

2.12

HOUSEHOLDS



The residential sector is made up of households with access to at least one housing unit. Although the concepts of household and housing unit are closely linked, distinctions must nonetheless be made.

As far as statistics are concerned, the household is the group of residents living in the same family housing unit, without them having to be physically related. A household can comprise one single person or several.

A family housing unit is considered as a room or set of rooms and corresponding facilities that occupy a building and which, on account of how they have been constructed or remodelled, are intended to be inhabited by one or several households. The housing unit is, therefore, the "roof" sheltering households, providing the infrastructure required for daily life.

As shown in the adjacent table, the number of households rose from 13.08 million in 2000 to 15.6 million in 2006, an increase of 19.24%. As far as number of people per household is concerned, all bands show significant rises in 2006 decades towards a decline in large families. Households comprising one or two people are the most numerous (44.5%).

In the period 2001-2006, over three million housing units were built in Spain, bringing the total stock to almost 24



million (23.85 million). Main or primary residences pared with 2000, except households of 5 members or more, which fell in line with the trend of recent account for approximately 16.5 million housing units (68.5%). In 2006 there was a 2.7% rise in construction compared with the previous year and a 13.4% rise compared with 2001, equivalent to construction of between 600,000 and 800,000 housing units per year. This process

INDICADOR	META	TENDENCIA
Number of passenger vehicle cars per household	Promote urban and inter-urban mobility using other more eco-friendly forms of transport	The number of passenger cars per household fell in comparison with the previous year
Urban waste production per household	Minimise production of urban waste	Waste production per household seems to be stabilising
Energy consumption per household	Improve efficiency in energy consumption	Energy consumption per household is rising for electrical usage and falling for heating/air conditioning
Emissions of CO ₂ by the residential sector	Reduce CO ₂ generation in the sector	There was a reduction of 8% between in 2005 and 2006
Water consumption per household	Minimise water consumption per household	Water consumption per household is decreasing
Gross disposable household income	Reach levels of income compatible with sustainable development	Gross disposable income is increasing in households, with major differences between Autonomous Communities
Eco-efficiency in the domestic sector	Decouple household income from resource consumption	Energy consumption and waste generation per household are slowing down and water consumption is falling

No. OF HOUSEHOLDS IN SPAIN

No. of members	No. of households 2000	No. of households 2005	No. of households 2006	Variation 2000-2006 (%)
1	1,608,987	2,107,366	2,569,400	59.69
2	3,330,619	4,178,678	4,374,500	31.34
3	2,950,338	3,532,071	3,739,100	26.73
4	3,405,403	3,689,628	3,891,900	14.29
5 or more	1,790,850	1,357,963	1,029,400	-73.97
TOTAL	13,086,197	14,865,707	15,604,300	19.24%

Source: INE. Household Budget Continuous Survey (2001 and 2005 data). INE. Living Conditions Survey. (2006 data).

constitutes a housing boom with major environmental consequences in relation to consumption of land, water and materials (especially cement), increased traffic and visual impact on the landscape.

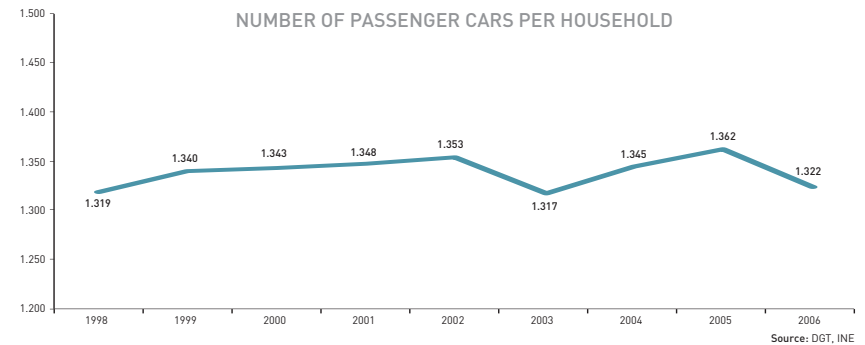
In general, fiscal policies have encouraged home ownership over rental. In the middle of the last century, each of these models accounted for approximately 50% of housing stock. According to the Living Conditions Survey (Encuesta de Condiciones de Vida) conducted by the Spanish National Institute of Statistics (INE – Instituto Nacional de Estadística), in 2006, the total number of households stood at 15,604,300 and a national average of 82.5% of households owned their housing units. At the same time, the figure for rental or rent-free usage was 17.5%.

The indicators in this chapter cover the household sector from an environmental perspective and reveal clear trends in terms of energy, CO₂ emissions, waste generation, water consumption, income, etc. In general, there is growing pressure on the environment from this sector. This is closely coupled to economic growth and increasingly widespread consumption patterns. The ideal solution would be to influence these patterns through increased public awareness and appropriate policies, in particular in terms of consumption of resources such as water and energy.

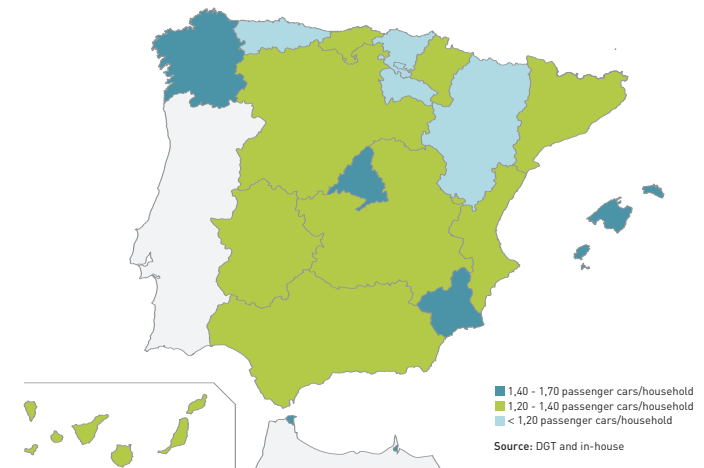
It must be underlined that the analysis of consumption presented by the indicators in this chapter is based on the number of households or, where applicable, individuals (per capita consumption). It is never presented in relation to the number of housing units because of the large number of empty housing units and second homes in Spain. Otherwise, a paradox would be produced in which resource consumption and waste and emissions generation would fall as more housing units were built, a phenomenon that has repeatedly been shown to be unsustainable under the conditions and at the rates seen in recent years.

