

29 June 2021

**Energy Consumption Survey 2019**  
Final data

**The mining and quarrying and manufacturing industries' energy consumption rose by 6.7% in 2019 compared to 2017**

**The branches of activity with the highest consumption were the food industry, metallurgy and chemical industry**

**The main energy product used is electricity, with 56.7% of the total consumption for the sector**

Energy consumption<sup>1</sup> in the Industrial Sector<sup>2</sup> reached 11,227 million euros in 2019, an increase of 6.7% compared to 2017, the last year in which this biennial survey was carried out.

The main energy products used in the Industrial Sector were electricity (56.7% of the total), gas (30.0%) and petroleum products (7.8%).

**Energy consumption in industry, by type of product. Year 2019**

Type of product	Consumption (thousands of euros)	% of the total	Variation 2019/2017 (%)
Electricity	6.367.976	56,7	2,3
Gas	3.371.337	30,0	13,1
Petroleum products	877.353	7,8	12,5
- Gasoil	678.354	6,0	15,5
- Fueloil	99.137	0,9	15,3
- Petrol and others	99.862	0,9	-6,6
Coal and coke	104.630	0,9	-30,9
Biofuels	44.727	0,4	60,3
Heat and other products	460.987	4,1	30,3
<b>TOTAL</b>	<b>11.227.010</b>	<b>100,0</b>	<b>6,7</b>

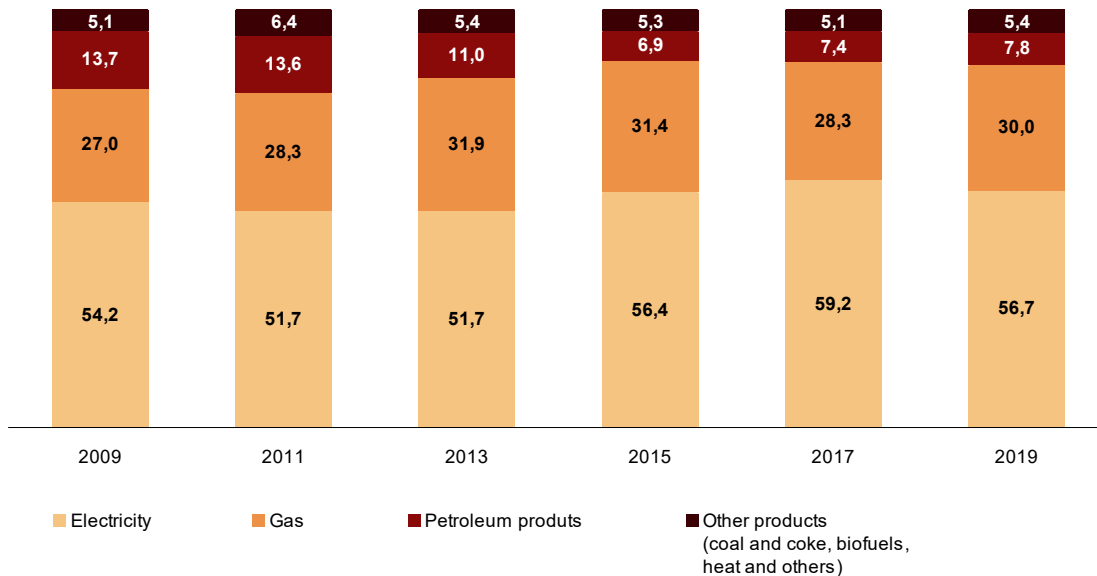
<sup>1</sup> Energy consumption is measured in monetary terms, at current prices. Therefore, its evolution takes into account both the amount consumed and the variation in different energy products' prices.

<sup>2</sup>The target population of study of the Energy Consumption Survey is legal units with 20 or more employees, and whose main activity is described in Sections B and C of the 2009 CNAE.

In the last 10 years, electricity has remained the main energy product in terms of consumption, with percentages ranging from 51.7% to 59.2%. In 2019, electricity represented 56.7% of the industry's energy consumption.

