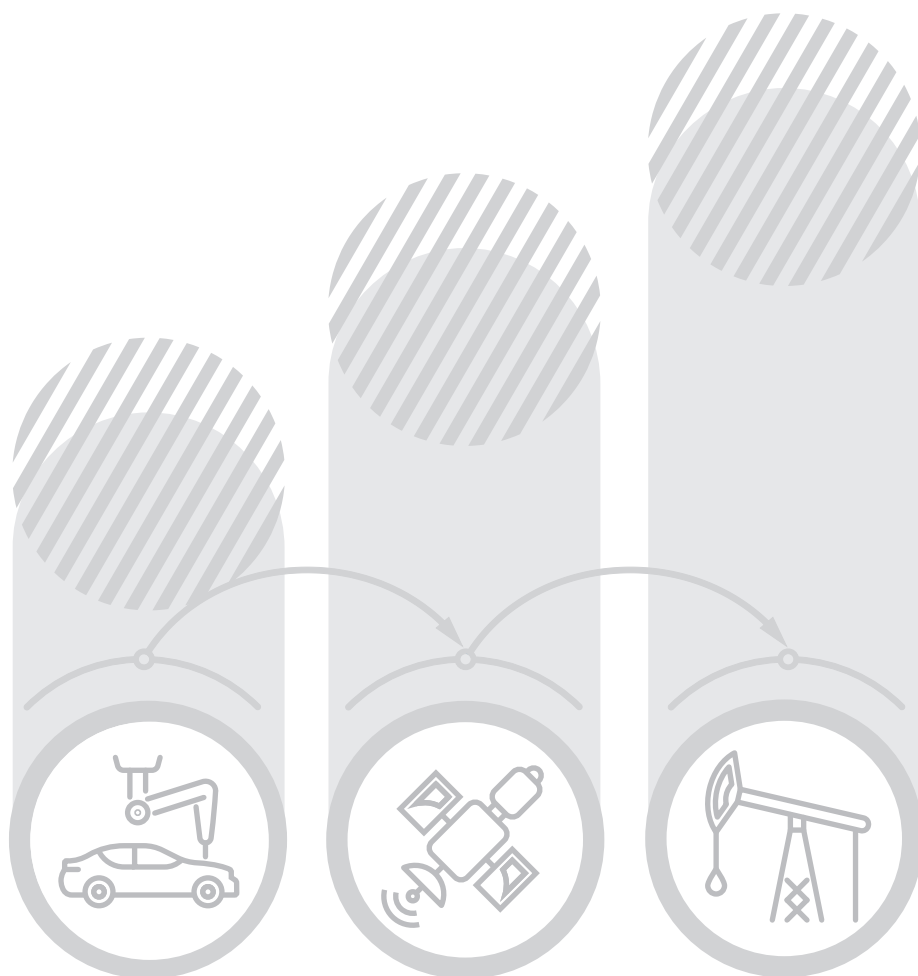






Production of industrial products in 2020–2024

Statistics Poland

Warsaw 2025

Content-related works

Statistics Poland, Enterprises Department

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e-ISSN 2720-667X

Publication available on website

stat.gov.pl/

When publishing Statistics Poland data – please indicate the source

Zakład Wydawnictw
Statystycznych

00-925 WARSZAWA, AL. NIEPODLEGŁOŚCI 208.

Informacje w sprawach sprzedaży publikacji GUS – tel. (22) 608 32 10, 608 38 10
Zam. 292/2025

Preface

Poland is one of the largest industrial producers in the European Union. It ranks fifth among the member states in terms of production of industrial products covered by the 'Mining and Quarrying Products' and 'Industrial Processing Products' sections of the Polish Classification of Products and Services (PKWiU 2015). The study, devoted to this area of the Polish economy, is an extension of the annual publication released in July, titled 'Industrial Products Production', which presents the preliminary results for the last year under review.

The publication offers a wealth of information on the production of major industrial products from 2020 to 2024, both in terms of quantity and value. Data are presented by industry sector and type of activity of the enterprises producing these products. In addition, the Polish industry is presented against the background of the European Union, in comparison with other member states' production.

The publication consists of an analytical part, methodological notes with definitions and a description of the scope of the study, and a tabular annex. The presented data have been updated in accordance with the policy concerning the revision of data on the production of industrial products. The presented industrial products have been carefully selected to meet the needs of different users, including the government administration, manufacturers' associations, employers' associations and scientific institutions.

In addition to our publication, we would like to encourage you to explore the resources of [Statistics Poland](#), including the [Knowledge Databases](#).

We wish to take this opportunity to express our sincere thanks to all the reporters who participated in the annual survey on industrial product production.

Director
Enterprises Department



Katarzyna Walkowska-Macias

President
Statistics Poland



Marek Cierpień-Wolan, Assoc. Prof.

Warsaw, December 2025

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Symbols

Symbol	Description
(.)	data not available, classified data (statistical confidentiality) or providing data impossible or purposeless
(—)	magnitude zero
(*)	revised data
of which	indicates that not all elements of the sum are given

Main abbreviations

Abbreviation	Complete name
CPA	Classification of Products by Activity
p.p.	percentage points
PKD	Polish Classification of Activities
PKWiU	Polish Classification of Goods and Services
PRODCOM	European product statistics
IoT	Internet Rzeczy

The abbreviated names of sections, divisions and industrial products used in the publication and units of measurement are included in Annex 2.

Introduction

The analytical publication Production of industrial products in Poland contains data on production of major products or assortment groups representing various divisions of the Polish Classification of Goods and Services (PKWiU 2015), belonging to the sections: Products of mining and quarrying and Manufactured products, obtained in annual survey compliant with the requirements of the Community survey of industrial production. The annual survey is based on data collected from enterprises employing 10 or more persons using the data set P-01 Production report.

The purpose of the publication is to present changes in the national production of industrial products on the basis of data expressed in physical units of measurement and to compare the results of the Community survey of industrial production PRODCOM. The publication includes a retrospective of manufactured and sold production of major industrial products in the years 2020-2024.

The first chapter presents data on sold production of products in various cross-sections, i.e. according to product classifications and nomenclatures used in product surveys (PKWiU, PRODPOL), by voivodships and by selected features of entities producing products, i.e. size class, kind of activity as defined in PKD. Data on subcontracted production and the production of products incorporating embedded systems, including the Internet of Things, were also presented. The second chapter contains data on the volume of manufactured production of representative products selected from individual industries at the country level and data on the recovery of secondary raw materials in industrial entities. In chapter three, data from the Community survey of industrial production PRODCOM are presented, collected according to the PRODCOM List binding for 2024 in European Union countries.

Executive summary

Key data

results of survey on the production of industrial products in 2024

38,334	economic entities covered by the annual survey on the production of industrial products
28	divisions of PKWiU covered by the survey on the production of industrial products
4,855	products or assortment groups covered by the observation in the annual survey
1,716.1 mld PLN	value of sold production of products
15.1 mld PLN	value of the sold production of products manufactured under subcontracting
42.2 mld PLN	value of sold production of products with embedded systems
27.5%	share of products with the Internet of Things in the value of sold production of products containing embedded systems
16.2%	the largest increase in the value of sold production (2023=100) – division Tobacco products
19.2%	the largest share in the value of sold products – division Food products
94.3%	the share of sold production of entities employing 50 persons and more
27.9%	the largest share of entities employing 10–49 persons in the sold production – division Wearing apparel
96.6%	the share of sold production of industrial enterprises
76.5%	the share of sold production reported by non-industrial entities – entities classified in section Wholesale and retail trade
21.9%	the share of sold production of products in terms of the value of entities that had their seat in Mazowieckie voivodship
1st place	in the ranking of products with the highest value of sold production – diesel oils

The industrial production survey covers products classified to two sections of PKWiU 2015: Products of mining and quarrying and Manufactured products.

