

Energy Consumption Survey 2005 (Definitive Data)

Industry energy consumption is over 8,000 million euros in 2005

Industry energy consumption is over 8,000 million euros in 2005. This figure is **15.4% higher** (variations in value are the result of variations in the amounts and prices) **than that of 2003**, the last year in which this survey that studies companies with more than 20 workers and whose main activity is within the extractive or manufacturing industries was performed.

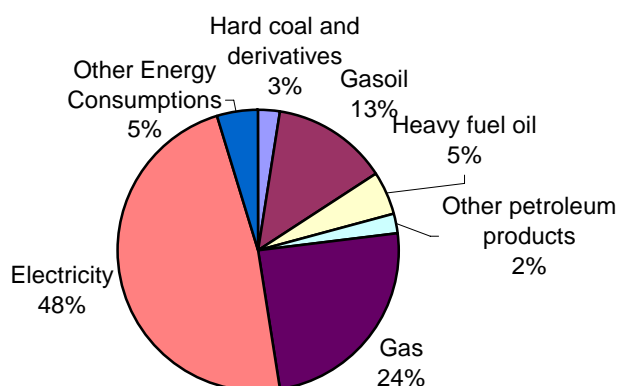
The main energy products used by industrial companies are electricity (47.9% of the total), gas (24.4%) and petroleum products (gasoil, Heavy fuel oil and others - 20.7%).

Compared to year 2003, the relative weight of electricity on total industrial energy consumption has decreased (from 51.3% to 47.9%) and that of gasoil has increased (from 10.6% to 13.3%).

Distribution of industry energy consumption

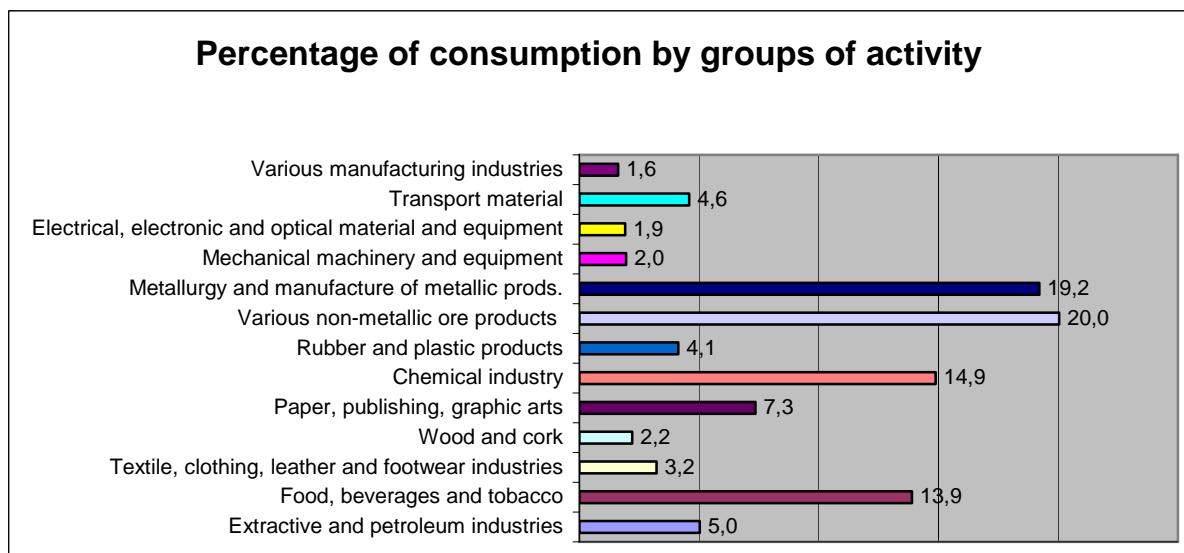
	Data thousand €	2003 %	Data thousand €	2005 %
Hard coal and derivatives	174,507	2.5	205,937	2.5
Gasoil	748,768	10.6	1,088,513	13.3
Heavy fuel oil	440,786	6.2	410,866	5.0
Other petroleum products	183,306	2.6	191,264	2.3
Gas	1,683,659	23.8	1,992,278	24.4
Electricity	3,633,775	51.3	3,916,243	47.9
Other energy consumption	220,627	3.1	372,399	4.6
Total energy consumption	7,085,427	100.0	8,177,499	100.0

Energy consumption by fuel type 2005



Energy consumption by groups of activity

The groups of activity with greater energy consumption are "Non-metallic ore products" (20.0%), "Metallurgy and manufacture of metallic products" (19.2%), "Chemical industry" (14.9%) and "Food, beverages and tobacco" (13.9%).