On the other hand, the consumption of petroleum products has been decreasing over this period, reaching 7.8% of the total, while 10 years earlier it represented 13.7% of total consumption.

## Percentage distribution of energy consumption in industry, by type of product. Years 2009-2019

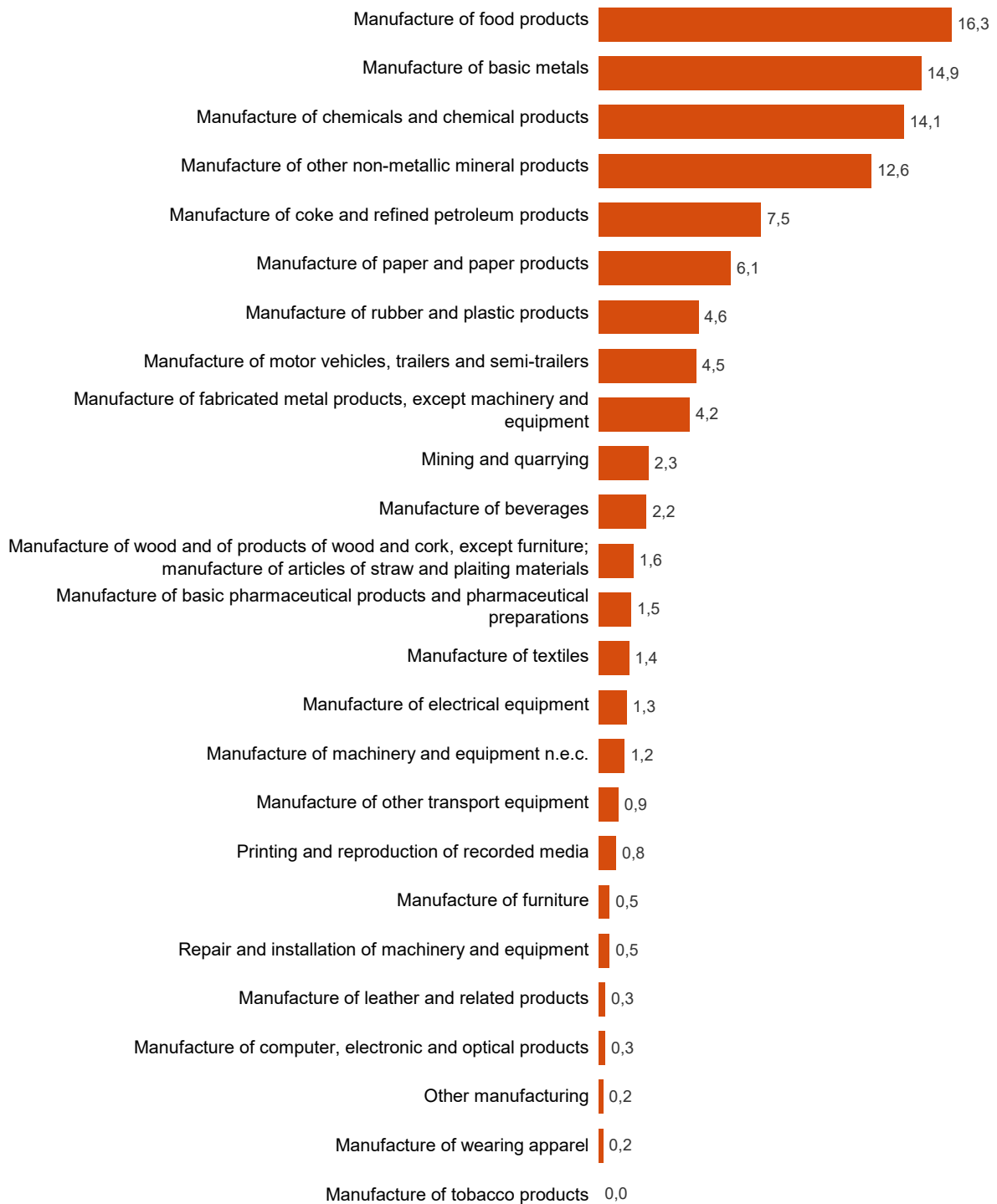


## Results by branch of activity

The industrial activity branches with the highest energy consumption in 2019 were *Food Industry* (1,829 million, 16.3% of the sector's energy consumption), *Manufacture of basic metals* (1,672 million, 14.9%) and *Manufacture of chemicals and chemical products* (with 1,582 million euros, 14.1%).