Sold production of industrial products

In 2024, the value of production sold at current prices amounted to 1,716,076.4 million PLN and was lower than the year before by 4.2%, but compared to 2020 was higher by 47.0%.

In 2024, compared to the previous year, the value of sold production of products increased in 11 divisions, among others Tobacco products (by 16.2%), Other products of mining and quarrying (by 12.6%), Other transport equipment (by 4.7%), Wearing apparel (by 4.6%), Computers, electronic and optical products (by 3.7%), Beverages (by 2.3%), Textiles (by 2.2%), Pharmaceutical products and preparations (by 1.9%). A decrease of the value of sold production of products in comparison to 2023, was noted in 16 divisions, among others Hard coal and lignite (by 32.8%), Electrical equipment (by 19.0%), Leather and related products (by 11.2%), Wood and products of wood, cork and straw (by 9.1%), Machinery and equipment (by 8.3%), Basic metals (by 4.8%), Rubber and plastic products (by 4.4%), Motor vehicles, trailers and semi-trailers (by 3.9%), Furniture (by 3.8%).

In 2024, the largest share in the value of sold production of products had divisions: Food products – 19.2%, Motor vehicles, trailers and semi-trailers – 11.4%, Electrical equipment – 6.9%, Rubber and plastic products – 6.6%, Basic metals – 5.8%, Fabricated metal products – 5.6%, Chemicals and chemical products – 5.6%. The lowest share in the value of sold production had divisions: Metal ores, Leather and related products, Crude petroleum and natural gas, Wearing apparel.

Production under sub-contracted operations amounted to 15,122.5 million PLN in 2024, and increased by 6.1% compared to 2023. The increase in production under sub-contracted operations at the national level was mainly influenced by increases in the divisions: Pharmaceutical products and preparations (by 59.8%), Wood and products of wood, cork and straw (by 48.6%), Other transport equipment (by 45.0%), Rubber and plastic products (by 19.9%), Electrical equipment (by 18.6%).

In 2024, the highest value of sold production of products, similarly to previous years, was recorded in Mazowieckie Voivodship – 377,406.3 million PLN, which constituted a 21.9% share in the national value of sold production of products. The second Voivodship with a significant share was Śląskie Voivodship – 249,823.2 million PLN (14.5% of the total value), followed by Wielkopolskie Voivodship – 206,916.7 million PLN (12.0%), Dolnośląskie Voivodship – 183,785.4 million PLN (10.7%) and Małopolskie Voivodship – 128,818.9 million PLN (7.5%). The lowest value of sold production was recorded for Świętokrzyskie Voivodship – 32,318.2 million PLN.

In the years 2020-2024, the share of the value of sold production of products reported by entities with 50 or more persons employed increased from 93.7% to 94.3% of the total value. In 2024, the value of total sold production of products of entities with 50 or more persons employed amounted to 1,617,781.2 million PLN, while for entities with 10-49 persons employed – 98,295.2 million PLN.

Considering the primary kind of activity of enterprises manufacturing products, sold production was reported in largest part by industrial entities having their primary activities classified to the following sections of NACE: Mining and quarrying and Manufacturing.

The value of sold production of products manufactured by industrial units in relation to the total sold production of products in 2023 decrease to 1,657,823.6 million PLN (by 4.2%).

In 2024, the value of sold production of products manufactured by non-industrial entities was 58,252.9 million PLN, of which 96.9% sold production was reported by entities whose activities were classified in five sections: Wholesale and retail trade (section G of PKD 2007), Construction (section F), Agriculture, forestry, hunting and fishing (section A), Information and communication (section J) and Professional, scientific and technical activities (section M).

As in previous years, the product with the largest share in the value of total sold production was diesel fuel. The second place was taken by parts and accessories for motor vehicles, and the third place was taken by unleaded motor gasoline, which moved up in the ranking by one place compared to 2023

In 2024, the sold production of products with embedded systems amounted to 42,207.0 million PLN and was higher by 28.8% than in 2023 and by 75.5% higher than in 2020. The share of sold production of products with elements of IoT in the sold production of all products with embedded systems amounted to 27.5%. The production of products with embedded systems was dominated by entities with domestic capital, whose share amounted to 74.2% in 2024. The highest value of sold production in 2024 for products with embedded systems was recorded for entities with the primary kind of activity classified in division 26 Manufacture of computers, electronic and optical products and in division 27 Manufacture of electrical equipment.

Manufactured production of products

In 2024, volume of production of measurement according to PRODPOL nomenclature was surveyed for 4 864 products and assortment groups, and for 3 694 of them, entities of national economy reported manufactured production.

In the years 2020-2024, production increased, among others, for: direct current motors and generators (by 150.3%), sanitary ware and parts of sanitary ware of iron or steel (by 145.5%), agricultural tractors, of an engine power more than 59 kW (by 124.6%), pile fabrics, terry towelling and other special fabrics (by 123.6%), condensed milk, sweetened (by 121.4%), machinery for the preparation of meat excluding poultry (by 111.4%), labels of paper or paperboard (by 109.6%), road tractors for semi-trailers (by 106.4%), reciprocating displacement compressors (by 106.1%), lorries (by 100.7%), pulley tackle and hoists powered by an electric motor (by 98.3%), prepared meals and dishes based on meat, meat offal or blood (by 95.9%), lifts (by 95.2%), snow-ploughs and snow-blowers (by 89.5%), provitamins, vitamins and their derivatives (by 80.7%), fixed resistors (by 77.4%), non-refractory surfacing preparations for facades, inside walls, ceilings and the like (by 74.1%), windows, French-windows and their frames, of wood (by 72.3%), converter copper from recycling materials (by 72.1%), floor, wall or ceiling coverings of plastics in rolls or in the form of tiles (by 71.9%), men's or boys' overcoats and other similar articles, not knitted (by 70.4%), abrasive products (by 66.1%), mustard (by 65.8%), anti-freezing preparations and prepared de-icing fluids (by 63.7%), granite, crude or roughly trimmed (by 63.0%), frozen sea fish (by 62.0%), trays, dishes, plates, cups and the like of paper or paperboard (by 62.0%), women's or girls' jackets not knitted or crocheted not knitted or crocheted (by 61.6%), wire of stainless or other alloy steel (by 60.1%), frozen bread (by 59.8%), yarn of artificial staple fibres (other than sewing thread), not packaged for retail sale (by 59.1%), pesticides (by 57.3%).

In the analysed period, a decrease in the production was recorded for: stainless steel sinks and wash basins (by 95.3%), lead, zinc and tin ores and concentrates (by 95.0%), newsprint in rolls or sheets (by 88.2%), domestic food grinders, mixers and fruit or vegetable juice extractors (by 87.5%), toilet and kitchen linen (by 87.4%), fixed capacitors (by 83.9%), ploughs (by 80.6%), special purpose motor vehicles (by 77.0%), needle roller bearing (by 76.4%), harrows excluding disc harrows (by 76.2%), light fuel oils (by 75.0%), sprayers designed to be drawn by agricultural tractors, of a kind used in forestry and orcharding (by 75.0%), women's or girls' jackets and blazers, knitted or crocheted (by 73.2%), yarn of synthetic staple fibres, not packaged for retail sale (by 72.2%), printed newspapers, journals and periodicals, appearing at least four times a week (by 72.0%), women's or girls' suits and ensembles, not knitted or crocheted (by 69.0%), electricity meters (by 65.1%), acetic acid (by 64.9%), concrete mixers (excluding for road construction) (by 64.2%), electric bakery and biscuit ovens (by 61.2%), distilled ethyl alcohol (by 59.6%), brass (by 59.2%), rotavators (by 58.5%), woven fabrics of synthetic filament yarn and artificial filament yarn (by 57.3%), gas stoves with oven (by 57.1%), women's or girls' trousers, overalls, breeches and shorts, not knitted or crocheted (by 55.0%), orthophosphoric acid (by 52.0%), women's or girls' dresses, skirts and culottes not knitted or crocheted (by 51.6%), coal steamers (by 51.6%), footwear with leather uppers (by 51.2%).