Taking the 2003/2005 period as a reference, the groups in which energy consumption has increased the most are "Chemical industry" (34.1%) and "Extractive and petroleum industries" (32.5%).

Energy consumption by groups of activity

Variation 2005/2003

Groups of activity	Total energy consumption 2003 (thousand €)	Total energy consumption 2005 (thousand €)	% 2005/2003
Extraction and manufacturing industry total	7,085,427	8,177,499	15.4
Extractive and petroleum industries	310,531	411,450	32.5
Food, beverages and tobacco	973,775	1,135,365	16.6
Textile, clothing, leather and footwear industries	306,757	263,200	-14.2
Wood and cork	161,057	180,075	11.8
Paper, publishing, graphic arts	560,964	600,896	7.1
Chemical industry	907,324	1,216,534	34.1
Rubber and plastic products	333,295	338,055	1.4
Various non-metallic ore products	1,411,056	1,638,282	16.1
Metallurgy and manufacture of metallic prods.	1,362,854	1,570,585	15.2
Mechanical machinery and equipment	146,333	160,110	9.4
Electrical, electronic and optical material and equipment	152,573	156,247	2.4
Transport material	352,129	374,546	6.4
Various manufacturing industries	106,777	132,155	23.8

With regard to the use of different types of fuels, the use of gas (37%) and hard coal and its derivatives (9%) is worth mentioning in the "Non-metallic mineral products" group; the use of petroleum products in the "Extractive and petroleum industries" (44%) and the "Wood and cork" (38%) groups; and the large participation of electricity in the "Rubber and plastic products" (77%) and the "Electrical, electronic and optical material and equipment" (72%) groups.

Percentage distribution by types of energy and groups of activity

Groups of activity	Hard coal and derivatives (%)	Petroleum products (%)	Gas (%)	Electricity (%)	Other energy consumption (%)	Total energy consumption
Extraction and manufacturing industry total	3	21	24	48	5	8,177,499
Extractive and petroleum industries	2	44	7	44	3	411,450
Food, beverages and tobacco	0	29	21	47	2	1,135,365
Textile, clothing, leather and footwear industries	0	14	23	58	5	263,200
Wood and cork	0	38	12	47	3	180,075
Paper, publishing, graphic arts	0	12	35	48	5	600,896
Chemical industry	1	13	32	39	15	1,216,534
Rubber and plastic products	0	10	10	77	3	338,055
Various non-metallic ore products	9	25	37	29	1	1,638,282
Metallurgy and manufacture of metallic prods.	2	15	18	61	4	1,570,585
Mechanical machinery and equipment	0	29	13	56	2	160,110
Electrical, electronic and optical material and equipment	0	20	7	72	1	156,247
Transport material	0	11	21	63	6	374,546
Various manufacturing industries	0	38	5	56	1	132,155

Energy consumption by activity sectors

Analysis of consumption of the different types of fuels shows that consumption of **hard coal and its derivatives** is quite significant in terms of percentage in the sectors of "Manufacture of cement, lime and plaster" (34%), "Extraction and agglomeration of anthracite, coal, lignite and peat" (12%) and in that of "Casting of metals" (7%). In the remaining sectors its use is relatively low with respect to the total.

