

Environmental accounts. Physical energy flow accounts Year 2022

Main results

- The energy intensity of the Spanish economy decreased by 4.5% in 2022.
- Household energy consumption increased by 0.1% in per capita terms.

More information

- [Detailed results](#)
- [Environmental Indicator Portal](#)

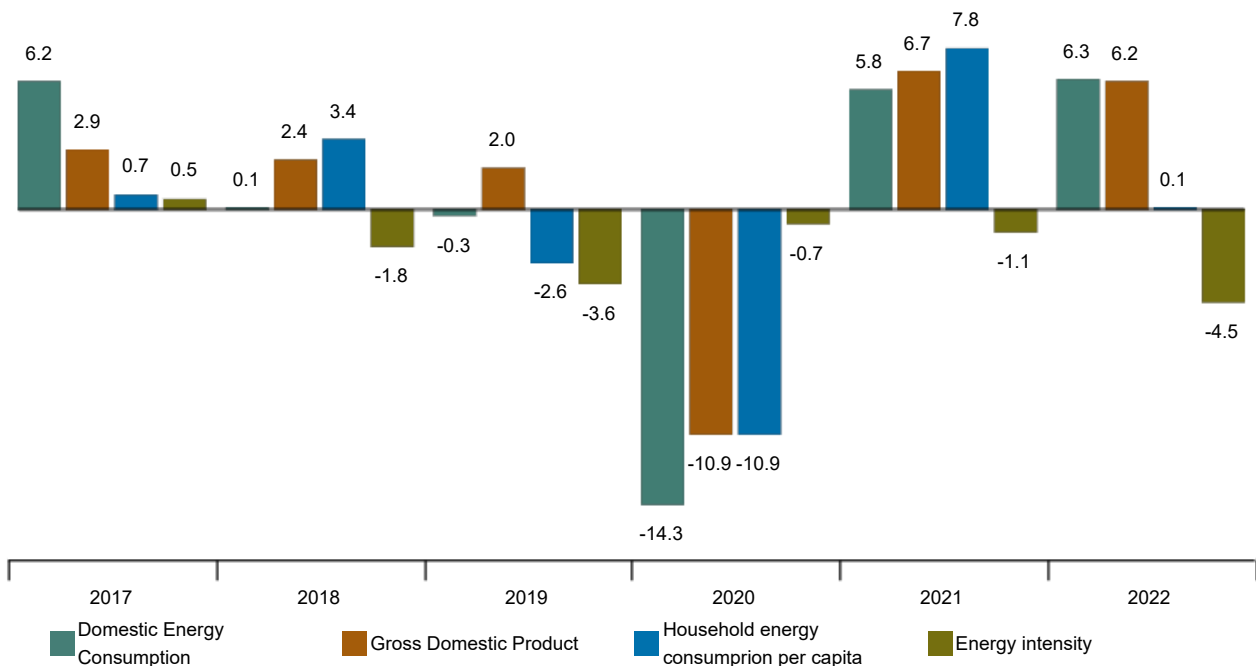
Energy intensity - or net inland energy use per unit of Gross Domestic Product (GDP) - reached 3.9 Terajoules (TJ) per million euros in 2022, a decrease of 4.5% compared to the previous year.

Domestic energy consumption - which measures energy consumption used directly by the economy - increased by 6.3% to 5,037.3 thousands of TJ.

Meanwhile, household energy consumption increased by 0.1% in per capita terms to 27.7 TJ for every 1,000 inhabitants.

Main indicators

Annual variation rates



Current press release at: <https://www.ine.es/dyngs/Prensa/en/CFFE2022.htm>

Domestic energy use by industry and households

Net domestic energy use - or the amount of energy consumed per business entity which is no longer available for later use - reached 5,014.9 thousand TJ in 2022. Of this, 3,679.6 thousand TJ corresponded to the branches of activity and 1,321.7 thousand to *Households*.

The most energy-intensive industries were *Electricity, gas, steam and air conditioning supply*, with 89.3 TJ per million euros, and *Transport and storage services*, with 9.9 TJ per million euros.

Energy Intensity by activity sector. 2022

Thousands of terajoules and terajoules per million euros

	Net domestic energy use	Over total %	Energy Intensity (EI)	Annual change (%)
Total branch of activity	3,679.6	100.0	3.147	-4.7
Industry (excluded energy supply)	1,332.7	36.3	7.898	-14.0
Supply of electricity, gas, steam and air conditioning	1,061.2	28.8	89.281	47.9
Transport and warehousing	575.2	15.6	9.856	-3.5
Construction and Services	556.7	15.1	0.613	-9.3
Agriculture, livestock, forestry and fishing	153.8	4.2	5.733	23.7

The energy consumption of *Households* was 27.7 TJ per 1,000 inhabitants, 0.1% more than in the previous year. By type of consumption, 54.7% was consumed by *Transport*, 32.4% by *Heating/Cooling* and 12.9% by *Other* (lighting, household appliances, etc.).

