

Survey on Water Supply and Sewerage
Year 2012

Average household water consumption stood at 137 litres per inhabitant per day, that is, 3.5% less than in 2011

The greatest unit costs of water were registered in Región de Murcia (2.50 euros per cubic metre), Illes Balears (2.38) and Cataluña (2.29), while Castilla y León and La Rioja (1.02) and Galicia (1.11) registered the lowest values

4,485 cubic hectometres (Hm³) of water were supplied to public urban supply networks⁽¹⁾ during the year 2012 in Spain. Three quarters of this amount (3,338 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 (1,147 Hm³) were unregistered volumes of water (rather than being measured, these were estimated using capacities).

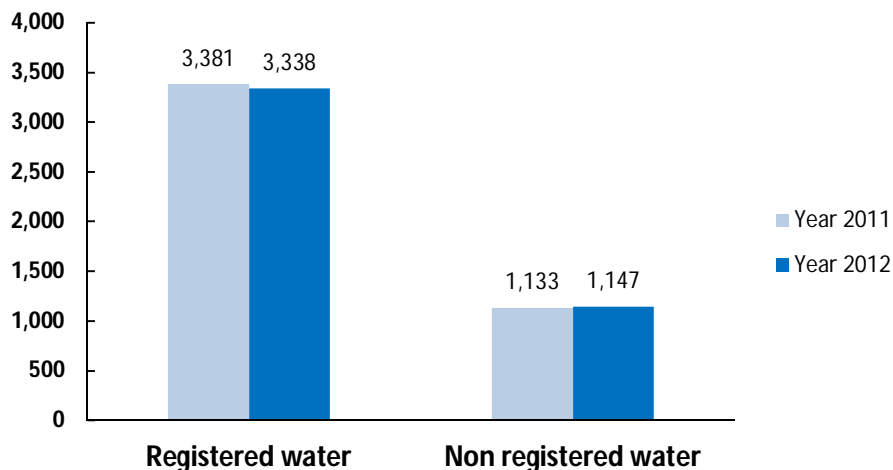
Volume of water supplied to the network

Unit: hm³

	Year 2012	% annual variation
Registered water	3,338	-1.3
Non registered water	1,147	1.2
Total water supplied to the network	4,485	-0.6

Volume of water supplied to the network

Unit: cubic hectometres



(1) The survey excludes the use of water in irrigation agriculture, which according to the 2012 Survey on the Use of Water in the Agrarian Sector reached 15,832 Hm³.

The volume of water registered and supplied for household consumption was 2,309 Hm³, which represented 69.2% of the total. The sectors of the economy used 711 Hm³ (21.3%), whereas municipal consumption (garden irrigation, street cleaning and other uses) reached 318 Hm³ (9.5%).

As compared with the previous year, household water consumption decreased 3.1%. In contrast, the sectors of the economy increased the use of water by 2.6% and that of municipal consumption did so by 4.6%.

Non registered water was divided into actual and apparent losses. Actual losses (leaks, breaks and breakdowns in the supply networks) were estimated at 711 Hm³, which represented 15.9% of the total water supply in those networks. In turn, apparent losses (estimated consumption, measurement errors, fraud or other causes) were estimated at 436 Hm³.

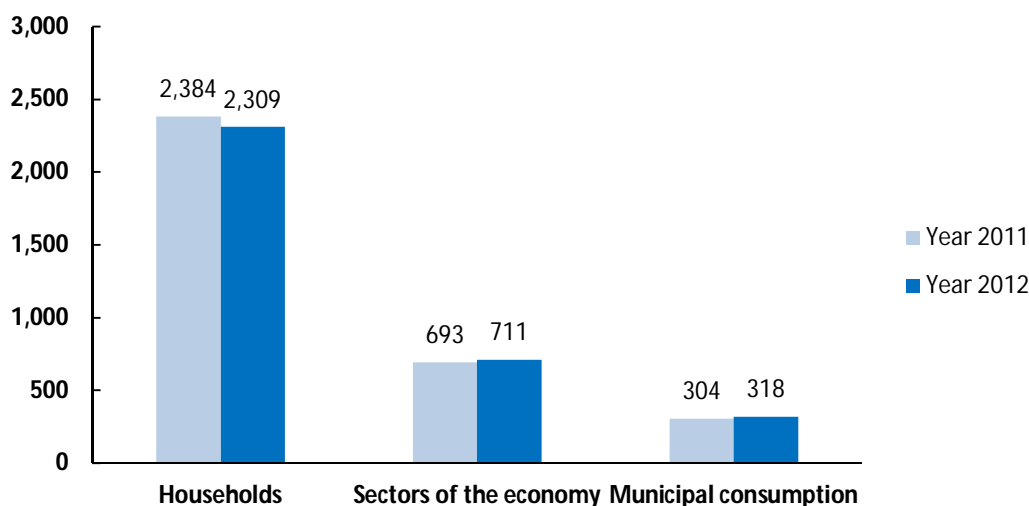
Volume of water registered and supplied to users