The 10 industrial sectors with larger percentage use of coal as compared to the fuel total

Activity sector	Hard coal and derivatives (%)
Manufacture of cement, lime and plaster	34
Extraction and agglomeration of anthracite, coal, lignite and peat	12
Casting of metals	7
Manufacture and first transformation or precious metals	4
Sugar, cocoa and chocolate industry	4
Ceramic goods other than those intended for construction	3
Manufacture of basic chemical products	2
Cisterns, large deposits and containers made of metal, radiators	1
Basic iron, steel and ferro-alloys products	1
Ceramic tiles, flooring tiles, bricks, roofing tiles... for construction	1

On the other hand, the sectors with the greatest participation of **petroleum products** are those of "Manufacture of articles of concrete, plaster and cement" (71%) and "Sawing, planing and industrial preparation of wood" (69%).

The 10 industrial sectors with greater percentage use of petroleum products as compared to the fuel total

Activity sector	Petroleum products (%)
Manufacture of articles of concrete, plaster and cement	71
Sawing, planing and industrial preparation of wood	69
Manufacture of wooden containers	63
Extraction of non-energetic ores	63
Manufacture of builders' carpentry and joinery of metal	59
Manufacture of metal structures	56
Recycling	54
Cutting, shaping and finishing of stone	47
Processing and preservation of fish and fish products	46
Radiofusion and television transmitters...	44

The use of **gas** (natural and manufactured) as fuel is at least half of the total energy consumptions in four industrial sectors. The activities with the greatest participation of gas are those of "Ceramic tiles, flooring tiles, bricks, roofing tiles... for construction" (67%), "Paints, varnishes, printing ink and mastics" (60%) and "Ceramic products except those intended for construction" (58%).

The 10 industrial sectors with the largest percentage use of gas as compared to the fuel total

Activity sector	Gas (%)
Ceramic tiles, flooring tiles, bricks, roofing tiles... for construction	67
Paints, varnishes, printing ink and mastics	60
Ceramic goods other than those intended for construction	58
Textile finishings	53
Manufacture of glass and glass products	49
Manufacture of pulp, paper and cardboard	48
Manufacture of other chemical products	46
Various non-metallic ore products	45
Manufacture of man-made fibres	41
Fur industry	37

Electricity Consumption represents a very significant part of the total for a large number of industrial sectors. Those of greater participation are "Manufacture of insulated wire and cable" (85%), "Television and radio receivers, sound or video recording or reproducing apparatus" (82%) and "Manufacture of plastic products" (81%).

The 10 industrial sectors with the largest percentage use of electricity as compared to the fuel total

Activity sector	Electricity (%)
Manufacture of insulated wire and cable	85
Television and radio receivers, sound or video recording or reproducing apparatus	82
Manufacture of plastic products	81
Manufacture of jewellery and gold and silver articles	80
Publishing	79
Manufacture of electronic valves, tubes and other components	79
Manufacture of footwear	79
Oil, natural gas and nuclear fuel industry	77
Manufacture of medical and surgical equipment and orthopaedic appliances	77
Manufacture of office machines and IT equipment	76

Finally, the sectors worth mentioning for their use of the **rest of energy consumptions** (biomass, heat...) are "Manufacture of basic chemical products" (19%) and "Manufacture of steam generators, except central heating hot water boilers" (18%).

The 10 industrial sectors with greater percentage use of other energy consumption as compared to the fuel total

Activity sector	Other energy consumption (%)
Manufacture of basic chemical products	19
Manufacture of steam generators, except central heating hot water boilers	18
Preparation and spinning of textile fibres	12
Manufacture of rubber products	11
Manufacture of motor vehicles	10
Textile finishings	10
General mechanical engineering by others	7
Manufacture of paper and cardboard articles	7
Manufacture of other chemical products	6
Basic iron, steel and ferro-alloys products	6

Energy consumption by autonomous community

The autonomous communities with a greater share in overall energy consumption are Cataluña (21.3%), Comunidad Valenciana (13.2%), Andalucía (10.2%) and País Vasco (10.1%); while Illes Balears (0.4%), La Rioja y Canarias (0.9% both) are the ones with the lowest weight in overall energy consumption.