Number of passenger cars per household

In 2006, the number of passenger cars per household fell as compared with the previous year



NUMBER OF PASSENGER CARS PER HOUSEHOLD, 2006



Spain's passenger car fleet reached a total of 20,636,738 vehicles in 2006, an increase of over 3 million units since 2000 (17%). At the same time, the number of households also increased, rising from 13.1 million in 2000 to 15.6 million in 2006, according to the INE's Living Conditions Survey. This is equivalent to growth of 19.24%.

This index shows that on average each household has 1.322 passenger cars, 2.9% less than the previous year. Growth in number of households in 2006 as compared with 2005 (4.9%) is higher than that registered in the passenger car fleet (1.9%), which explains the drop in the index at national level. It would be desirable to see significant decoupling between the increase in number of passenger cars and the increase in number of households.

The down-turn seen in the graph in 2003 is the result of a reduction in passenger car fleet size, from 18,732,632 in 2002 to 18,688,320 in 2003 (0.23% less). At the same time, the number of households rose from 13,842,739 (2002) to 14,187,443 (2003), an increase of 2.51%.

Twelve Autonomous Communities recorded figures below the national average, while the rest registered numbers above it, especially the Autonomous Cities of Ceuta and Melilla (1.65), the Balearic Islands (1.69), Madrid (1.48) and Galicia (1.41). At the other extreme are Rioja (1.08), the Basque Country (1.13), Asturias (1.13) and Aragon (1.14).

From an environmental point of view, vehicle fleet renewal is an important factor as new vehicles incorporate technology that reduces consumption and pollution. In the period 2000-2006, an average of 749,003 passenger cars were withdrawn from circulation every year. In 2006, the number of passenger cars withdrawn from circulation (910,727) accounted for 4.41% of the passenger car fleet and 83% of all vehicles withdrawn. In addition, 13.5% (123,368) of passenger cars withdrawn were more than 20 years old.

Another significant factor is the type of fuel used: as is commonly known, there is a growing trend to prefer diesel vehicles over petrol-powered ones. Thus, in 2000, 27% of passenger cars ran on diesel, while by 2006 that figure had risen to 44.92%. It seems clear that fuel prices and fiscal policies have favoured this trend.

The public's preference for evermore powerful passenger cars can also be seen. In 2006, passenger cars with a 1600 to 1999-cc cylinder capacity constituted the most popular band (42.76%). Along with those with a cylinder capacity of over 1999 cc, they made up more than half (52.69%) of the national passenger car fleet. This preference among consumers results in increased fuel consumption, which neutralises the technological advances that car manufacturers incorporate into their vehicles.

Worsening air quality due to pollutant emissions, noise, vibration, traffic congestion and road accidents (with and without personal injury), are some of the most serious problems associated with increased car use in towns and cities. The rise in the number of passenger cars per household can therefore be seen as a growing threat, especially as regards quality of life in towns and cities.

NOTES

- Up to 2005, the Household Budget Continuous Survey (*Encuesta Continua de Presupuestos Familiares*) was used. This has now been replaced by the Household Budget Survey (*Encuesta de Presupuestos Familiares*), which does not give the number of households directly. For this reason, the Living Conditions Survey, which does provide it, has been used for this chapter.
- According to the INE (Living Conditions Survey 2006), the number of car-owning households stands at 76.4% of the total. The rest (23.6%) do not have a car either because they cannot afford one or for other reasons. According to this data, the number of households with a car reaches 11,921,685, equivalent to 1.73 cars per household.
- Spain's Directorate General for Traffic (*Dirección General de Tráfico*) defines "passenger car" as, "an automobile, other than a motorcycle, specifically designed and built to transport people and having the capacity to carry up to nine passengers including the driver". Rental fleets of passenger cars and commercial vehicles that meet this definition are also included in this indicator.
- The national vehicle fleet stood at 28,531,183 vehicles on 31/12/2006 (lorries, vans, buses, passenger cars, motorcycles, industrial tractors and other vehicles), of which 48.97% were powered by diesel and 50.39% by petrol. The number of passenger cars withdrawn from circulation represented 3.21% of the total national vehicle fleet. The number of passenger cars over 20 years old withdrawn from circulation only represented 0.4% of the total fleet.
- In order to have a broad, continuous series for the "number of households" variable, the number of households recorded in the Household Budget Continuous Survey carried out by the INE up to 2005 was used. After this year, it was replaced by the Household Budget Survey, which includes methodological changes and does not present the number of households directly. For this reason, this edition used the 2006 data from the Living Conditions Survey.
- The vehicle fleet in Spain as at 31/12/2006 stood at 28,531,183 units.