In 2024, in comparison to 2023, manufactured production increased, among others, for: white chocolate (by 99.0%), flat products covered with zinc (by 91.6%), pulley tackle and hoists powered by an electric motor

(by 89.9%), potassic fertilisers (by 80.7%), buckwheat groats (by 80.1%), glues based on synthetic resins (by 52.1%), assembled parquet panels of wood for mosaic floors (by 47.7%), panty hose and tights (by 42.7%), mixing valves for baths of brass (by 41.6%), canned pork, beef, veal meat, including shoulders and hams and canned edible meat offal (by 37.6%), primary cells and primary batteries (by 36.3%), mixing valves for wash basins of brass (by 36.3%), other wooden kitchen furniture (by 36.2%), wire of stainless (by 35.7%), mixing valves for showers of brass (by 35.6%), lifts (by 34.2%), smoked fish (by 33.9%), wooden flooring materials (by 32.8%), propylene (by 31.1%), automatic drying machines, of a dry linen capacity not exceeding 10 kg (by 31.1%), polyamides (by 30.4%), mountain bikes (by 30.0%), aluminium plates, sheets and strip, of a thickness > 0,2 mm (by 28.8%), essential oils (by 28.0%), sandstone (by 27.5%), radiators, not electrically heated, and parts thereof of steel (by 26.2%), bricks made of clay (by 25.2%), structural-wall clay hollow bricks (by 24.2%), pig iron (by 24.0%), men's or boys' jackets and blazers not knitted or crocheted (by 23.4%), nectars (by 23.3%), building blocks of light concrete (by 22.7%), freezers (by 20.8%), leather of bovine animals or of equine animals, without hair (by 20.6%), frozen vegetables (by 20.3%), dried vegetables (by 20.2%), cider (by 20.2%), hand tools of a kind used in agriculture, horticulture or forestry (by 20.2%), ammonium sulfate (by 20.1%), copper and copper alloy bars, rods, profiles and hollow profiles (by 19.3%), superphosphates (by 19.0%), animal fats, rendered, edible (by 18.9%).

Decrease of production in 2024 in comparison to the previous year was recorded, among others, for: printed newspapers, journals and periodicals, appearing at least four times a week (by 66.9%), needle roller bearing (by 66.8%), machines for mixing mineral substances with bitumen (by 60.0%), self-loading or unloading trailers and semi-trailers for agriculture (by 59.5%), structural-floor clay hollow bricks (by 58.3%), aeroplanes for civil use (by 55.6%), compression ignition engines for industrial use (by 54.7%), fixed capacitors (by 50.6%), numerically controlled machine tools (by 49.2%), women's or girls' suits and ensembles, knitted or crocheted (by 47.5%), toilet and kitchen linen (by 45.9%), women's or girls' suits and ensembles, not knitted or crocheted (by 43.6%), electricity meters (by 42.9%), multi-phase alternating current motors (by 42.7%), transformers (by 42.2%), overhead travelling cranes on fixed support (by 41.3%), unwrought aluminium for blocking, technically pure (by 40.1%), milling machines (by 39.9%), casting moulds (by 37.7%), harrows excluding disc harrows (by 37.6%), men's or boys' trousers, overalls, breeches and shorts, not knitted or crocheted (by 37.2%), road tractors for semi-trailers (by 32.7%), field seeders (by 32.7%), yarn of synthetic staple fibres, not packaged for retail sale (by 32.4%), fireclay (by 32.0%), light fuel oils (by 31.8%), bicycles for children (by 31.4%), women's or girls' blouses, shirts and shirt-blouses, not knitted or crocheted (by 29.2%), passenger cars (by 27.3%), wooden kitchen furniture for fitted kitchen (by 26.4%), containers for compressed or liquefied gas, of metal (by 25.4%), rods of other alloy steel (by 23.8%), canned poultry meat (by 21.7%), non-refractory clay roofing tiles (by 20.9%), agricultural tractors (by 20.4%), sanitary fixtures of porcelain (by 19.6%).

Production of industrial products compared to other European Union countries

In 2024, similar to 2020-2023, Poland ranked fifth, after Germany, France, Italy and Spain, in terms of the number of PRODCOM items for which production was reported. In 2024 Poland reported production data for 3,144 products and product assortment groups, which constitutes 77.7% of all items covered by the survey.

In 2024, for about 400 products, Poland's share in European Union sold production in value terms ranged from 10.1% to 20.0%. The largest number of products with a share between 10.1% and 20.0% was recorded in the divisions: Food products – 56 products, Chemicals and chemical products – 37, Rubber and plastic products – 35, Fabricated metal products – 31 and Machinery and equipment – 29 products.

Poland's share of over 20% in the value of production sold in the European Union was recorded for about 268 products, including television receivers (61.1%), cloth washing and drying machines, of household type (52.5%), apple juice (35.2%), laminated safety glass suitable for incorporation in vehicles (27.0%), airbag with inflator system and parts thereof (26.4%), smoking tobacco (excluding excise duty) (24.3%).

Among the products in which Poland's share in the volume of sold production exceeded 50% were: frozen whole fresh water fish, raw sugar, medium density fibreboard (MDF) of a thickness not exceeding 5 mm, hand-made paper and paperboard, scouring pastes and powders and other scouring preparations, steel plaited bands, television receivers, domestic electric toasters, potato-diggers and potato harvesters, steering wheels, steering columns and steering boxes and parts thereof, seats convertible into beds, of wood and candles.

Chapter 1. Sold production of industrial products by divisions and groups PKWiU

Sold production of industry products is the volume and value of goods sold outside the enterprise during reporting period, manufactured as own production or made by subcontracting in other unit from materials provided by the enterprise, regardless of the time of their production.

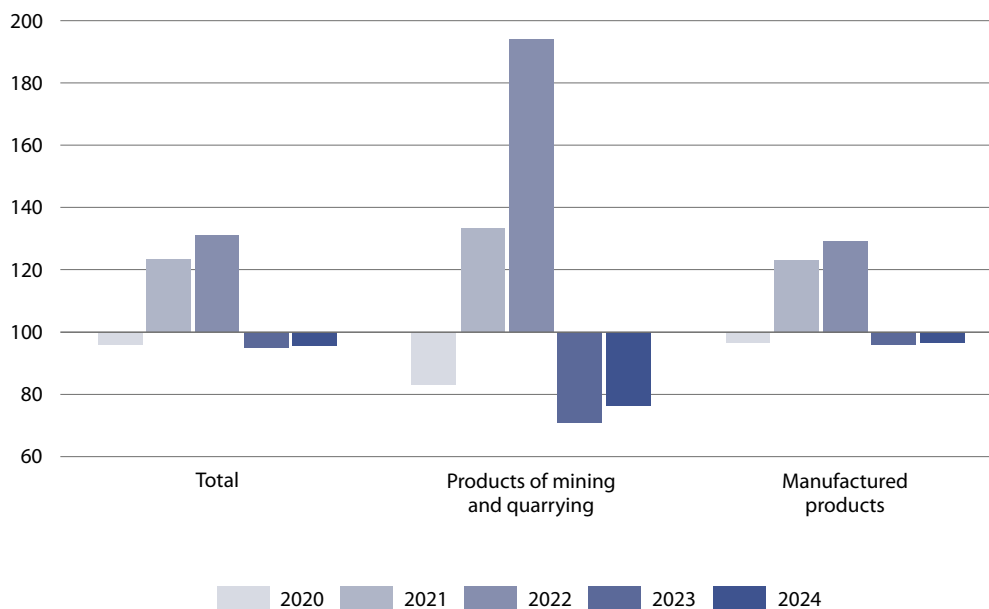
Sold production value includes:

- 1) received and receivable amounts for products of own production sold outside the enterprise during the reporting period, for products manufactured by the enterprise as subcontractor from enterprise's own materials, and for products manufactured by another producer – subcontractor – from materials provided by the enterprise – adjusted for due extra charges, granted rebates, reductions, discounts or contractual due payments for the sale of products;
- 2) the value of goods not categorized as sale but treated as sales, i.e. the value of own products supplied to own retail outlets as well as to own catering or wholesale establishments;
- 3) the value of products manufactured and treated as sales, i.e.: transferred free of charge to enterprise's benefit fund, used for enterprise's investment, for the purpose of representation and advertisement, provided for the taxpayer's and staff's personal needs, and donated free of charge.

