

30 November 2020

Environmental accounts. Physical Energy Flow Accounts
Year 2018

The consumption of energy products by households as final consumers increased 0.4% in 2018

Indoor energy production decreased by 0.5%

In 2018, total energy flows amounted to 20,069.1 thousand Terajoules (TJ), a figure similar to the previous year.

Origin of physical energy flows

Physical energy flows originate in the environment (natural energy resources), in production and import (energy products) and in the consumption and accumulation of energy waste.

In 2018, in regards to origin, natural energy resources extracted from the environment reached 1,384.7 thousand TJ, 0.3% less than in 2017.

For its part, the supply of energy products amounted to 13,263 thousand TJ, 0.8% less than the previous year (of this figure, 7,601.5 thousand TJ corresponded to domestic production and 5,661.5 thousand TJ to imports).

Lastly, the energy waste produced (mostly heat dissipated in the combustion processes) increased by 2.2%, to 5,421.4 thousand TJ.

Origin of the energy. Year 2018

Unit: Thousand TJ

	Total	% of the total	% Annual rate
Total	20,069.1	100.0	0.0
Natural energy inputs	1,384.7	6.9	-0.3
Energy products	13,263.0	66.1	-0.8
Energy residuals	5,421.4	27.0	2.2

Domestic production of energy products accounted for 57.3% of the total supply of this type of physical flow, 0.5% less than in 2017. On the other hand, imports represented 42.7%, with a decrease of 1.1%.

By type of energy product, the highest productions corresponded to *Coke and refined petroleum products* (56.9% of the total), *Extractive industry products* (23.3%) and *Electric power and heat* (14.7%).

The energy products with the greatest weight in imports were *Extractive industry products* (80.0% of the total) and those of *Coke and refined petroleum products* (17.3%).

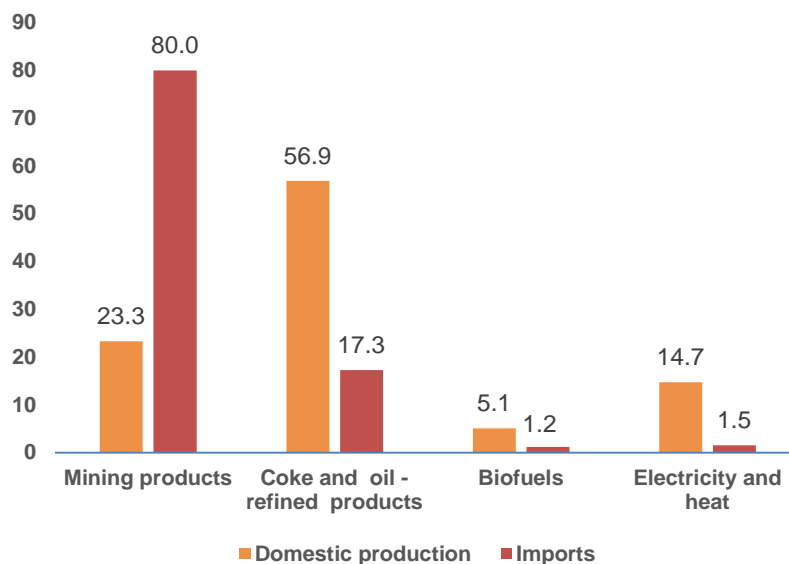
On the other hand, the imports with the lowest weight were *Electric power and heat* (1.5%) and *Biofuels* (1.2%).

Energy products by type and origin. Year 2018

Unit: Thousand TJ

	Domestic production	% of the total	% Annual rate	Imports	% of the total	% Annual rate
Energy products	7,601.5	100.0	-0.5	5,661.5	100.0	-1.1
Mining products	1,774.1	23.3	-2.2	4,526.0	80.0	-0.1
Coke and oil - refined products	4,327.1	56.9	0.1	978.9	17.3	-8.8
Biofuels	386.8	5.1	8.7	70.1	1.2	91.5
Electricity and heat	1,113.5	14.7	-3.1	86.5	1.5	1.2

Origin of energy products (%). Year 2018



The destination of physical energy flows

The branches of activity of the economy used 58.0% of the total physical energy flows in 2018, representing an increase of 0.6% as compared to the previous year. Of this intermediate energy consumption, 87.6% were *Energy products*, 11.9% *Natural energy resources* and 0.5% *Energy waste*.

On the other hand, households as final consumers of energy products consumed 6.6% of the total, with an increase of 0.4% as compared with the previous year. Exports, which accounted for 9.0% of the total, decreased by 2.0%.

Finally, the environment received 25.7% of the total physical energy flows, mostly energy losses (dissipated heat) due to different production processes and final consumption activities. These physical energy flows destined for the environment, increased by 0.7% compared to 2017.

Destination of energy. Year 2018

Unit: Thousand TJ

	Total	% of the total	% Annual rate
Total	20,069.1	100.0	0.0
Industries	11,637.2	58.0	0.6
Households	1,323.6	6.6	0.4
Exports	1,809.6	9.0	-2.0
Environment (energy residuals)	5,158.5	25.7	0.7
Accumulation ¹ and statistical differences	140.2	0.7	..