SOURCES

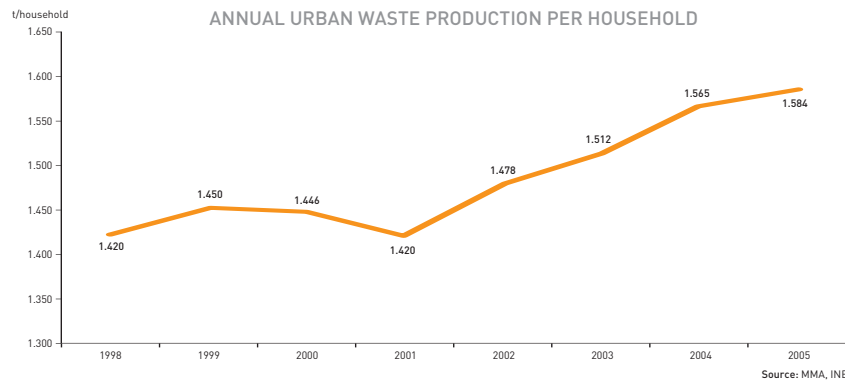
- Households: Spanish National Institute of Statistics (INE): Household Budget Continuous Survey. Base 1997. Households by type of household and number of members (*Hogares por tipo de hogar y personas*).
- Households: Living Conditions Survey (2006).
- Passenger cars: Directorate General for Traffic (DGT). General Statistics Yearbook (*Anuario estadístico general*). 2006.

FURTHER INFORMATION

- <http://www.ine.es/inebase>.
- <http://www.dgt.es/estadisticas/estadisticas03.htm>

Urban waste production per household

In 2006, urban waste production per household per year reached 1.6 tonnes, a slight increase on the previous 12-month period



This indicator estimates the average annual amount of urban waste generated per household. The overall figure for 2005 comprises mixed waste (88%), separately collected waste (9.5%) and waste collected at recycling points (2.55%). Each household generated 1.584 tonnes that year as opposed to 1.565 t in 2004.

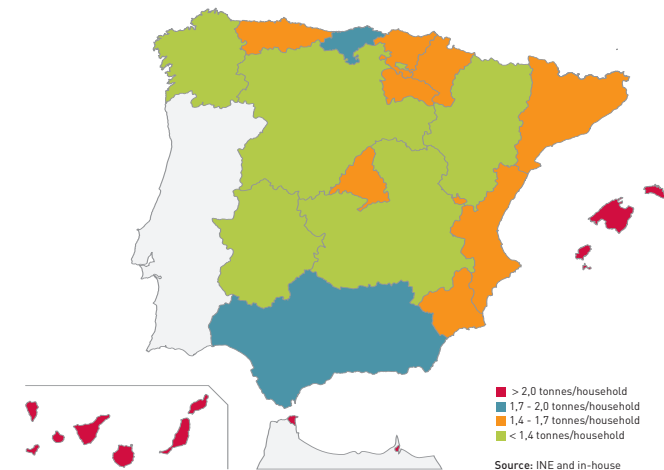
According to available figures, urban waste generation grew by 24.4% between 2000 and 2005, increasing at an average annual rate of 4.8%⁽¹⁾. In the last year of the period, 814,248 tonnes more of waste were generated in Spain than in the previous 12-month period, a rise of 3.6%, lower than the year-on-year rate and similar to GDP growth for that year (3.7%). Given that the number of households increased by 13.6% since 2000 (from 13.0 million to 14.8 million in 2005), it is clear that not only has there been a failure to decouple the quantity of waste generated from the number of households, but that it has actually grown in greater proportion. Economic growth, strongly based on internal consumption, seems to be a conditioning factor.

Waste generation analysed by Autonomous Community (2005) shows that eight of them are within the 1.4-1.7 t/household band, while five are below 1.4 t/household. The most popular tourist regions (Balearic and Canary Islands) and the Autonomous Cities of Ceuta and Melilla recorded figures above 2 t/household/year, the latter on account of packaging

(1) The drop seen in 2001 is due more to the increase in the number of households as a result of updating the Census of Population and Housing (Censo de Población y Vivienda) than to any decrease in the amount of waste produced during that year (19.1 t).

waste from intensive trade with Morocco. The following four Autonomous Communities generate the highest percentages of waste: Andalusia (17.92%), Catalonia (17.42%), Valencia (11.42%) and Madrid (14.14%). These Autonomous Communities, which represent more than half of Spain's population (57.8%), together generate 60.9% of urban waste.

WASTE PRODUCTION PER HOUSEHOLD, 2005



NOTES

- The inflection observed in the graphic (year 2001) is more dependent on statistical increase in the number of households after updating the Census of Population and Housing, than on the decrease in the amount of waste generated in that year (19.1 t). For statistical purposes the amount of waste generated is the amount of waste collected.
- Urban waste are those generated in households, shops, offices and services, as well as all those which do not have the qualification of dangerous and that by nature and composition are similar to those produced in the mentioned locations or activities. The following are also regarded as urban waste: waste coming from the cleaning of public roads, green areas, recreational areas and beaches, dead pets, as well as furniture, fittings and abandoned vehicles and, finally, waste and debris from construction works and minor home repairs. (10/1998 Waste Act; "Ley 10/1998 de Residuos")