Sold production value of products are presented at current prices without VAT, but including excise tax.

The survey of sold production of products covers producers' own products, classified into two sections of PKWiU 2015: Mining and quarrying products and Manufactured products. In 2024, the value of production sold at current prices amounted to 1,716,076,437.3 thousand PLN and was lower than the year before by 4.2%, and compared to 2020 was higher by 47.0%.

Chart 1. Dynamics of sold production of industrial products by PKWiU sections (previous year = 100)



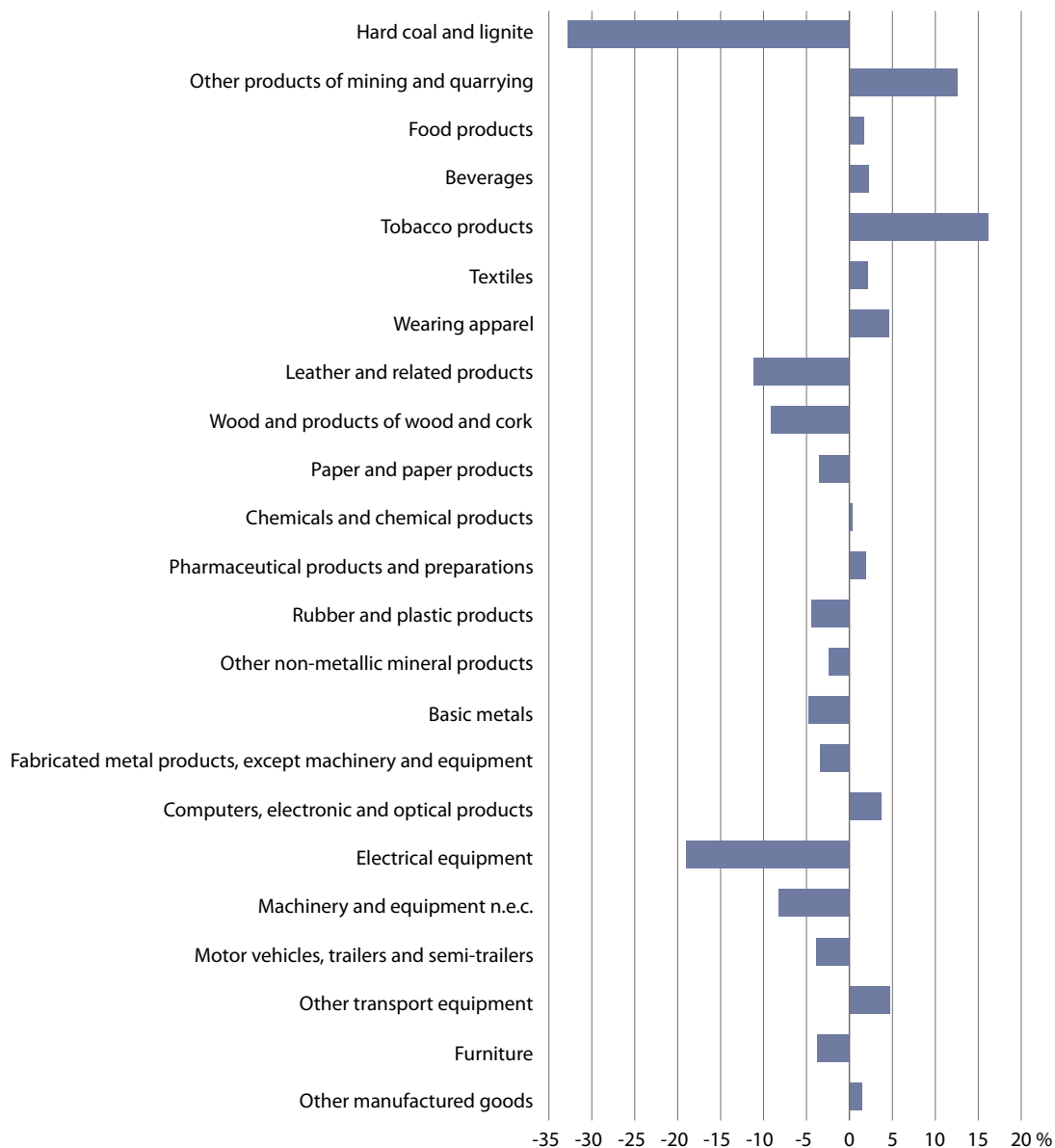
Dynamics calculated on the basis of value of sold production

1.1. Value of sold production of products by divisions and groups of PKWiU

In 2024, in comparison to 2020, the value of sold production of products increased in 24 divisions, among others in divisions Other transport equipment (by 65.0%), Motor vehicles, trailers and semi-trailers (by 62.7%), Other products of mining and quarrying (by 60.9%), Food products (by 58.3%), Hard coal and lignite (by 51.9%), Other manufactured goods (by 49.3%), Pharmaceutical products and preparations (by 45.1%), Electrical equipment (by 45.0%), Basic metals (by 44.5%), Machinery and equipment (by 42.7%), Chemicals and chemical products (by 41.3%), Fabricated metal products, except machinery and equipment (by 40.2%), Paper and paper products (by 38.0%), Beverages (by 34.9%), Other non-metallic mineral products (by 34.9%), Rubber and plastic products (by 34.0%), Wearing apparel (by 32.1%), Computers, electronic and optical products (by 27.7%), Tobacco products (by 27.2%), Wood and products of wood, cork and straw (by 24.2%), Textiles (by 21.7%), Furniture (by 19.4%). A decrease of the value of sold production of products was recorded, among other in division Leather and related products (by 8.1%).