Unit: cubic hectometres

	Year 2012	% of the total	% annual variation
Households	2,309	69.2	-3.1
Sectors of the economy	711	21.3	2.6
Municipal consumption and other	318	9.5	4.6
TOTAL	3,338	100	-1.3

Volume of water registered and supplied to users

Unit: cubic hectometres



Results by Autonomous Community

In 2012, the greatest volume of water was supplied by the Autonomous Communities of Andalucía (17.2% of the total), Cataluña (15.0%) and Comunidad de Madrid (12.9%). In turn, La Rioja (0.7%), Cantabria (1.5%) and Comunidad Foral de Navarra (1.7%) registered the lowest volume.

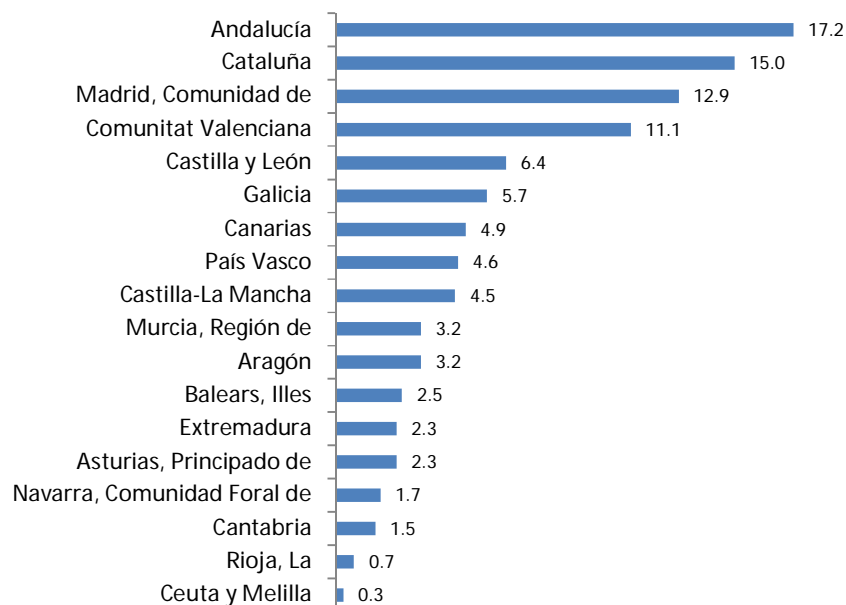
The Autonomous Communities that registered the greatest increase in the volume of registered and supplied water in 2012 were Illes Balears (10.0%), Aragón (8.8%) and Galicia (3.9%). In turn, the greatest decreases were registered in La Rioja (-14.7%), País Vasco (-12.1%) and Comunidad Foral de Navarra (-7.0%).

Volume of water supplied to users by Autonomous Community

Unit: thousands of m³

	Year 2012	% of the total	% annual variation
Andalucía	576,176	17.2	-0.3
Aragón	106,036	3.2	8.8
Asturias, Principado de	77,558	2.3	-6.2
Balears, Illes	81,979	2.5	10.0
Canarias	162,915	4.9	2.0
Cantabria	50,748	1.5	1.4
Castilla y León	212,398	6.4	-6.8
Castilla-La Mancha	150,879	4.5	-3.4
Cataluña	504,301	15.0	-1.1
Comunitat Valenciana	369,422	11.1	3.7
Extremadura	75,522	2.3	2.0
Galicia	189,873	5.7	3.9
Madrid, Comunidad de	429,556	12.9	-3.8
Murcia, Región de	106,673	3.2	-0.8
Navarra, Comunidad Foral de	55,849	1.7	-7.0
País Vasco	154,880	4.6	-12.1
Rioja, La	24,366	0.7	-14.7
Ceuta y Melilla	8,897	0.3	-32.2
Total national	3,338,028	100	-1.3

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 2012 were Andalucía (16.9%), Cataluña (14.6%) and Comunidad de Madrid (13.7%).