SOURCES

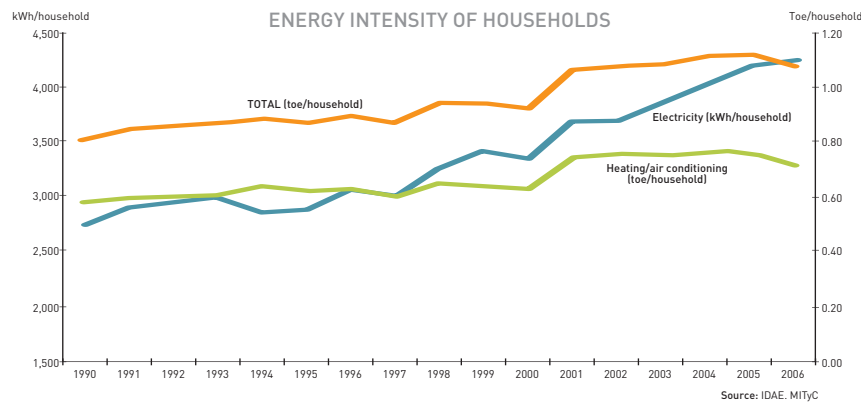
- Data provided by the Waste Management Department. Sub-Directorate General for Waste. Directorate General for Quality and Environmental Assessment. [Área de Gestión de Residuos. Subdirección General de Residuos. Dirección General de Calidad y Evaluación Ambiental]. Spanish Ministry of the Environment (MMA)
- Spanish Ministry of the Environment (MMA), 2006. "The Environment in Spain 2005" [Medio Ambiente en España 2005]
- Spanish Ministry of the Environment (MMA), 2007. "The Environment in Spain 2006" [Medio Ambiente en España 2006]
- Spanish National Institute of Statistics (INE). Number of households in 2005: "Continuous survey of household budgets. Several years. Base 1997" [Encuesta continua de presupuestos familiares. Varios años. Base 1997].
- Spanish National Institute of Statistics (INE). Number of households 2006: "Survey on Living Conditions 2006" [Encuesta de condiciones de vida 2006].

FURTHER INFORMATION

- www.ine.es/inebase
- www.eea.europa.eu
- www.epp.eurostat.ec.europa.eu

Energy consumption per household

In 2006, energy consumption in Spanish households fell by 3.5% as compared with the previous year due to reduced energy use for heating and air conditioning



This indicator measures energy consumption per household broken down into electrical usage (kWh/household) and heating/air conditioning (toe/household). In the period 1990-2006, electrical usage rose by 54.3% and heating/air conditioning by 22.8%, giving an overall increase of 31.9% and an average annual increase of close to 2%.

However, in the period 2000-2006, there was a 25.6% rise for electrical usage and 12.9% increase for heating/air conditioning, which together produced a rise of 14.4%. The average annual increase in the total since 2000 was 2.4%. In comparison with the previous year, 2006 shows an increase in electrical usage per household, but a decrease in use for heating/air conditioning, which produced an overall fall of 3.9%.

In comparison with its European counterparts, Spain's residential sector still has one of the lowest levels of energy consumption. However, there is a strong upward trend which runs contrary to the reduction in consumption observed in neighbouring countries and the European Union as a whole. This situation may be partly due to mild average winter temperatures, meaning reduced energy consumption for heating, while the upward trend in electricity consumption is driven by economic development, which is also strongly linked to family consumption, made possible by an increase in the number of household appliances, but with no significant improvement in the eco-efficiency of said appliances.

In terms of total final energy consumption, the residential sector accounts for 15.6%, compared with 35.8% for industry, 36.4% for transport, 8.9% for the service sector and 3.26% for agriculture. The figure for 2000 was 13.3%, meaning that the residential sector has increased its share since the start of the century by 2.3%.

According to the Spanish Institute for Energy Saving and Diversification (IDAE – Instituto para la Diversificación y Ahorro de la Energía), the break-down of household energy consumption is as follows: heating (41.7%), household appliances (12%), hot water (26.2%), cooking (10.8%), lighting (9%) and air conditioning (0.4%). It is this use of air conditioning, both in households and in the tertiary sector, which is responsible for the surges in power demand registered during the summer. At the same time, the INE estimates that almost 100% of households have a telephone, refrigerator, automatic washing machine and television; over 25% have a personal computer, electric cooker, freezer and dishwasher; and air conditioning is also making considerable inroads. Two key factors are revealed by a comparison with average consumption across Europe (EU-15): the lower rate of energy consumption for heating in Spanish households (26.2% according to 2003 data), and Spain's greater energy consumption for household appliances and lighting (6.8%) and for hot water (12.1%).

EUROPE 2004-2005: HOUSEHOLD ELECTRICITY CONSUMPTION

EU/Country	2004 (ktoe)	2005 (ktoe)	Increase 2004-2005 (%)
EU-27	67,410	68,736	1.97
EU-15	60,294	61,495	1.99
Germany	12,071	12,193	1.01
France	12,703	12,881	1.40
Spain	4,991	5,488	9.96
Italy	5,726	5,758	0.56
United Kingdom	9,933	10,044	1.12

Source: Eurostat 2008. Note: The indicator shows household electricity consumption. Household consumption includes total electricity use for appliances, heating/air conditioning and hot water. Data for the EU and Spain are provisional.

NOTES

- From a methodological perspective, it should be noted that when compiling these energy statistics it is not easy to separate consumption attributable to families from that of small tertiary sector businesses that are often signed up to domestic gas and electricity tariffs on account of their small size.
- In 2006, the Spanish Ministry of Trade, Industry and Tourism (MITyC – *Ministerio de Industria, Turismo y Comercio*) attributed 34% of final energy consumption to the industrial sector, 38.2% to transport and the remainder (27.9%) to “miscellaneous uses”. It did not provide a break-down of the different components, among them the residential, commercial and agricultural sectors, but stated that there had been rapid acceleration in the growth of energy demand by transport and the residential and tertiary sectors, while growth in industrial demand had slowed. When compared with the previous year, greatest growth in demand came from the transport sector (3.6%). Meanwhile, demand from other sectors fell: industry by 5.6% and the sectors included under miscellaneous uses by 1.7%. Eurostat (2004) provides the following break-down by sector for final energy consumption in Spain: industry (30.7%), residential (14.4%), services and others (10.9%), and transport (38.4%).
- The data was calculated by the source (IDAE) both for electrical usage (kWh/household) and for heating/air conditioning (toe/household).

