,317	2.1	19,013	2.7	8,555	2.9
Balears, Illes	57,174	2.6	23,893	3.4	3,902	1.3
Canarias	109,755	4.9	27,607	4.0	21,159	7.1
Cantabria	31,010	1.4	11,995	1.7	4,762	1.6
Castilla y León	144,047	6.5	50,374	7.3	18,614	6.2
Castilla-La Mancha	106,503	4.8	35,319	5.1	18,681	6.3
Cataluña	316,533	14.3	112,303	16.2	32,668	10.9
Comunitat Valenciana	285,743	12.9	44,553	6.4	33,763	11.3
Extremadura	56,230	2.5	5,026	0.7	8,370	2.8
Galicia	119,906	5.4	40,021	5.8	24,632	8.3
Madrid, Comunidad de	304,968	13.8	78,846	11.4	30,444	10.2
Murcia, Región de	66,088	3.0	26,810	3.9	6,343	2.1
Navarra, Comunidad For.	26,088	1.2	13,851	2.0	8,321	2.8
País Vasco	97,802	4.4	46,113	6.6	10,176	3.4
Rioja, La	12,967	0.6	8,395	1.2	2,534	0.8
Ceuta y Melilla	6,488	0.3	674	0.1	1,608	0.5
Total national	2,217,686	100	694,659	100	298,498	100

Origin of water collected

Considering the origin of the water collected by the supply companies themselves, 66.4% was from surface water, while 30.1% was from groundwater. 3.5% came from other types of water (desalinated sea or brackish water).

Average household water consumption per inhabitant per day

Average household water consumption stood at 130 litres per inhabitant per day for the year 2013. This figure was 3.7% lower than the 135 litres registered the previous year ⁽¹⁾.

Results by Autonomous Community

The highest average consumption was registered in Comunitat Valenciana (158 litres per inhabitant per day), Castilla y León (157), and Cantabria (144).

In contrast, the lowest average household consumption was registered in Comunidad Foral de Navarra and La Rioja (both 112 litres per inhabitant per day), and Cataluña (117).

Average household water consumption by Autonomous Community

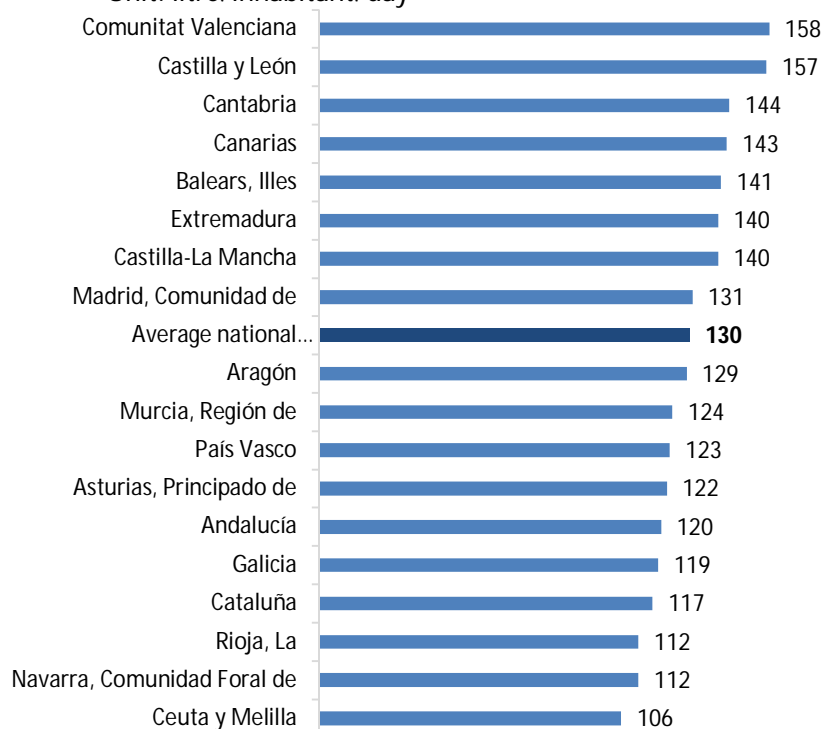
Unit: litre /inhabitant/day

	Year 2013	% annual variation
Andalucía	120	-5.5
Aragón	129	-4.4
Asturias, Principado de	122	-4.7
Balears, Illes	141	6.8
Canarias	143	-5.3
Cantabria	144	-4.6
Castilla y León	157	5.4
Castilla-La Mancha	140	-1.4
Cataluña	117	-4.9
Comunitat Valenciana	158	-1.9
Extremadura	140	2.2
Galicia	119	-9.8
Madrid, Comunidad de	131	-3.0
Murcia, Región de	124	-14.5
Navarra, Comunidad Foral de	112	-11.1
País Vasco	123	6.0
Rioja, La	112	-13.8
Ceuta y Melilla	106	-2.8
Average national consumption	130	-3.7

⁽¹⁾ Average household water consumption is calculated using the quotient between the total volume of water registered and distributed to households, and the estimated de jure population. Latest resident population figures published by the INE have been used.

Average household water consumption by Autonomous Community

Unit: litre/inhabitant/day



Unit cost of water

The unit cost of water is the quotient between the amounts paid for the water supply, plus that of quotas for sewerage and waste water filtering, as well as for the sanitation or dumping tax, and the volume of water registered and distributed to users.