On the other hand, the activities with the lowest consumption were *Tobacco industry*, *Manufacture of wearing apparel* and *Other manufacturing industries*.

**Percentage distribution of energy consumption in industry, by branch of activity. Year 2019**



Energy consumption represented 2.8% of the total goods and services purchases (purchases, work done by other companies and external services) made by the industry in 2019.

The branches of activity with the highest percentages in terms of this ratio were Extractive industries (11.1%) and Manufacture of other non-metallic ore products (10.5%).

## Energy consumption in industry, by branch of activity. Year 2019

Branches of activity	Energy consumption (thousands of euros)	Energy consumption / Purchases (%)
<b>Mining and quarrying</b>	<b>254.284</b>	<b>11,1</b>
<b>Manufacturing</b>	<b>10.972.728</b>	<b>2,8</b>
Manufacture of food products	1.828.614	2,3
Manufacture of beverages	249.320	2,1
Manufacture of tobacco products	3.594	0,8
Manufacture of textiles	160.623	4,8
Manufacture of wearing apparel	18.594	0,7
Manufacture of leather and related products	31.296	1,3
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	177.762	4,5
Manufacture of paper and paper products	681.805	6,9
Printing and reproduction of recorded media	84.221	3,6
Manufacture of coke and refined petroleum products	846.631	2,0
Manufacture of chemicals and chemical products	1.581.572	4,9
Manufacture of basic pharmaceutical products and pharmaceutical preparations	169.302	1,6
Manufacture of rubber and plastic products	519.741	3,6
Manufacture of other non-metallic mineral products	1.416.290	10,5
Manufacture of basic metals	1.672.215	6,4
Manufacture of fabricated metal products, except machinery and equipment	472.333	2,3
Manufacture of computer, electronic and optical products	29.101	0,9
Manufacture of electrical equipment	148.699	1,0
Manufacture of machinery and equipment n.e.c.	135.998	1,0
Manufacture of motor vehicles, trailers and semi-trailers	501.278	0,8
Manufacture of other transport equipment	100.504	0,9
Manufacture of furniture	60.048	2,0
Other manufacturing	27.761	1,4
Repair and installation of machinery and equipment	55.426	1,5
<b>TOTAL</b>	<b>11.227.010</b>	<b>2,8</b>