SOURCES

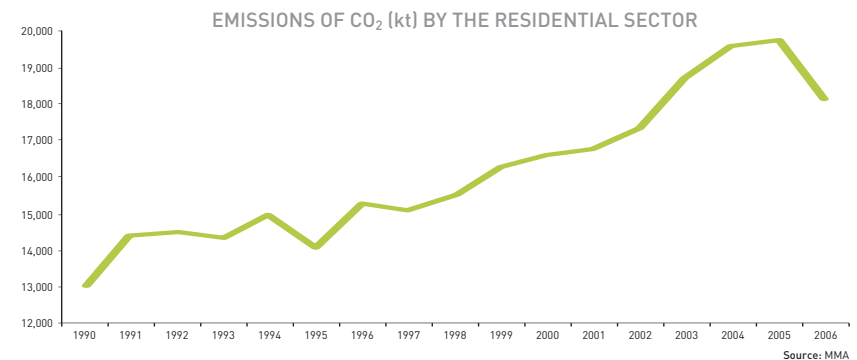
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- Spanish Institute for Energy Saving and Diversification (IDAE): Energy Efficiency and Renewable Energy (*Eficiencia energética y energías renovables*), Report Series.
- Spanish Sustainability Monitoring Centre (OSE – *Observatorio de la Sostenibilidad en España*): Sustainability in Spain 2007 (*Sostenibilidad en España 2007*). Alcalá de Henares (Madrid), 2007.
- Spanish Ministry of Trade, Industry and Tourism (MITyC), 2006: Energy in Spain 2006 (*La Energía en España, 2006*).

FURTHER INFORMATION

- <http://www.idae.es>
- <http://www.eea.eu.int>
- <http://www.mityc.es>
- <http://epp.eurostat.ec.europa.eu>

Emissions of CO₂ by the residential sector

In 2006, the residential sector's CO₂ emissions fell by 8% as compared with 2005. Each household emitted an average of 1.134 t/year of CO₂



In 2006, there was a major year-on-year fall, estimated at 8%, in CO₂ emissions by the residential sector. This is the biggest decrease since 1990, although there were also significant falls in 1995 and 1993. In total, this sector emitted 18,110 kilotonnes, making it responsible for 5.04% of overall CO₂ emissions into the atmosphere.

In the period 1990-2006, there was a 39.5% increase in these emissions. However, between 2000 and 2006 emissions only rose by 9.2%. As indicated above, 2006 showed a major decrease in CO₂ emissions (8%) compared with 2005, building on the slow-down in growth recorded in the latter year (0.8%). Each household produced 1.16 tonnes of CO₂ in 2006. This figure is lower than the European average and may be attributed to the fact that energy consumption for heating is much higher in many other European countries because of their lower winter temperatures.

Use of energy-efficient household appliances and energy certification of housing units could reduce these emissions (70% of which are attributed to heating), thereby contributing to a reduction in atmospheric concentrations. Measures that have been applied to achieve more efficient energy consumption in the domestic sector include the “Plan Renove” to replace energy-inefficient appliances, which was included in Spain's Energy Saving and Efficiency Plan 2005-2007 (E4 – Plan de Ahorro y Eficiencia Energética 2005-2007).

An idea of the scope of this measure is revealed by the fact that every year in Spain 2.8 million household appliances (fridges, freezers, washing machines and dishwashers) are replaced. The aim of the “Plan Renove” was to promote withdrawal of ageing appliances manufactured when there was no energy- efficiency labelling requirement. Grants available under this Plan were provided on condition of purchase of appliances rated as category “A” or higher.

Improvements to heating systems and bioclimatic conditions in buildings in response to new regulations under the Spanish Building Code (Código Técnico de la Edificación), along with use of alternative energies, are also contributing to emissions reductions.

NOTES

- This indicator shows CO₂ emissions from residential combustion plants, a sub-activity belonging to group 2, “Non-industrial combustion plants” in the Selected Nomenclature for Sources of Air Pollution, known as SNAP-97. It includes emissions produced by: boilers, gas turbines, stationary engines and other appliances such as heaters, cookers, etc.
- The SNAP-97 for the CORINAIR project lists sources of emissions associated with a selection of pollutants, in accordance with certain structural principles that allow for emissions from certain sectors, sub-sectors and activities to be distinguished.
- In order to calculate the quantity of CO₂ attributed to each household, the “households” figure provided by the INE in its Greenhouse Gases in Spain Inventory (Inventario de Gases de Efecto Invernadero de España), 2007 edition (1990-2005 series) was used. This calculates the number of households to be 15,975,900. For the remaining indicators in this chapter, the figure used was taken from the INE’s Living Conditions Survey (15,604,300 households).
- No. of households (2006): 15,604,300. Spanish National Institute of Statistics (INE). Living Conditions Survey 2006.