In 2013, the unit cost of water stood at 1.83 euros per cubic metre (m³), with an increase of 5.8% as compared with the previous year (1.73 euros).

The unit cost of the water supply reached 1.09 euros/m³, 5.8% more than that of 2012, while that of sanitation (sewage, waste water treatment and tax) was 0.74 euros/m³, with an increase of 5.7%.

Unit cost of water

Unit: euros / m³

	Year 2013	% annual variation
Supply	1.09	5.8
Sewerage	0.74	5.7
Total unit cost	1.83	5.8

Results by Autonomous Community

By Autonomous Community, the highest unit costs in 2013 corresponded to Región de Murcia (2.73 euros/ m³), Cataluña (2.54) and Illes Balears (2.21).

In contrast, Castilla y León (1.00 euros per m³), and La Rioja (1.06), and Galicia (1.19) recorded the lowest unit costs of water.

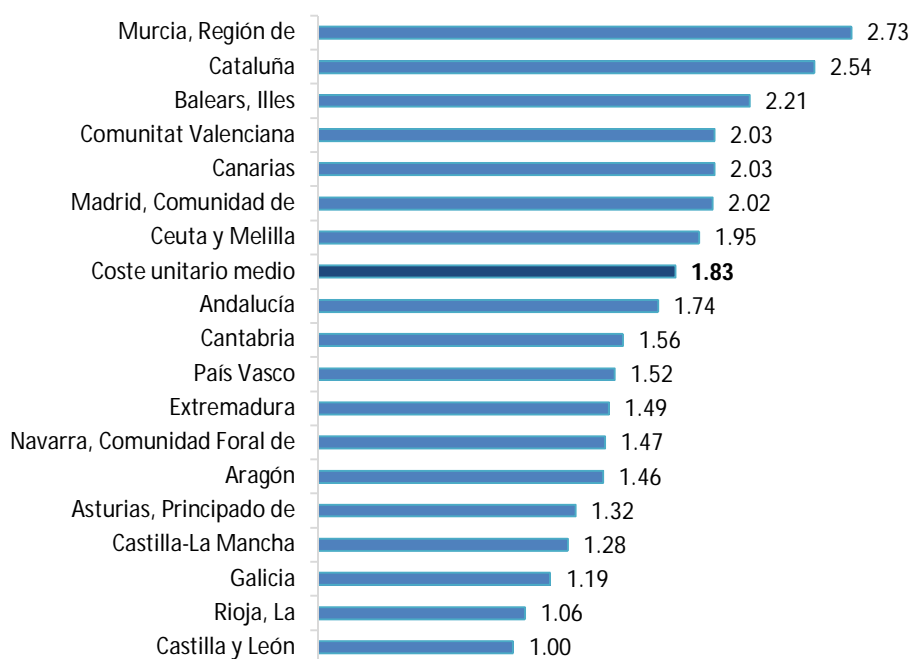
Unit cost of water by Autonomous Community. Year 2013

Unit: euros / m³

	Total	Supply	Sewerage
Andalucía	1.74	1.04	0.70
Aragón	1.46	0.70	0.76
Asturias, Principado de	1.32	0.68	0.64
Balears, Illes	2.21	1.11	1.10
Canarias	2.03	1.66	0.37
Cantabria	1.56	0.91	0.65
Castilla y León	1.00	0.54	0.46
Castilla-La Mancha	1.28	0.79	0.49
Cataluña	2.54	1.34	1.20
Comunitat Valenciana	2.03	1.23	0.80
Extremadura	1.49	1.04	0.45
Galicia	1.19	0.77	0.42
Madrid, Comunidad de	2.02	1.28	0.74
Murcia, Región de	2.73	1.86	0.87
Navarra, Comunidad Foral de	1.47	0.73	0.74
País Vasco	1.52	0.75	0.77
Rioja, La	1.06	0.50	0.56
Ceuta y Melilla	1.95	1.37	0.58
Average unit cost	1.83	1.09	0.74

Unit cost of water by Autonomous Community

Unit: euros/m³



Methodological note

The INE conducts the *Survey on Water Supply and Sewerage* for the purpose of quantifying, in physical units, the activities related to the collection of water from the environment, and to water purification, supply and sanitation (sewage and waste water treatment). Likewise, information is collected on the unit costs of the water supply and sanitation services. The survey excludes the use of water in irrigation agriculture, which is studied in the *Survey on the Use of Water in the Agrarian Sector*.

The total number of water management entities or companies researched was 427 for reference year 2013. The frame of reference for the survey was constituted from the Central Companies Directory (CCD) compiled by the INE, and from the Directory of Local Entities compiled by the General Directorate for Financial Coordination with Local Tax Offices belonging to the Ministry of the Treasury. Said framework is extended with those municipal councils that carry out the direct management of water-related services.

The theoretical sample of units is obtained by selecting a quota within the strata formed in each Autonomous Community, according to the size of the population serviced. Once the water management unit is selected, in order to avoid duplication, all of the municipalities serviced by the said unit are related. This includes, with a comprehensive criterion, those management units that service municipalities larger than 15.000 inhabitants, as well as a representation of the remaining municipality sizes. This yields coverage effectiveness indices of nearly 90% of the resident population.

For the variables related to the water supply in those municipalities serviced by management units that are not a part of the comprehensive stratum, the sampling data is corrected with a ratio estimator, using the resident population as an auxiliary variable.

Latest resident population figures published by the INE have been used to calculate volume indicators.