Table 1. Sold production of products by selected PKWiU divisions

Specification	2020	2021	2022	2023	2024	
	in million PLN					2020=100
Total	1 167 209.3	1 437 782.0	1 882 880.4	1 790 396.9	1 716 076.4	147.0
Products of mining and quarrying	28 661.5	38 213.6	74 092.2	52 641.9	40 176.6	140.2
of which						
Hard coal and lignite	17 341.7	21 339.7	37 455.4	39 203.6	26 345.3	151.9
Other products of mining and quarrying	6 619.5	7 334.7	8 686.0	9 461.3	10 653.7	160.9
Manufactured products	1 138 547.8	1 399 568.5	1 808 788.2	1 737 755.0	1 675 899.9	147.2
of which						
Food products	208 631.0	233 246.8	311 674.3	324 679.1	330 263.1	158.3
Beverages	33 169.2	36 371.0	41 291.5	43 724.9	44 730.4	134.9
Tobacco products	17 777.7	17 248.2	18 502.8	19 462.5	22 620.0	127.2
Textiles	9 645.1	11 087.5	11 174.5	11 489.5	11 737.5	121.7
Wearing apparel	4 333.3	4 628.1	5 161.9	5 470.3	5 722.6	132.1
Leather and related products	2 901.5	3 016.3	3 083.7	3 001.5	2 666.2	91.9
Wood and products of wood, cork and straw	28 539.8	38 154.9	47 570.1	39 017.0	35 458.8	124.2
Paper and paper products	42 634.5	52 862.3	69 443.7	61 006.7	58 849.8	138.0
Chemicals and chemical products	68 424.4	88 903.9	124 000.5	96 348.8	96 694.2	141.3
Pharmaceutical products and preparations	11 418.1	12 020.1	14 575.0	16 252.0	16 562.8	145.1
Rubber and plastic products	84 735.6	105 960.5	127 966.5	118 857.1	113 569.7	134.0
Other non-metallic mineral products	52 570.9	60 140.9	74 388.6	72 711.9	70 931.5	134.9
Basic metals	68 944.5	102 565.3	125 986.7	104 614.1	99 630.3	144.5
Fabricated metal products	68 328.7	84 673.7	104 524.9	99 201.9	95 794.5	140.2
Computers, electronic and optical products	36 396.2	47 783.7	51 464.7	44 802.6	46 462.0	127.7
Electrical equipment	81 814.6	106 561.0	135 788.6	146 537.7	118 622.9	145.0
Machinery and equipment	44 984.3	55 683.2	68 171.3	70 019.4	64 205.0	142.7
Motor vehicles, trailers and semi-trailers	120 690.5	142 361.7	174 986.0	204 382.2	196 420.5	162.7
Other transport equipment	18 940.3	19 413.8	25 831.8	29 843.0	31 254.1	165.0
Furniture	41 858.2	49 510.4	54 491.5	51 958.6	49 994.3	119.4
Other manufactured goods	9 821.1	12 666.8	15 057.4	14 440.5	14 660.0	149.3

Chart 2. Change in value of sold production of industrial products by PKWiU divisions in 2024 (2023=100)

In 2024, compared to the previous year, the value of sold production of products increased in 11 divisions, among others Tobacco products (by 16.2%), Other products of mining and quarrying (by 12.6%), Other transport equipment (by 4.7%), Wearing apparel (by 4.6%), Computers, electronic and optical products (by 3.7%), Beverages (by 2.3%), Textiles (by 2.2%), Pharmaceutical products and preparations (by 1.9%). A decrease of the value of sold production of products in comparison to 2023, was noted in 16 divisions, among others Hard coal and lignite (by 32.8%), Electrical equipment (by 19.0%), Leather and related products (by 11.2%), Wood and products of wood, cork and straw (by 9.1%), Machinery and equipment (by 8.3%), Basic metals (by 4.8%), Rubber and plastic products (by 4.4%), Motor vehicles, trailers and semi-trailers (by 3.9%), Furniture (by 3.8%).

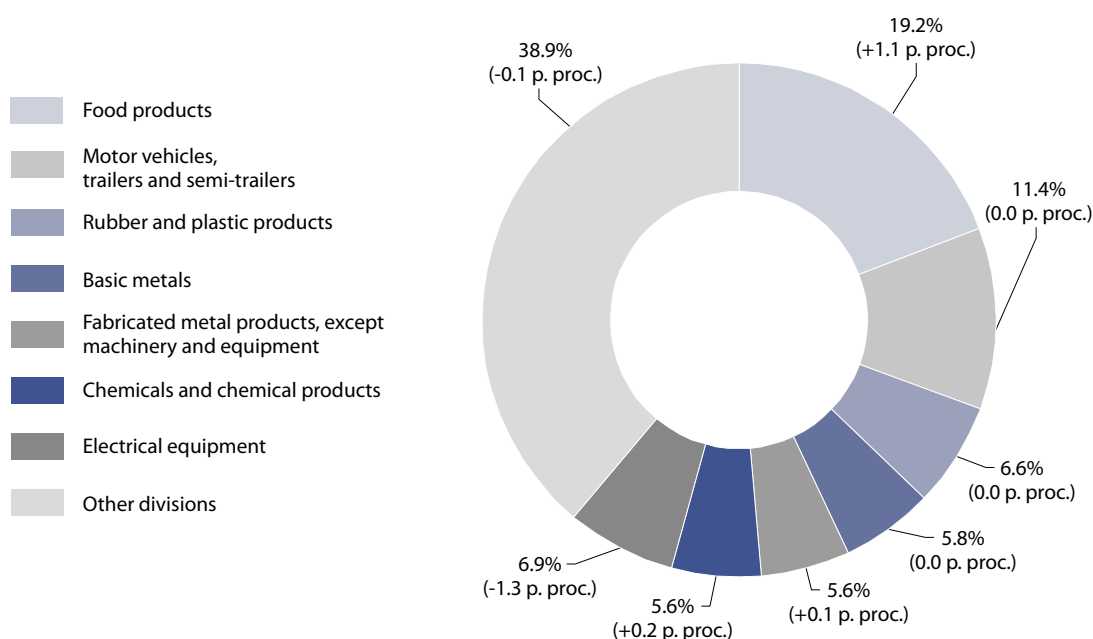
In 2024, the largest share in the value of sold production of products had divisions: Food products – 19.2%, Motor vehicles, trailers and semi-trailers – 11.4%, Electrical equipment – 6.9%, Rubber and plastic products

– 6.6%, Basic metals – 5.8%, Fabricated metal products – 5.6%, Chemicals and chemical products – 5.6%. The lowest share in the value of sold production had divisions: Metal ores, Leather and related products, Crude petroleum and natural gas, Wearing apparel.

In comparison to 2023 the share in the sold production of products increased the most in divisions: Food products (by 1.1 p. p.) and Beverages, Tobacco products, Chemicals and chemical products, Computers, electronic and optical products (by 0.2 p. p.) and it fell the most in divisions Electrical equipment (by 1.3 p. p.), Hard coal and lignite (by 0.7 p. p.)

In comparison to 2020 the most increased the share of division Motor vehicles, trailers and semi-trailers (by 1.8 p. p.). The largest decline in share was recorded for divisions: Furniture and Rubber and plastic products (by 0.7 p. p.) and Other non-metallic mineral products and Computers, electronic and optical products (by 0.4 p. p.).

Chart 3. Structure of value of sold production of products by PKWiU divisions in 2024 and its change (2023=100)



The division with the highest share in the value of total sold production of products in 2024 was Food products in which the largest share in sales was held by Preserved meat and meat products (31.2%). The next two groups with the largest share in the sold production of this division were Other food products (16.3%) and Dairy products (14.6%). Group Other food products covers a wide range of food products, including sugar, chocolate and confectionery, spices, ready-made meals and dishes, homogenized and dietary foods. The smallest share in sales was recorded for Vegetable and animal oils and fats (3.3%). Other dominant division in terms of the value of sold production was the division Motor vehicles, trailers and semi-trailers, in which the largest share had groups Parts and accessories for motor vehicle (51.1%) and Motor vehicles, excluding motorcycles (43.5%), while the smallest share in this division had group Bodies (coachwork) for motor vehicles, trailers and semi-trailers – 5.4%.