SOURCES

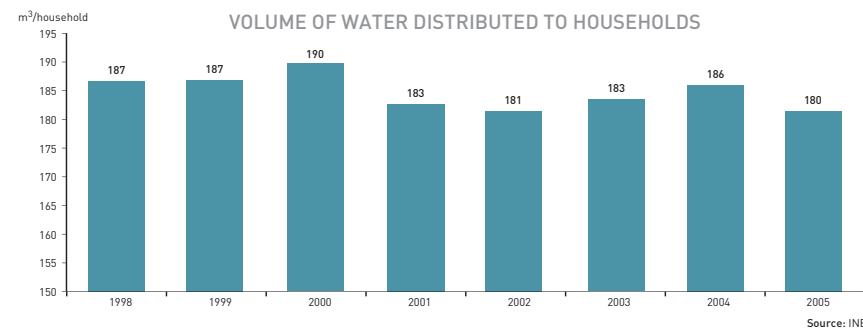
- Data on CO₂ emissions taken from the Spanish National Atmospheric Emissions Inventory (*Inventario Nacional de Emisiones a la Atmósfera*). Sub-Directorate General for Air Quality and Risk Prevention (*Subdirección General de Calidad del Aire y Prevención de Riesgos*). Spanish Ministry of the Environment (MMA – *Ministerio de Medio Ambiente*).
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FURTHER INFORMATION

- <http://www.mma.es>
- <http://www.ine.es>

Water consumption per household

In 2005, there was a 1% fall in water consumption by the residential sector compared with the previous year



The indicator shows the quantity of water distributed to Spanish households annually. According to the Survey on Water Supply and Treatment (Encuesta sobre el suministro y tratamiento del agua) carried out by the Spanish National Institute of Statistics (INE), in 2005, 4,873 hm³ of water were supplied in Spain (50 hm³ less than in 2004). Of this volume, 82.1% was consumed by families, businesses, institutions, municipal services, etc. The public distribution network lost 17.9% of available water through leakage, a similar amount to the previous year.

Water consumption by Spanish families stood at 2,673 hm³ in 2005, a decrease of 1.04% on the previous year, when the figure was 2,701 hm³. Based on figures from the INE’s Household Budget Continuous Survey 2005 (14,865,707 households), water consumption per household was 179.8 m³ per year, making daily use per household approximately 500 litres.

Water consumption in 2005 as compared with 2004 fell in the following Autonomous Communities: Castile-Leon, the Basque Country, Navarre, Madrid, Catalonia, Aragon, Castile-La Mancha, Galicia and Valencia. It also decreased in the Autonomous Cities of Ceuta and Melilla. In contrast, consumption rose in Rioja (5.64%) Andalusia (5.3%), Asturias, (5.2%), Cantabria (3.8%) and Murcia (3.7%).

Daily consumption per inhabitant is calculated at 166 litres, 5 litres less than in 2004. As can be seen in the table below, average water consumption per inhabitant per day has grown by 20 litres per day since 1996, equivalent to 13.69% in the period 1996-2005,

although it should be noted that current figures place consumption per capita per day at approximately 1999 levels.

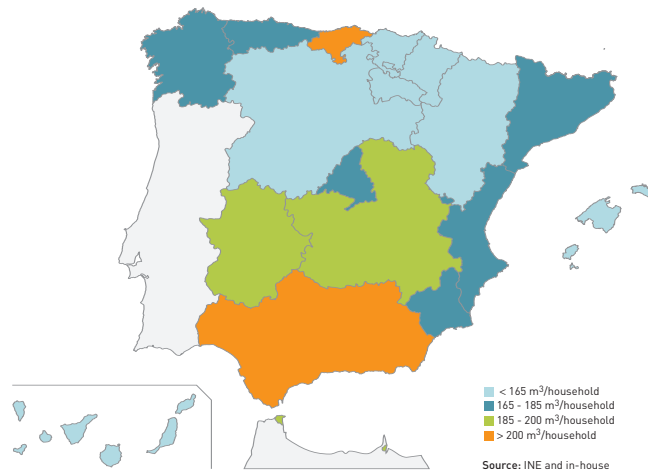
WATER SUPPLIED TO HOUSEHOLDS (LITRES)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Average consumption per inhabitant per day	146	153	159	165	168	165	164	167	171	166

Source: INE

In terms of demand management, an important factor in water consumption is the price of this service. According to the INE, the unit cost of water rose by 2.1% in 2005, reaching an average of 0.98/m³ in Spain compared with 0.86 the previous year. The highest water prices in 2005 were found in the Canary Islands (1.65), the Balearic Islands (1.58), Murcia (1.52), Valencia (1.36), Madrid (1.09) and Catalonia (1.04), all of which were above the national average.

VOLUME OF WATER DISTRIBUTED TO HOUSEHOLDS, 2005 (m³/household)



In the EU-15, residential consumption accounts for 10% of total water consumption, and the supply of water to most households is constant in terms of quality and quantity. Guaranteeing water supply is not an easy task in Mediterranean countries, where water availability is characterised by seasonal fluctuations and scarcity. In Spain, the growing size of the resident foreign population also has an influence, as do tourists (over 50 million) who visit Spain each year. Meanwhile, the recent period of severe drought (2005-2006)

has highlighted the imbalance between available water (with considerable drops in reservoir water levels) and demand by the population.

NOTES

- Water consumption in households is calculated from the INE's Survey on Water Supply and Treatment for the period 1996-2005. It includes the volume of water measured and distributed to households. Water distribution includes the total amount of water available in the distribution network, plus losses from the network itself. It is calculated from total water abstraction by the supply company plus the net balance of water purchase and sale by other companies and local councils.
- In the series of data provided by the INE's Water Indicators (*Indicadores sobre el agua*) (*Serie 1996-2003*), the indicators used are water supply and treatment, volume of water available and volume of water supplied (litres/inhabitant/day).