Regarding water consumption of the sectors of the economy, the Autonomous Communities with the greatest volume were Andalucía (17.8%), Cataluña (17.7%) and Comunidad de Madrid (12.0%).

The Autonomous Communities with the greatest volumes of water supplied for municipal consumption were Andalucía (18.9%), Cataluña (12.9%) and Comunidad de Madrid (9.1%).

**Volume of water registered and supplied by type of user
and Autonomous Community
Year 2012**

Unit: thousands of m³

	Total Households	Sectors of the economy	Municipal consumption
Andalucía	576,176	389,257	126,719
Aragón	106,036	66,288	28,777
Asturias, Principado de	77,558	49,974	19,708
Balears, Illes	81,979	53,045	24,942
Canarias	162,915	115,028	27,060
Cantabria	50,748	32,660	12,755
Castilla y León	212,398	137,251	53,602
Castilla-La Mancha	150,879	108,939	24,977
Cataluña	504,301	337,621	125,554
Comunitat Valenciana	369,422	293,361	49,096
Extremadura	75,522	55,277	6,859
Galicia	189,873	133,745	38,448
Madrid, Comunidad de	429,556	315,483	85,034
Murcia, Región de	106,673	77,271	21,542
Navarra, Comunidad For	55,849	29,374	16,174
País Vasco	154,880	92,471	41,592
Rioja, La	24,366	15,219	7,593
Ceuta y Melilla	8,897	6,608	738
Total national	3,338,028	2,308,872	711,170

Origin of water collected

Considering the origin of the water collected by the supply companies themselves, 67% was from surface water, while 29% was from groundwater. 4% came from other types of water (desalinated sea or brackish water).

Average household water consumption

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.

Average household water consumption stood at 137 litres per inhabitant per day for the year 2012. This figure was 3.5% lower than the 142 litres registered the previous year.

Results by Autonomous Community

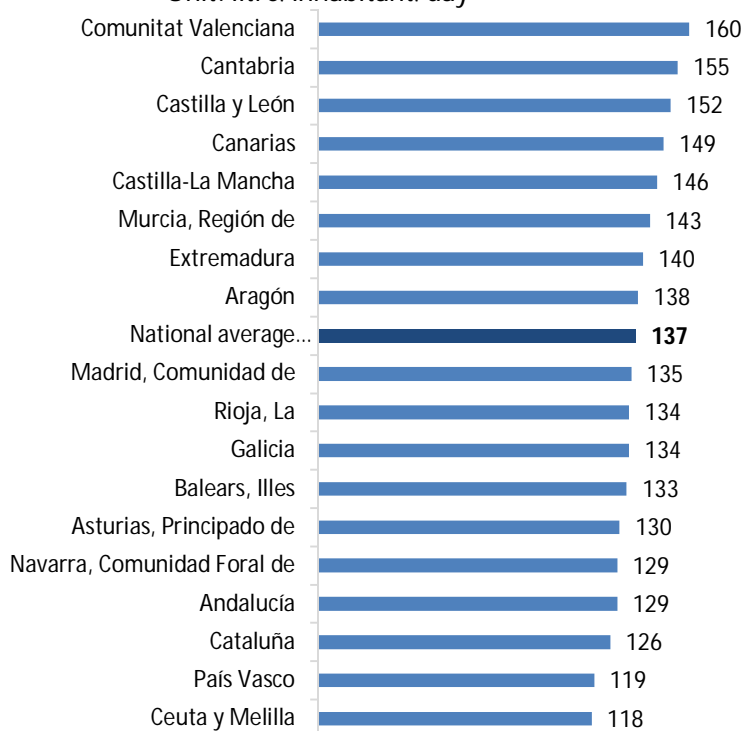
The highest average consumption was registered in Comunitat Valenciana (160 litres per inhabitant per day), Cantabria (155) and Castilla y León (152).

In contrast, the lowest average household consumption was registered in País Vasco (119 litres per inhabitant per day), Cataluña (126) and Andalucía (129).