Table 2. Groups with the largest share in value of sold production of products by PKWiU divisions in 2024

Divisions by PKWiU	Groups with the highest share in the value of total sold production in division	Share of group in division in %
Hard coal and lignite	Hard coal	97.1
Other products of mining and quarrying	Stone, sand and clay	88.4
Food products	Preserved meat and meat products	30.9
Beverages	Beverages	100.0
Tobacco products	Tobacco products	100.0
Textiles	Other textiles	87.5
Wearing apparel	Wearing apparel except fur apparel	86.5
Leather and related products	Footwear	53.0
Wood and products of wood, cork and straw	Products of wood, cork, straw and plaiting materials	84.7
Paper and paper products	Articles of paper and paperboard	72.1
Chemicals and chemical products	Basic chemicals, fertilisers and nitrogen compounds, plastics and synthetic rubber in primary forms	50.6
Pharmaceutical products and preparations	Pharmaceutical preparations	95.3
Rubber and plastic products	Plastics products	80.8
Other non-metallic mineral products	Products of concrete, cement and plaster	34.0
Basic metals	Basic precious and other non-ferrous metals structural metal products	48.7
Fabricated metal products	Structural metal products	37.6
Computers, electronic and optical products	Consumer electronics	53.4
Electrical equipment	Batteries and accumulators	25.2
Machinery and equipment	Other general-purpose machinery	35.8
Motor vehicles, trailers and semi-trailers	Parts and accessories for motor vehicles	52.0
Other transport equipment	Air and spacecraft and related machinery	39.2
Furniture	Furniture	100.0
Other manufactured goods	Medical and dental instruments and supplies	40.4

Among most divisions covered by the survey of industrial products, one group of products clearly dominated in the division, e.g. in the division Pharmaceutical products and medicines the group Pharmaceutical preparations with a share of 95.3% of the value of sold production, or in the division Rubber and plastic products – Plastic products (share of 80.8% in the value of sold production). However, there were divisions in which the share of the main group of products in the value of sold production did not exceed 40.0%. These divisions included a wide range of products and product groups, diversified in terms of purpose, degree of processing and technological advancement, materials and raw materials used for production. In 2024, these included among others: in the division Other transport equipment – group Air and spacecraft and related machinery (share of 39.2%), in the division Electrical equipment – group Batteries and accumulators (share of 25.2%), in the division Machinery and equipment – group Other general-purpose machines (share of 35.8%) or in the division Products made of other non-metallic mineral raw materials – group Products made of concrete, cement and plaster (share of 34.0%).

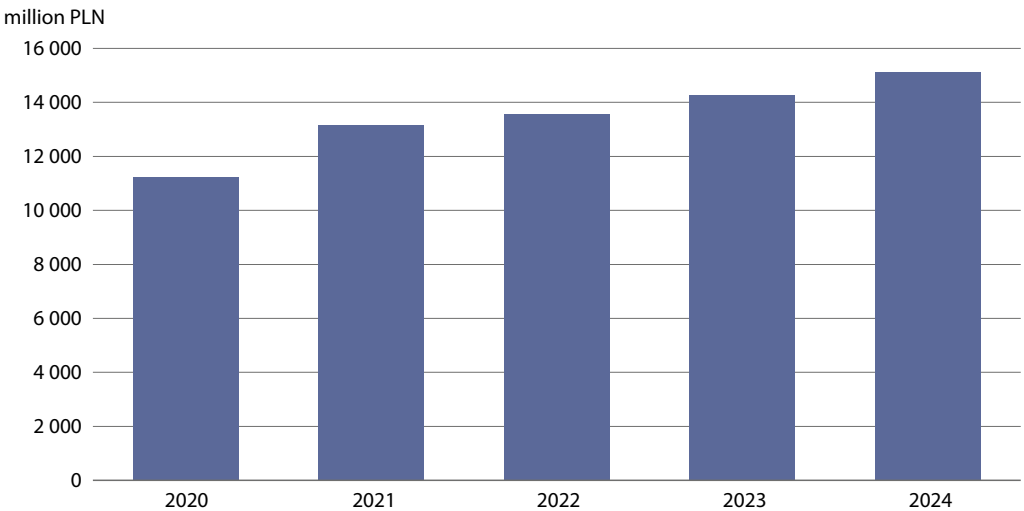
1.2. Production under sub-contracted operations

Production under sub-contracted operations is the production of products made under a contract between the principal and the contractor from material entrusted by the principal, where the value of the entrusted materials must exceed 80% of the value of the materials used in the production. The principal also provides, in whole or in part, technical specifications, samples, cut-outs, recipes. The principal sells the sub-contracted manufactured product as a final product or incorporated into its other products and assumes full after-sales responsibility for the manufactured product.

The majority of industrial products are produced by entities of the national economy under own-account production, which means that the producer carries out the entire production process himself from raw materials and materials purchased by himself. Some products, in addition to own-account production, are also produced under sub-contracting, which means that the national economy entity producing the product is not the actual owner of the product and the production process carried out by it is carried out with a significant share of materials entrusted by the principal and according to the technical specifications provided. Production under sub-contracted operations may take place for a number of reasons, e.g. the principal does not have sufficient capacity to fulfil the contract acquired, does not have suitable machinery at its disposal, the process of manufacturing the product on its own is not cost-effective as it requires too much investment or additional production conditions.

Production under sub-contracted operations amounted to 15,122.5 million PLN in 2024, and increased by 6.1% compared to 2023, when it was recorded at its highest level in the entire period under review. The increase in production under sub-contracted operations at the national level was mainly influenced by increases in the divisions: Pharmaceutical products and preparations (by 59.8%), Wood and products of wood, cork and straw (by 48.6%), Other transport equipment (by 45.0%), Rubber and plastic products (by 19.9%), Electrical equipment (by 18.6%).

Chart 4. Sold production under sub-contracted operations



In 2024, the largest share of the value of production under sub-contracting was recorded for the Food and Tobacco industry (38.9%), comprising the Food, Beverages and Tobacco products divisions, as well as the Fabricated metal products and Chemicals and chemical products divisions (by 9.7% each) and Motor vehicles, trailers and semi-trailers (9.3%). The marginal importance of production under sub-contracted operations was recorded in the divisions: Coke, briquette and refined petroleum products, Wood and products of wood, cork and straw, Pharmaceutical products and preparations, Leather and related products and Furniture.

Table 3. Sold production under sub-contracted operations by division of the Manufactured Products section in 2024

Specification	Value of sold production under sub-contracted operations	
	thousand PLN	in %
Manufactured products	15 122 495.7	100.0
Food products, Beverages, Tobacco products	5 886 641.9	38.9
Textiles	566 619.6	3.7
Wearing apparel	558 289.5	3.7
Leather and related products	91 016.6	0.6
Wood and products of wood, cork and straw	20 608.1	0.1
Paper and paper products	459 625.0	3.0
Printing services and reproduction services of recorded media	353 149.4	2.3
Coke, briquette and refined petroleum products	.	.
Chemicals and chemical products	1 460 523.1	9.7
Pharmaceutical products and preparations	.	.
Rubber and plastic products	240 931.5	1.6
Other non-metallic mineral products	127 003.0	0.8
Basic metals	197 922.9	1.3
Fabricated metal products	1 463 185.9	9.7
Computers, electronic and optical products	447 642.7	3.0
Electrical equipment	923 679.5	6.1
Machinery and equipment	166 882.5	1.1
Motor vehicles, trailers and semi-trailers	1 403 364.4	9.3
Other transport equipment	249 238.5	1.6
Furniture	96 599.4	0.6
Other manufactured goods	361 703.2	2.4

Production under sub-contracted operations plays a large role in divisions that do not record a high value of sold production. These are divisions that include relatively low-cost industrial products, their manufacturing costs are not high and production does not require high investment.

In the division Wearing apparel, as many as 81 products or product assortment groups, out of the 158 covered by the survey, were reported to be manufactured to order from outsourced material in addition to own-account production (51.3%). In the division Printing services and reproduction services of recorded media, this was 41.6%, and in the division Furniture it was 36.8%. Although as many as 82 under sub-contracted products were reported in the division Food products, they accounted for only 16.2% of all food products under observation.