¹ Changes in stocks

Of the total energy used, 86.5% went to the *Extractive, manufacturing and energy and water industries*, 9.6% to the *Services* sector, 3.1% to *Agriculture, forestry and fishing* and the 0.8% to *Construction*.

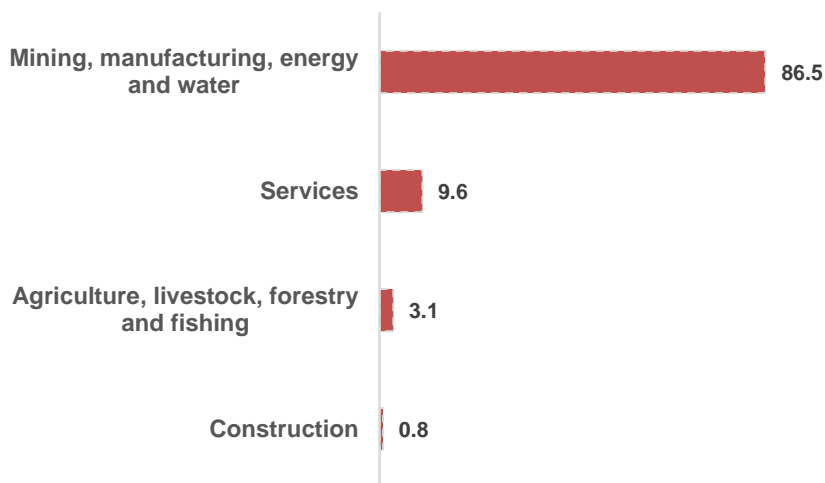
On the other hand, the economic sectors that consumed the most energy products were *Extractive industry, manufacturing and energy and water* (with 86.6% of the total) and *Services* (10.9%). On the other hand, those that consumed the least were *Agriculture, forestry and fishing* (1.6%) and *Construction* (0.9%).

Destination of the energy by type of energy flow and industry. Year 2018

Unit: Thousand TJ

	Agriculture, livestock, forestry and fishing	% of the total	Mining, manufacturing, energy and water	% of the total	Construction	% of the total	Services	% of the total	Total
Total	359.3	3.1	10,069.6	86.5	92.9	0.8	1,115.4	9.6	11,637.2
Natural energy inputs	199.3	14.4	1,185.4	85.6	0.0	0.0	0.0	0.0	1,384.7
Energy products	160.0	1.6	8,822.5	86.6	92.9	0.9	1,115.0	10.9	10,190.4
Energy residuals	0.0	0.0	61.7	99.4	0.0	0.0	0.4	0.6	62.1

Distribution of energy flows by economic activity (%). Year 2018



Physical trade balance of energy products

The physical trade balance of energy products (or difference between exports and imports) had a negative balance of 3,851.9 thousand TJ in 2018.

By components, imports of extractive industry products represented 80.0% of the total, while exports represented 6.9%, resulting in a negative balance of 4,401.1 thousand TJ.

The energy products that generated a positive trade balance were those of *Coke and refined petroleum products*, 569.8 thousand TJ and *Biofuels* 19.4 thousand TJ.

Components of physical energy trade balance of energy products. Year 2018

Unit: Thousand TJ

	Physical trade balance	Imports	% of the total	Exports	% of the total
TOTAL	3,851.9	5,661.5	100.0	1,809.6	100.0
Products of the mining industry	-4,401.1	4,526.0	80.0	124.9	6.9
Coke and oil - refined products	569.8	978.9	17.3	1,548.7	85.6
Biofuels	19.4	70.1	1.2	89.5	4.9
Electricity and heat	-40.0	86.5	1.5	46.5	2.6

Data Review and Update

The data published today is provisional and will be revised when next year's data is released.

Methodological note

The objective of the Environmental Accounts (EA) is to coherently integrate environmental information into the central system of National Accounts. They include a set of satellite accounts, with annual transmission, compiled using the accounting formats applicable to the different sectoral and territorial areas, with a strong presence of physical data. They show the interaction between 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). These accounts make it possible to obtain a set of aggregate indicators on the origin and destination of natural energy resources, which enable the evaluation of energy and environmental sustainability in economic development.

For more information the methodology can be accessed at:
<http://www.ine.es>

The standardized methodological report is at:
<http://www.ine.es/dynt3/metadatos/en/RespuestaDatos.html?oe=30063>

For further information see **INEbase**: www.ine.es/en/ Twitter: [@es_ine](https://twitter.com/es_ine)

All press releases at: www.ine.es/en/prensa/prensa_en.htm

Press Office: Telephone numbers: (+34) 91 583 93 63 /94 08 – gprensa@ine.es

Information Area: Telephone number: (+34) 91 583 91 00 – www.ine.es/infoine/?L=1