	Year 2012	% annual variation
Andalucía	129	-7.9
Aragón	138	4.5
Asturias, Principado de	130	-15.0
Balears, Illes	133	7.3
Canarias	149	-0.7
Cantabria	155	-3.7
Castilla y León	152	-10.6
Castilla-La Mancha	146	-6.4
Cataluña	126	-3.1
Comunitat Valenciana	160	5.3
Extremadura	140	-2.8
Galicia	134	0.8
Madrid, Comunidad de	135	-4.3
Murcia, Región de	143	-5.9
Navarra, Comunidad Foral de	129	-4.4
País Vasco	119	1.7
Rioja, La	134	8.9
Ceuta y Melilla	118	-30.6
Total national	137	-3.5

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 2012, the unit cost of water stood at 1.73 euros per cubic metre (m³), with an increase of 12.3% as compared with the previous year (1.54 euros).

The unit cost of the water supply reached 1.03 euros/m³, 8.4% more than that of 2011, while that of sanitation (sewage, waste water treatment and tax) was 0.70 euros/m³, with an increase of 18.6%.

Unit cost of water

Unit: euros / m³

	Year 2012	% annual variation
Supply	1.03	8.4
Sewerage	0.70	18.6
Total unit cost	1.73	12.3

Results by Autonomous Community

By Autonomous Community, the highest unit costs corresponded to Región de Murcia (2.50 euros/ m³), Illes Balears (2.38) and Cataluña (2.29).

In contrast, Castilla y León and La Rioja (both at 1.02 euros per m³) and Galicia (1.11) recorded the lowest unit costs of water.

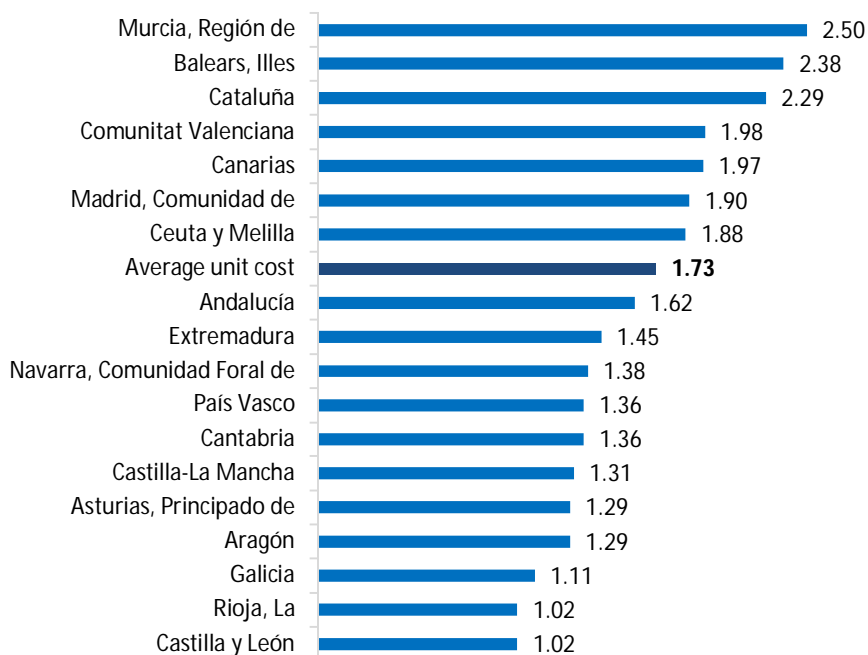
Unit cost of water by Autonomous Community. Year 2012

Unit: euros / m³

	Total	Supply	Sewerage
Andalucía	1.62	0.97	0.65
Aragón	1.29	0.66	0.63
Asturias, Principado de	1.29	0.67	0.62
Balears, Illes	2.38	1.32	1.06
Canarias	1.97	1.58	0.39
Cantabria	1.36	0.83	0.53
Castilla y León	1.02	0.50	0.52
Castilla-La Mancha	1.31	0.85	0.46
Cataluña	2.29	1.14	1.15
Comunitat Valenciana	1.98	1.22	0.76
Extremadura	1.45	0.97	0.48
Galicia	1.11	0.72	0.39
Madrid, Comunidad de	1.90	1.22	0.68
Murcia, Región de	2.50	1.73	0.77
Navarra, Comunidad Foral de	1.38	0.70	0.68
País Vasco	1.36	0.73	0.63
Rioja, La	1.02	0.58	0.44
Ceuta y Melilla	1.88	1.40	0.48
Total national	1.73	1.03	0.70

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 454 for reference year 2012. 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.