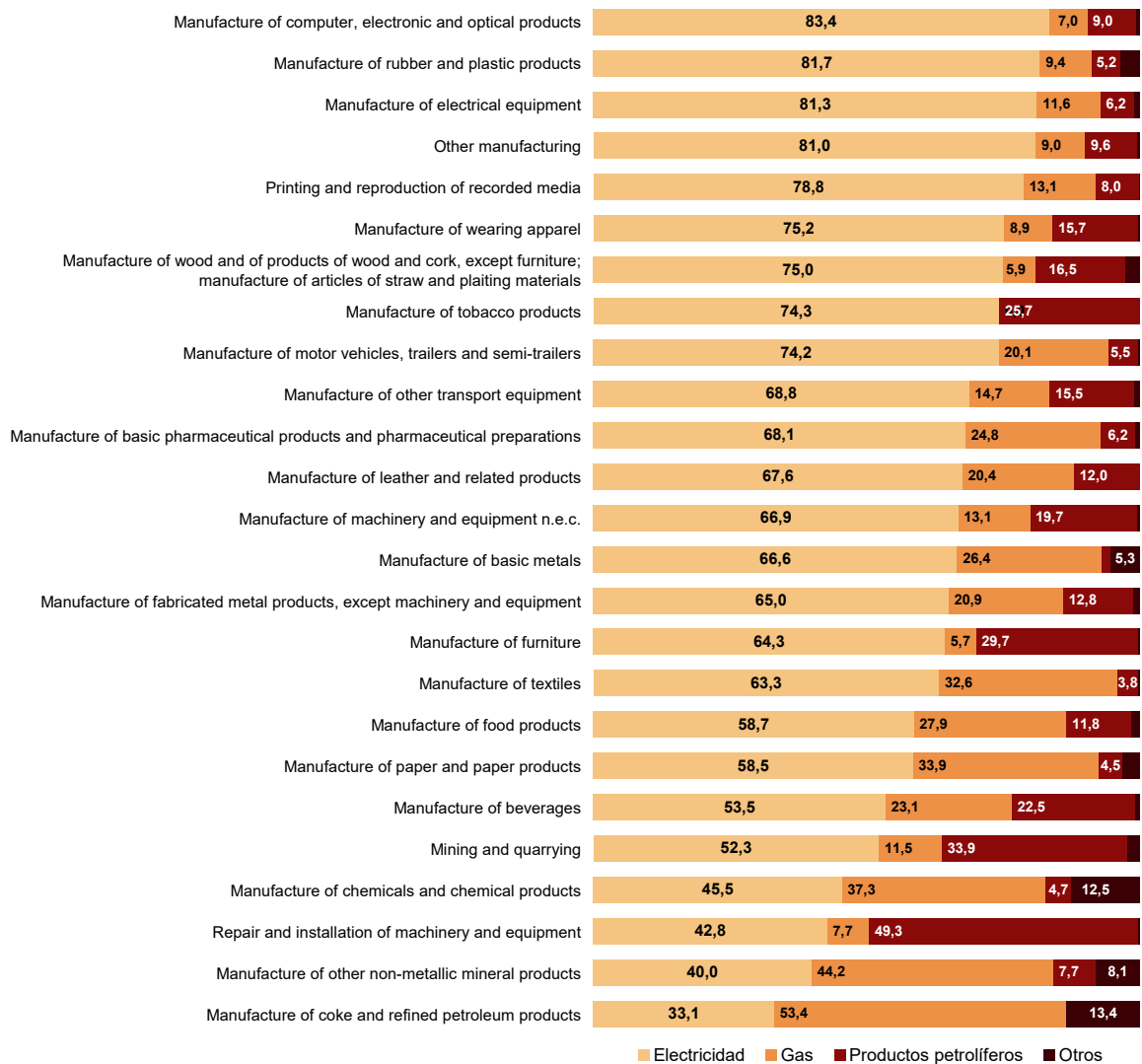
## Results by branch of activity and type of energy product

Regarding the use of the different types of energy sources, it is worth noting the high consumption of electricity registered by the following branches of activity: *Manufacture of computer, electronic and optical products* (83.4% of its total energy consumption), *Manufacture of rubber and plastic products* (81.7%) and *Manufacture of electronic material and equipment* (both 79.6%)

In turn, the use of gas accounted for 53.4% of the total energy consumption for the *Manufacture of coke and refined petroleum products*, 44.2% for the *Manufacture of other non-metallic ore products* and 37.3% in *Manufacture of chemicals and chemical products*.

Petroleum products consumption represented 49.3% of the total in the branch of *Repair and installation of machinery and equipment*, 33.9% in *Extractive industries* and 29.7% in the *Manufacture of furniture*.