Table 4. Production of selected products manufactured under subcontracting and on own account in 2024

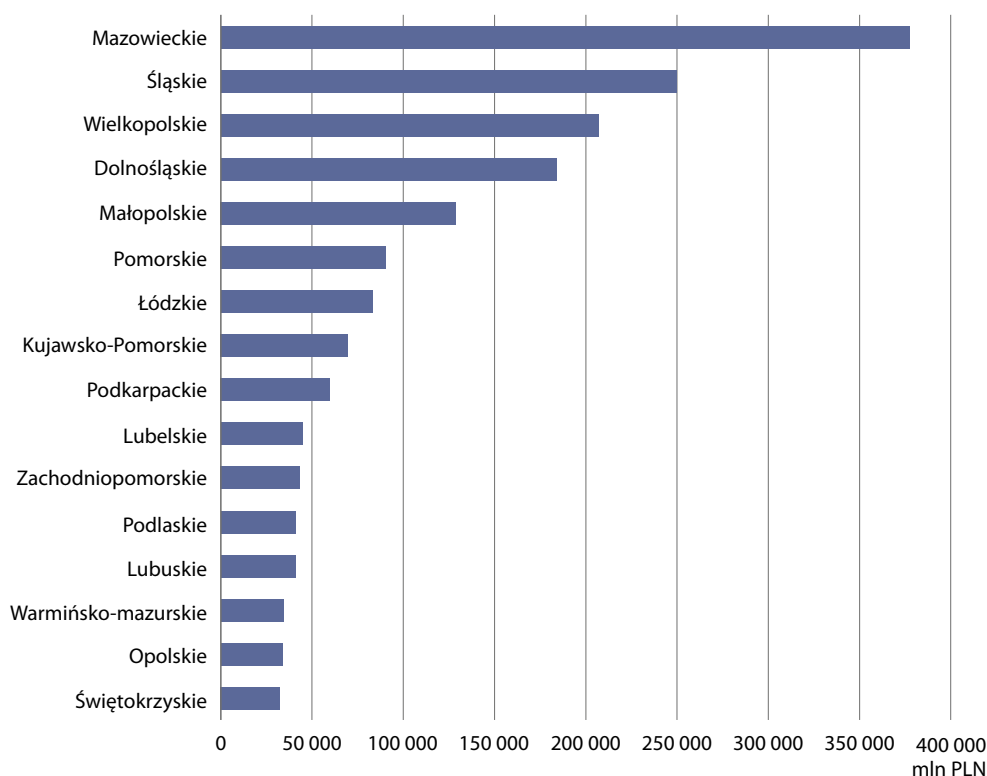
Specification	Unit	Manufactured production	Sold production	
			on own account	under sub-contracted operations
Food products				
Crisps	tonnes	111 529	58 823	53 023
Rapeseed and colza oil with fractions, crude, edible	tonnes	1 455 454	630 075	562 133
Soybean oil, crude, chemically unmodified, edible	tonnes	10 301	4 210	5 905
Savoury or salted extruded or expanded products	tonnes	214 265	120 936	95 404
Roasted coffee, not decaffeinated	tonnes	101 081	44 395	5 548
Soups and broths and preparations therefor	tonnes	93 648	60 977	31 100
Wearing apparel				
Men's or boys' overcoats, car-coats, capes, cloaks and similar articles, of knitted or crocheted textiles (excluding jackets and blazers, anoraks, wind-cheaters and wind- jackets)	unit	208 169	137 213	69 802
Women's or girls' overcoats, car-coats, capes, cloaks and similar articles, of knitted or crocheted textiles (excluding jackets and blazers)	unit	134 962	87 514	46 362
Women's or girls' jackets and blazers (excluding knitted or crocheted)	unit	832 082	556 264	372 974
Women's or girls' dresses (excluding knitted or crocheted)	unit	813 997	532 928	325 396
Women's or girls' trousers and breeches, of cotton (excluding denim, for industrial or occupational wear)	unit	311 401	175 048	156 772
Men's or boys" shirts, knitted or crocheted	unit	800 648	350 598	429 938
Printing services and reproduction services of recorded media				
Printed books, brochures, leaflets and similar printed matter, in single sheets	kg	204 129 513	213 349 991	30 128 880
Furniture				
Upholstered seats with wooden frames (including three piece suites) (excluding swivel seats)	unit	9 656 253	9 623 889	75 717

1.3. Sold production of products by voivodship

In 2024, the highest value of sold production of products, as in previous years, was recorded in the Mazowieckie Voivodship – 377,406.3 million PLN, which accounted for 21.9% of the domestic value of sold production of products. Such a large share is due to the fact that the headquarters of many manufacturers of products operating in Poland are located here.¹ The second Voivodship with a significant share was the Śląskie Voivodship – 249,823.2 million PLN (14.5% of the total value), followed by the Wielkopolskie Voivodship – 206,916.7 million PLN (12.0%), the Dolnośląskie Voivodship – 183,785.4 million PLN (10.7%) and the Małopolskie Voivodship – 128,818.9 million PLN (7.5%). The lowest value of sold production was recorded for the Świętokrzyskie Voivodship – 32,318.2 million PLN (1.9%).

In the years 2020-2024, the share of most voivodships in the value of sold production of industrial products changed slightly or remained at a similar level. In 2024, compared to 2023, the largest decrease in the value of sold production was recorded for the Dolnośląskie Voivodship (by 1.2 p.p.) and the Śląskie Voivodship (by 1.0 p.p.). A decrease was also recorded in the Kujawsko-Pomorskie Voivodship (by 0.1 p.p.). In 2024, there was an increase in the share in the value of sold production in nine voivodships, most significant in the Małopolskie (by 0.6 p.p.) and Mazowieckie (by 0.4 p.p.). In the Opolskie, Świętokrzyskie, Warmińsko-Mazurskie and Zachodniopomorskie voivodships, the share in the value of sold production remained at the same level as in the previous year. Compared to 2020, the largest increase in the share was recorded in the Mazowieckie Voivodship (by 1.3 p.p.) and the Małopolskie Voivodship (by 0.8 p.p.). The shares of the Śląskie and Lubelskie voivodships remained unchanged (14.5% and 2.6%, respectively). For other voivodships, a decrease in the share of the value of sold production was recorded, the largest in the Wielkopolskie voivodship (by 0.8 p.p.) and the Pomorskie Voivodship (by 0.7 p.p.).