Energy consumption by autonomous community (percentage distribution)

Autonomous Communities	Total energy consumption (thousand €)	%
National total	8,177,499	100.0
Andalucía	835,909	10.2
Aragón	374,291	4.6
Asturias (Principado de)	374,809	4.6
Balears (Illes)	36,647	0.4
Canarias	70,763	0.9
Cantabria	187,934	2.3
Castilla y León	505,121	6.2
Castilla-La Mancha	410,156	5.0
Cataluña	1,742,229	21.3
Comunidad Valenciana	1,078,736	13.2
Extremadura	96,308	1.2
Galicia	628,360	7.7
Madrid (Comunidad de)	502,866	6.1
Murcia (Región de)	193,579	2.4
Navarra (Comunidad Foral de)	244,659	3.0
País Vasco	823,899	10.1
Rioja (La)	71,234	0.9

The communities experiencing the greatest growth in energy consumption figures for the 2005/2003 period are Extremadura (35.4%) and Canarias (28.3%).

For their part, Comunidad Valenciana (10.1%) and Aragón (10.6%) are the ones showing a lower growth, although in general terms, percentage participation has not varied significantly among the different communities.

Energy consumption by autonomous community (variation 2005/2003)

Autonomous Communities	% 2005/2003		
	Total energy consumption thousand €	2003	Total energy consumption thousand €
National total	7,085,427		8,177,499
Andalucía	691,836		835,909
Aragón	338,476		374,291
Asturias (Principado de)	316,720		374,809
Balears (Illes)	29,131		36,647
Canarias	55,137		70,763
Cantabria	157,505		187,934
Castilla y León	442,684		505,121
Castilla-La Mancha	331,164		410,156
Cataluña	1,527,556		1,742,229
Comunidad Valenciana	979,423		1,078,736
Extremadura	71,145		96,308
Galicia	508,114		628,360
Madrid (Comunidad de)	452,848		502,866
Murcia (Región de)	163,967		193,579
Navarra (Comunidad Foral de)	220,069		244,659
País Vasco	740,673		823,899
Rioja (La)	58,978		71,234

Regarding the **different fuels used**, autonomous communities showing a greater percentage consumption of hard coal and its derivatives are Illes Balears (9%) and Asturias (Principado de) (5%). The communities using the largest share of petroleum products are Canarias (49%), Extremadura (39%) y Galicia (38%).

On another hand, the communities with the greatest percentages of gas consumption are Comunidad Valenciana (41%) and Aragón (33%). Finally, electricity represents over 50% of total energy consumption in six autonomous communities.

Distribution by type of energy and autonomous community

Autonomous Communities	Hard coal and derivatives (%)	Petroleum products (%)	Gas (%)	Electricity (%)	Other energy consumption (%)	Total energy consumption (thousand €)
National total	3	21	24	48	5	8,177,499
Andalucía	3	27	20	44	6	835,909
Aragón	2	19	33	43	2	374,291
Asturias (Principado de)	5	12	17	57	9	374,809
Balears (Illes)	9	28	18	43	2	36,647
Canarias	3	49	4	43	1	70,763
Cantabria	3	15	23	51	9	187,934
Castilla y León	2	25	23	44	6	505,121
Castilla-La Mancha	3	25	26	40	5	410,156
Cataluña	3	16	24	52	6	1,742,229
Comunidad Valenciana	2	16	41	39	2	1,078,736
Extremadura	2	39	12	47	1	96,308
Galicia	4	38	8	48	2	628,360
Madrid (Comunidad de)	1	23	19	52	4	502,866
Murcia (Región de)	1	35	12	49	3	193,579
Navarra (Comunidad Foral de)	3	15	29	50	3	244,659
País Vasco	1	11	28	55	5	823,899
Rioja (La)	3	23	24	47	2	71,234

For further information see **INEbase-www.ine.es** All press releases at: **www.ine.es/prensa/prensa.htm**

Press office: Telephone: 91 583 93 63 / 94 08 – Fax: 91 583 90 87 - **gprensa@ine.es**

Information area: Telephone: 91 583 91 00 – Fax: 91 583 91 58 – **www.ine.es/infoine**