## Percentage distribution, by type of energy and branch of activity Year 2019

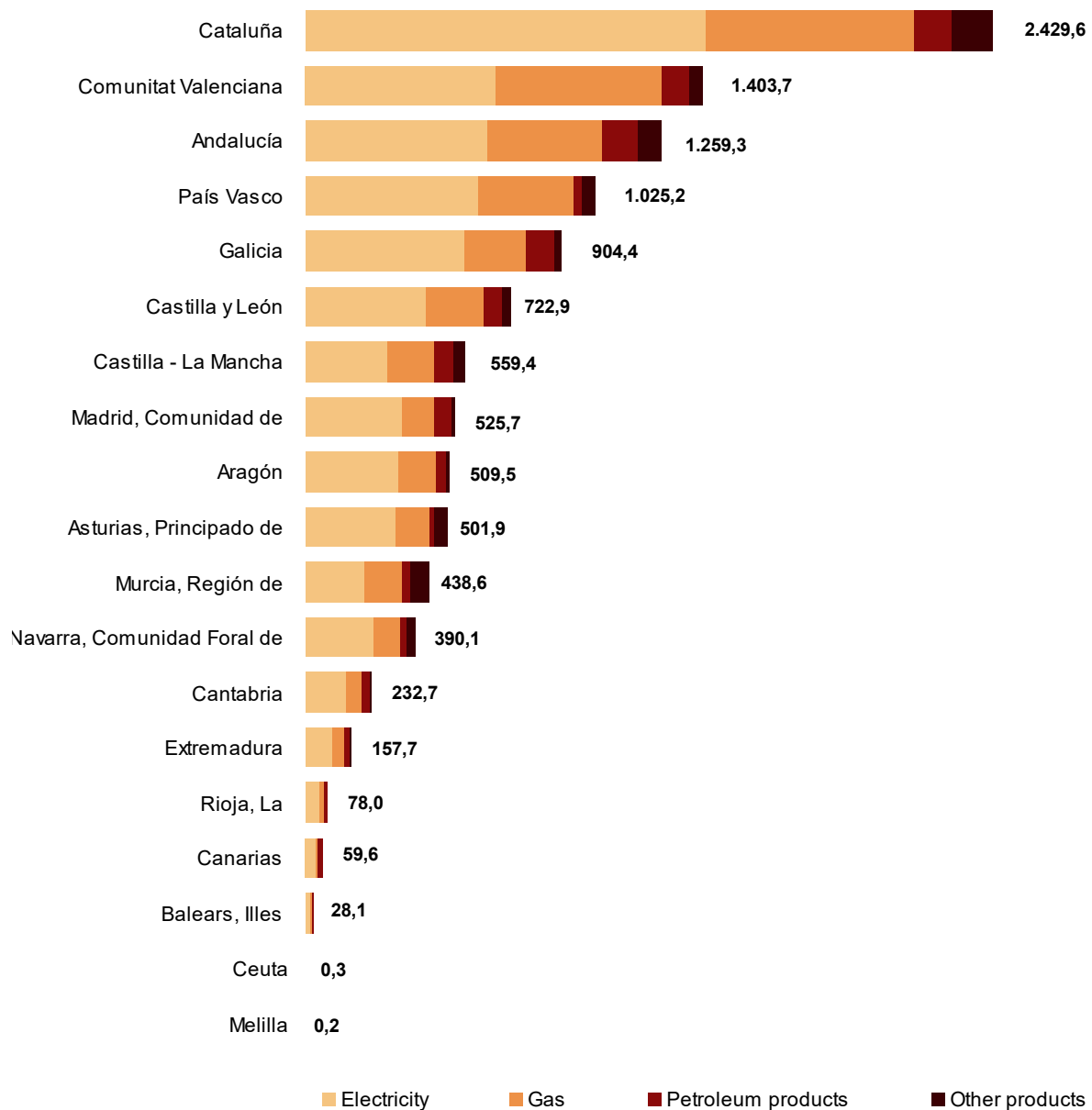


## Results by Autonomous Communities

The autonomous communities with the highest industrial energy consumption in 2019 were Cataluña (with 2,429 million euros, 21.6% of the national total), Comunitat Valenciana (12.5%) and Andalucía (11.2%).

Conversely, Illes Balears (0.3%), Canarias (0.5%) and La Rioja (0.7%) presented the lowest percentages.