SOURCES

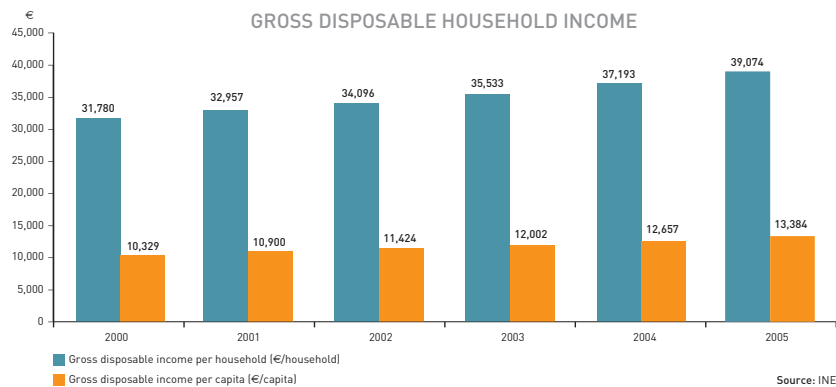
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- Unit cost of water: Spanish National Institute of Statistics (INE). Press release "Water Surveys 2005" (*"Encuestas del agua 2005"*). 17 October 2007.
- Households: Spanish National Institute of Statistics (INE): Household Budget Continuous Survey. Base 1997. Annual Results 2005 (*Resultados anuales 2005*). Households, members and average size (*Hogares, personas y tamaño medio del hogar*).

FURTHER INFORMATION

- <http://www.ine.es/inebase>

Gross disposable household income

Up to 2005, rising income levels led to increased household consumption, bringing with it greater environmental impacts



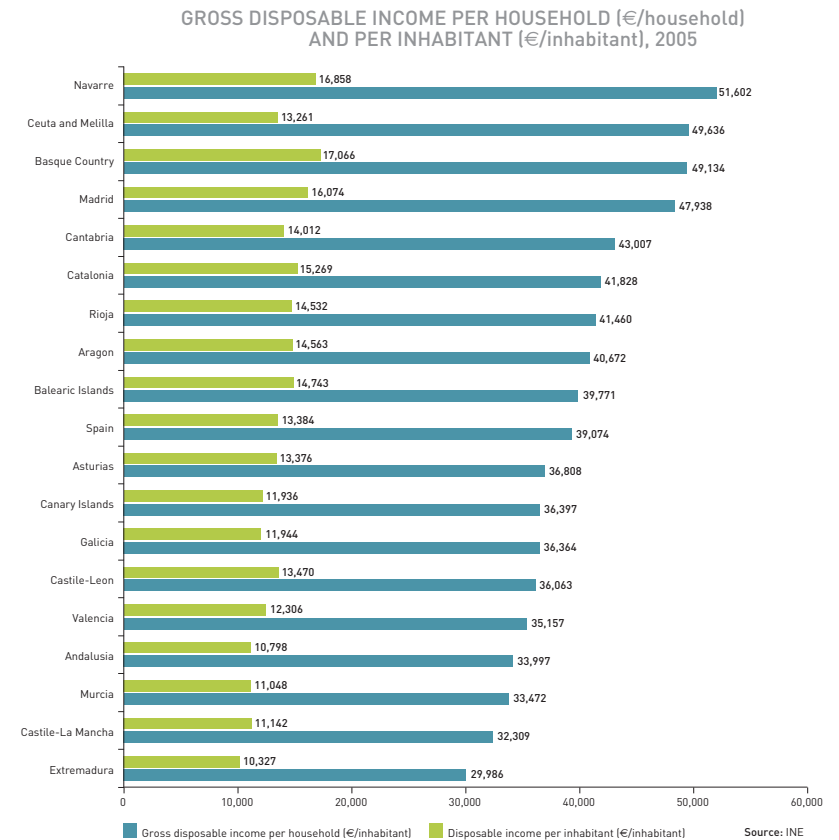
This indicator presents gross disposable income per household in Spain from 2000 to 2005. Although the overall increase in income is almost 40%, the rise corresponding to each household is smaller (22.95%) due to the increase in number of households (from 13 million to 14.8 million), which grew by 19.24% in the period considered.

As can be seen from the break-down by Autonomous Community, gross disposable income per household is above the national average in eight regions, as well as in the Autonomous Cities of Ceuta and Melilla. At the head of the list is Navarre (51,602/household), followed by the Autonomous Cities (49,636), the Basque Country (49,134), Madrid (47,938), Cantabria (43,007), Catalonia (41,828) and Aragon (40,672).

If analysis is carried out for gross disposable income per inhabitant, nine Autonomous Communities are above the national average, led by the Basque Country (€17,066) and followed by Navarre (€16,858), Madrid (€16,074), Catalonia (€15,069), the Balearic Islands (€14,743), Rioja (€14,532) and Cantabria (€14,012).

There are still major differences between Autonomous Communities, as can be seen by comparing Navarre (€51,602/household) with Extremadura (€29,986/household), or the Basque Country (€17,066 per capita) with Andalusia (€10,798 per capita).

According to the Household Budget Continuous Survey, real average expenditure per household rose from €15,642.50 in 2000 to €19,183.23 in 2005, an increase of 22.63%. The variation index for real average expenditure per household compared with the Survey baseline year (1997=100) is 116.85.



The distribution of and changes in household expenditure can be seen in the following table, which shows the four largest groups that account for over 10% of total expenditure. The lowest items of household expenditure in 2005 corresponded to health (2.86%) and education (1.34%), rates which have remained fairly stable over the period, as might be expected given widespread public provision of health care and education.

Household expenditure groups	2000	2002	2004	2005
Food (not including alcoholic beverages)	21.93%	22.57%	21.77%	20.92%
Housing, water, electricity and fuel	12.40%	12.30%	12.41%	12.71%
Transport	14.50%	13.49%	13.58%	14.16%
Restaurants and hotels	10.96%	11.00%	11.23%	11.13%

Source: INE. Household Budget Continuous Survey, Base 1997.