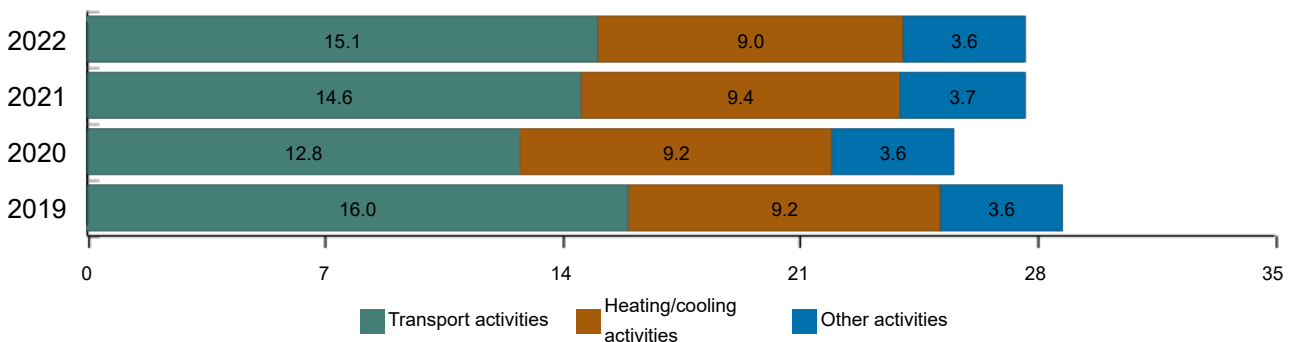
Household energy consumption. 2022

Thousands of terajoules and terajoules per 1,000 inhabitants

	Net domestic energy use	Over total %	Annual change %	Per 1,000 inhabitants
Households	1,321.7	100.0	1.0	27.7
Transport activities	723.8	54.7	4.7	15.1
Heating/cooling activities	427.9	32.4	-3.5	9.0
Other activities	170.0	12.9	-2.4	3.6

Household energy consumption evolution, by energy type

Terajoules per 1,000 inhabitants



Domestic energy consumption components

2021.

Domestic energy consumption. 2022

Thousands of terajoules

	Total	Annual change(%)
Domestic energy consumption	5,037.3	6.3
Extraction of natural energy inputs	1,421.5	0.8
Physical trade balance	3,615.8	8.6
- Imports	5,454.5	9.6
- Exports	1,838.7	11.7

In terms of source, renewable natural resources reached 787.2 thousand TJ. *Biomass* was the main source of these resources, with 34.4% of the total, followed by *Wind*, with 28.7%.

The renewable natural resources that have grown the most since 2015 were *Others* (heat pumps, geothermal), *Solar* and *Wind Energy*.

Renewable national natural resources. 2022

Thousands of terajoules

	Total	Over total %	Annual change (%)	2015 change (%)
Total	787.2	100.0	-1.2	16.5
Biomass	270.9	34.4	-0.5	9.6
Wind	226.0	28.7	1.2	27.3
Solar	176.2	22.4	17.9	33.1
Hydro	63.3	8.0	-40.7	-37.5
Other renewable	50.8	6.5	12.9	198.8

Components of the physical trade balance of energy products

The physical trade balance of energy products (or the difference between imports and exports) was of 3,615.8 thousand TJ in 2022.

By component, the imports with the greatest importance were *Extractive industry products* (80.9% of the total) and *Coke and refined petroleum products* (17.3%). In exports, the main product was *Coke and refined petroleum products*, which accounted for 75.6% of the total.

The energy products that generated the largest positive trade balance were *Extractive industry products* (4,159.2 thousand TJ).

Components of the physical trade balance of energy products. 2022

Thousands of terajoules

	Physical trade balance	Imports	Over total %	Exports	Over total %
Total	3,615.8	5,454.5	100.0	1,838.7	100.0
Products of the mining industry	4,159.2	4,413.4	80.9	254.2	13.8
Coque and oil - refined products	-445.6	944.4	17.3	1,390.0	75.6
Biofuels	-26.5	67.8	1.3	94.3	5.1
Electricity and heat	-71.3	28.9	0.5	100.2	5.5

Data revisions and updates

The data published today is provisional and will be revised when next year's data is released. All results of this operation are available on [INEbase](#).

Methodological note

The objective of the Environmental Accounts (EA) is to consistently integrate environmental information into the central system of National Accounts. They include a set of satellite accounts, which are transmitted annually, compiled using the accounting formats applicable to the different sectoral and territorial areas, with a major presence of physical data. They display the interactions among the economy, households and environmental factors.


The Physical Energy Flow Accounts record flows of energy from the environment to the economic system of a country, within the economic system of a country, and from the economic system to the environment. It also calculates the flows of energy products with the rest of the world (imports and exports).

The Physical Energy Flows Account is constructed from a set of aggregated indicators on the origin and destination of the natural energy resources derived from a wide variety of statistical operations, which in turn are subject to their own availability and revision schedule. This means that the estimates of the aggregates are subject to a revision process for the whole series of results to ensure that the estimation methods are kept up to date.

For more information, you can access the [methodology](#) and the [standardised methodological report](#).

INE statistics are produced in accordance with the Code of Good Practice for European Statistics. More information on [Quality at INE](#) and the [Code of Best Practices](#).

For further information see [INEbase](#)

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