### Energy consumption (million euros) in industry, by Autonomous Community. Year 2019



Regarding the different energy sources used, the consumption of electricity accounted for more than half of the total energy consumption in 16 Autonomous Communities and more than 60% in eight.

The Communities that registered the highest percentages of gas use were Comunitat Valenciana (42.0% of the total energy consumption of the industry in the community) and País Vasco (32.8%).

On the other hand, Canarias (26.7%) and Illes Balears (17.9%) presented the highest consumption of petroleum products in percentage terms.

Regarding the use of coal and coke, while low in most communities, its consumption stands out in Illes Balears (5.5% of the total) and Comunidad Foral de Navarra (4.9%).

## Percentage distribution of energy consumption, by type of energy and Autonomous Community. Year 2019

Autonomous Community	Electricity	Gas	Petroleum products	Coal and coke	Biofuels	Others
Andalucía	50,6	32,4	10,0	0,6	0,3	6,0
Aragón	64,3	26,3	7,2	0,7	0,6	0,8
Asturias, Principado de	63,2	23,1	4,0	1,8	0,0	7,9
Balears, Illes	58,3	16,1	17,9	5,5	1,8	0,3
Canarias	57,1	12,3	26,7	2,7	0,2	1,0
Cantabria	61,2	22,2	13,4	1,9	0,3	1,0
Castilla y León	58,5	28,1	9,7	1,2	0,8	1,8
Castilla - La Mancha	50,9	30,0	12,1	1,9	0,7	4,4
Cataluña	58,2	30,4	5,4	0,7	0,4	4,9
Comunitat Valenciana	47,6	42,0	6,9	0,6	0,3	2,7
Extremadura	59,2	26,4	11,2	2,5	0,2	0,5
Galicia	62,5	23,5	11,4	0,2	0,3	2,1
Madrid, Comunidad de	64,9	21,7	11,1	1,3	0,3	0,8
Murcia, Región de	47,8	29,3	7,0	0,2	0,1	15,6
Navarra, Comunidad Foral de	60,7	25,6	5,5	4,9	1,5	1,8
País Vasco	59,4	32,8	3,3	0,0	0,1	4,4
Rioja, La	61,9	23,2	13,3	0,1	0,4	1,1
Ceuta	67,0	21,8	11,2	0,0	0,0	0,0
Melilla	37,3	4,5	55,0	0,9	0,1	2,2
<b>TOTAL</b>	<b>56,7</b>	<b>30,0</b>	<b>7,8</b>	<b>0,9</b>	<b>0,4</b>	<b>4,1</b>

## Data Review and Update

The data published today are final. The results are available at INEBase.

## Methodological note

The Energy Consumption Survey is a biennial survey targeting legal units with 20 or more employees whose main activity is included in Sections B (extractive industries) or C (manufacturing industry) of the 2009 CNAE.

This statistical survey provides information on the consumption of different types of energy products. These products are understood to mean those products acquired to be used as fuel (energy products used as a commodity or intended for resale without transformation are excluded). Energy consumption is quantified in monetary terms. Detailed results are offered at the national level and by Autonomous Community.

The sample of the Energetic Consumption Survey is chosen as a subsample of the total sample of legal units of the Structural Enterprise Statistics. *Industrial Sector*. Both operations share procedures for collecting and processing information.

**Type of operation:** biennial continuous survey, for odd reference years.

**Population scope:** legal units with 20 or more employees, whose main activity is included in Sections B (extractive industries) or C (manufacturing industry) of the 2009 CNAE.

**Geographical scope:** the entire national territory.

**Reference period for the results:** The calendar year.

**Sample size:** 5,700 units, approximately.

**Collection method:** completion of the questionnaire by the respondent, mainly via the Internet (IRIA system).

For further details, please see the general methodology for this survey on the INE website:

[http://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica\\_C&cid=1254736146240&menu=ultiDatos&idp=1254735576715](http://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736146240&menu=ultiDatos&idp=1254735576715)

And the standardised methodological report at:

<https://www.ine.es/dynt3/metadatos/es/RespuestaDatos.html?oe=30070>

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