NOTES

- The INE presents two sets of income accounts for households:
 - Allocation of primary income account
 - Secondary distribution of income account
- The former (primary income) is presented as the balance of income received by households from their direct involvement in the production process (salaries, operating profits and mixed income) plus income from assets (interest, dividends, etc.).
- The secondary distribution of income account shows how the balance of primary income is allocated through redistribution, in other words, through taxation on income, assets, etc., Social Security contributions and provisions (excluding social transfers in kind) and other net current transfers (grants, fines and lottery and gaming prizes). The account balance gives the gross disposable income presented under this indicator.
- The INE's Household Budget Continuous Survey analyses 12 expenditure groups: 1. Food and non-alcoholic beverages, 2. Alcoholic beverages, tobacco and narcotics, 3. Clothing and footwear, 4. Housing, water, electricity and other fuels, 5. Furnishings, household equipment and routine maintenance of the house, 6. Health, 7. Transport, 8. Communications 9. Recreation and culture, 10. Education, 11. Restaurants and hotels, and 12. Miscellaneous goods and services.

SOURCES

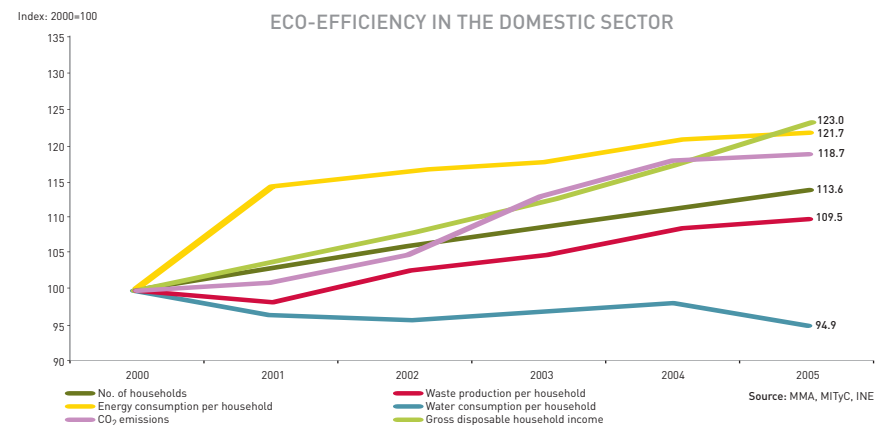
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FURTHER INFORMATION

- <http://www.ine.es/inebase>

Eco-efficiency in the domestic sector

The rate of energy consumption and waste generation is slowing in Spain while water consumption per household is falling



This indicator compares the available variables that reflect changes in the residential sector in the period 2000-2005, in which the number of households increased from 13 million to 14.8 million. At the same time, gross disposable income in Spain rose from 10,329 per capita in 2000 to 13,384 in 2005. There was major growth both in number of households and income, with gross income showing a greater increase.

In general, throughout the period analysed there was an upward trend in all the variables except for water consumption per household, which fell considerably. Spanish households are progressively consuming more energy, emitting more CO₂ into the atmosphere and producing more waste. It may therefore be deduced that economic growth, measured as gross disposable household income, and demographic growth have been accompanied by an increase in pressure on the environment.

Nevertheless, in relation to energy consumption and waste generation, there was a slight slow-down in 2005 as compared with 2004. Household energy consumption rose as regards electricity usage, but fell for heating and air conditioning, making the total equal to that of the previous year (1.12 toe per household). Waste generated per household in 2005 was 1.584 t compared with 1.565 the previous year.

Water consumption per household behaves differently to the other variables, showing fluctuations that could be related to meteorological parameters. It shows a certain decoupling from growth in gross disposable income per household and number of households, and a sharp fall in 2005 as compared with 2004. This index could be partly explained by campaigns to raise awareness about water saving and, above all, by restrictions applied during periods of drought and water scarcity.

NOTES

- The indicator was calculated using the annual variation rate of each of the indicators, establishing 2000 as the baseline year and setting the indicator's values at 100.
- European households account for nearly 27% of energy consumption, mainly using it for heating and air conditioning. In Spain, this figure is lower, probably due to the country's milder climate, which does not require so much heating in winter. Domestic energy consumption, excluding transport, is generally increasing due to the growth in the number of households and expenditure by the same. Household appliances' greater efficiency was counteracted by the large number of these devices used in households.
- The 2005-2007 Action Plan (Plan de Acción 2005-2007) drawn up under the Spanish Energy Saving and Efficiency Strategy (Estrategia de Ahorro y Eficiencia Energética) set a savings target of approximately 500,000 toe in 2007 for the Construction subsector. To achieve this objective, a series of measures were established. Some of these were directed at the existing stock of buildings, while other more ambitious measures target new buildings, which could bring about a fall in residential energy consumption in the future.
- Practically all Spanish households have access to water, although its cost and the rationing imposed in times of drought prevent unlimited consumption. The Segura, Júcar, Sur and Guadiana river basins, inland basins in Catalonia and certain areas of the Ebro Basin suffer periods of water scarcity. These were particularly acute in the 2004-2005 hydrological year. In Spain, 17% of water consumed is used for urban supply. In the rest of the European Union, this does not exceed 10%.

SOURCES

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- Spanish Ministry of Trade, Industry and Tourism (MITYC). Secretariat General for Energy (*Secretaría General de la Energía*), 2006: Energy in Spain 2006.
- Water consumption: Spanish National Institute of Statistics (INE). Survey on Water Supply and Treatment. Various years.

FURTHER INFORMATION

- <http://www.ine.es>
- <http://www.idae.es>
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