Chart 5. Sold production of products by Voivodship in 2024

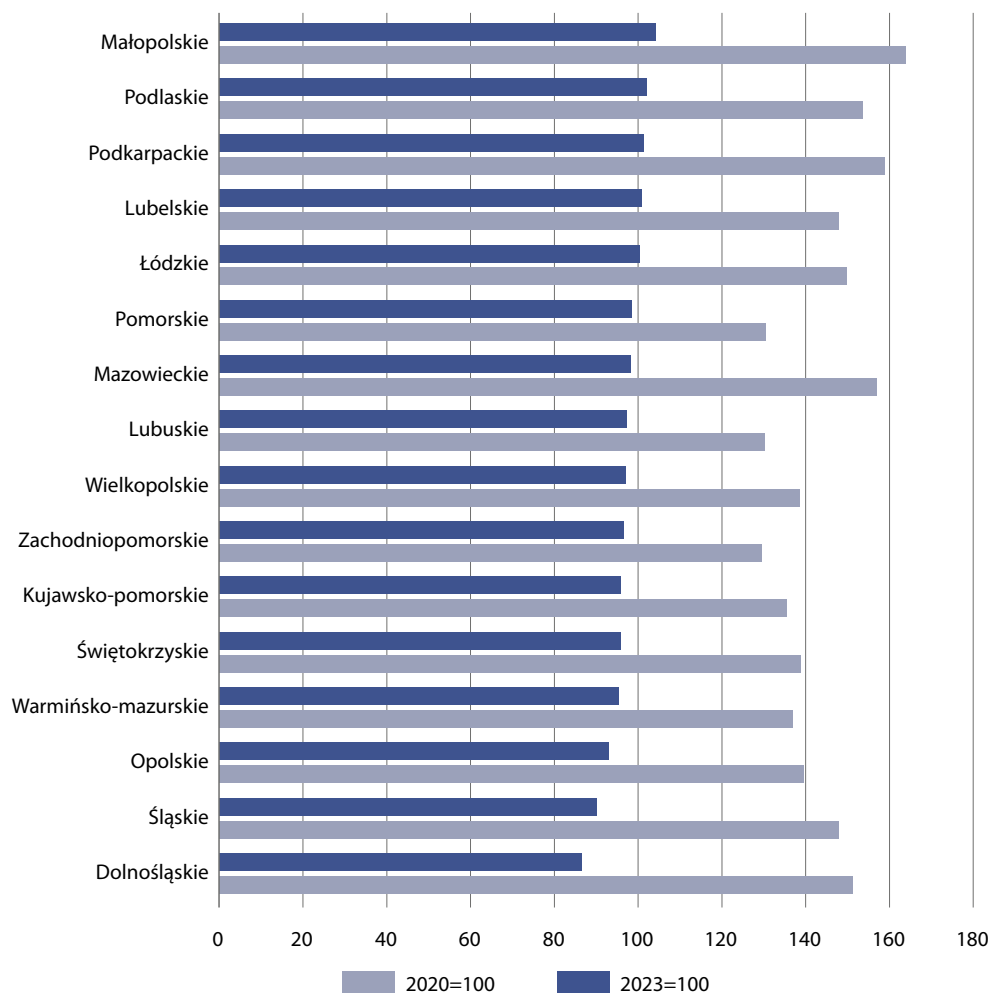


¹ Data is collected and presented according to the enterprise method, i.e. according to the company's headquarters.

Table 5. Share of voivodships in the sold production of products

Voivodships	2020	2021	2022	2023	2024
	in %				
Dolnośląskie	10.4	11.2	10.8	11.9	10.7
Kujawsko-pomorskie	4.4	4.1	4.2	4.1	4.0
Lubelskie	2.6	2.6	2.5	2.5	2.6
Lubuskie	2.7	2.7	2.5	2.3	2.4
Łódzkie	4.7	4.6	4.4	4.6	4.8
Małopolskie	6.7	6.8	6.5	6.9	7.5
Mazowieckie	20.6	20.7	23.2	21.5	21.9
Opolskie	2.1	2.1	2.0	2.0	2.0
Podkarpackie	3.2	3.3	3.1	3.3	3.5
Podlaskie	2.3	2.2	2.2	2.2	2.4
Pomorskie	6.0	6.2	6.1	5.1	5.3
Śląskie	14.5	14.8	14.6	15.5	14.5
Świętokrzyskie	2.0	1.9	1.8	1.9	1.9
Warmińsko-mazurskie	2.1	2.1	2.1	2.0	2.0
Wielkopolskie	12.8	12.1	11.3	11.8	12.0
Zachodniopomorskie	2.9	2.6	2.7	2.5	2.5

In 2024, enterprises from the Mazowieckie Voivodship had the largest share in the value of production sold in Poland in the following divisions: Crude oil and natural gas; Food products; Printing services and services for the reproduction of recorded media; Coke, briquettes and petroleum refining products; Chemicals and chemical products; Pharmaceutical products and preparations; Computers, electronic and optical products; Machinery and equipment; Other transport equipment. The Śląskie Voivodship played a leading role in the production of the following divisions: Hard coal and lignite; Rubber and plastic products; Products of other non-metallic mineral raw materials; Basic metals; Finished metal products, excluding machinery and equipment; Motor vehicles, trailers and semi-trailers, and the Wielkopolskie Voivodship – in the sections: Beverages; Textile products; Furniture and Other Products. In the Dolnośląskie Voivodship, the largest share in the value of total sold production was recorded in the divisions: Leather and leather products and Electrical equipment, in the Łódzkie Voivodship – Wearing apparel, in the Kujawsko-Pomorskie Voivodship – Paper and paper products, in the Małopolskie Voivodship – Tobacco products; in the Zachodniopomorskie Voivodship – Wood and products of wood, cork and straw.

Chart 6. Dynamics of sold production of products by Voivodship in 2024 (2020=100; 2023=100)

Dynamics calculated on the basis of the value of sold production.

In 2024, compared to 2023, an increase in the value of sold production was recorded in the Małopolskie Voivodship (by 4.3%), Podlaskie Voivodship (by 2.0%), Podkarpackie Voivodship (by 1.2%), Lubelskie Voivodship (by 0.9%) and Łódzkie Voivodship (by 0.4%). In other voivodships, there was a decrease in the value of sold production – the largest decrease was recorded in the Dolnośląskie (by 13.5%), Śląskie (by 9.8%) and Opolskie (by 7.1%). Compared to 2020, an increase in the value of sold production was recorded in all voivodships. The largest increase in sold production was recorded in the following voivodships: Małopolskie (by 63.8%), Podkarpackie (by 58.8%), Mazowieckie (by 56.9%), Podlaskie (by 53.5%) and Dolnośląskie (by 51.1%).

1.4. Sold production of industrial products by size class of entities

The survey on the production of industrial products covered economic entities with 10 or more persons employed, whose activity resulted in the production of industrial products classified within two sections: Products of mining and quarrying and Manufactured products. In the years 2020-2024, the share of the value of sold production of products reported by entities with 50 or more persons employed increased from 93.7% to 94.3% of the total value. In 2024, the value of total sold production of products of entities with 50 or more persons employed amounted to 1,617,781.2 million PLN, while for entities employing 10-49 persons – 98,295.2 million PLN. In the analyzed period, the sold production of products reported by entities with 50 or more persons employed increased until 2022 in both sections. Since 2023, a decline in the value of sold production has been observed. In the case of entities with 10-49 persons employed, production in the Products of mining and quarrying section grew systematically throughout the period. However, in the Manufactured products section, similar trends were observed as in the case of entities with 50 or more persons employed – increase till 2022 and decrease in 2023-2024.

Table 6. Sold production of products by size class of entities

Specification	2020	2021	2022	2023	2024
	in million PLN				
TOTAL					
entities with 50 and more persons employed	1 093 292.0	1 352 681.1	1 781 376.6	1 691 220.2	1 617 781.2
entities with 10-49 persons employed	73 917.3	85 100.9	101 495.6	99 176.6	98 295.2
PRODUCTS OF MINING AND QUARRYING					
entities with 50 and more persons employed	27 615.3	37 062.1	72 751.1	51 275.6	38 658.4
entities with 10-49 persons employed	1 046.2	1 151.5	1 341.2	1 366.4	1 518.1
MANUFACTURED PRODUCTS					
entities with 50 and more persons employed	1 065 676.6	1 315 619.0	1 708 625.6	1 639 944.7	1 579 122.8
entities with 10-49 persons employed	72 871.2	83 949.5	100 154.4	97 810.3	96 777.1

In 2024, the largest share of production of entities with 50 or more persons employed in the production of products sold was recorded in the following divisions: Hard coal and lignite (99.9%), Tobacco products (99.7%), Coke, briquette and refined petroleum products (99.7%), Pharmaceutical products and preparations (98.6%), Motor vehicles, trailers and semi-trailers (98.5%), Metal ores, Crude petroleum and natural gas. The largest share in the production of products reported by entities with 10 to 49 persons employed in 2024 was recorded in the following divisions: Wearing apparel (27.9%), Leather and related products (17.4%), Textiles (16.8%), Wood and products of wood, cork and straw (16.0%), Printing services and reproduction services of recorded media (14.1%), Other products of mining and quarrying (13.9%), Fabricated metal products (13.2%), Other manufactured goods (12.4%).

Table 7. Share of entities with 50 and more persons employed in value of sold production of products by PKWiU divisions

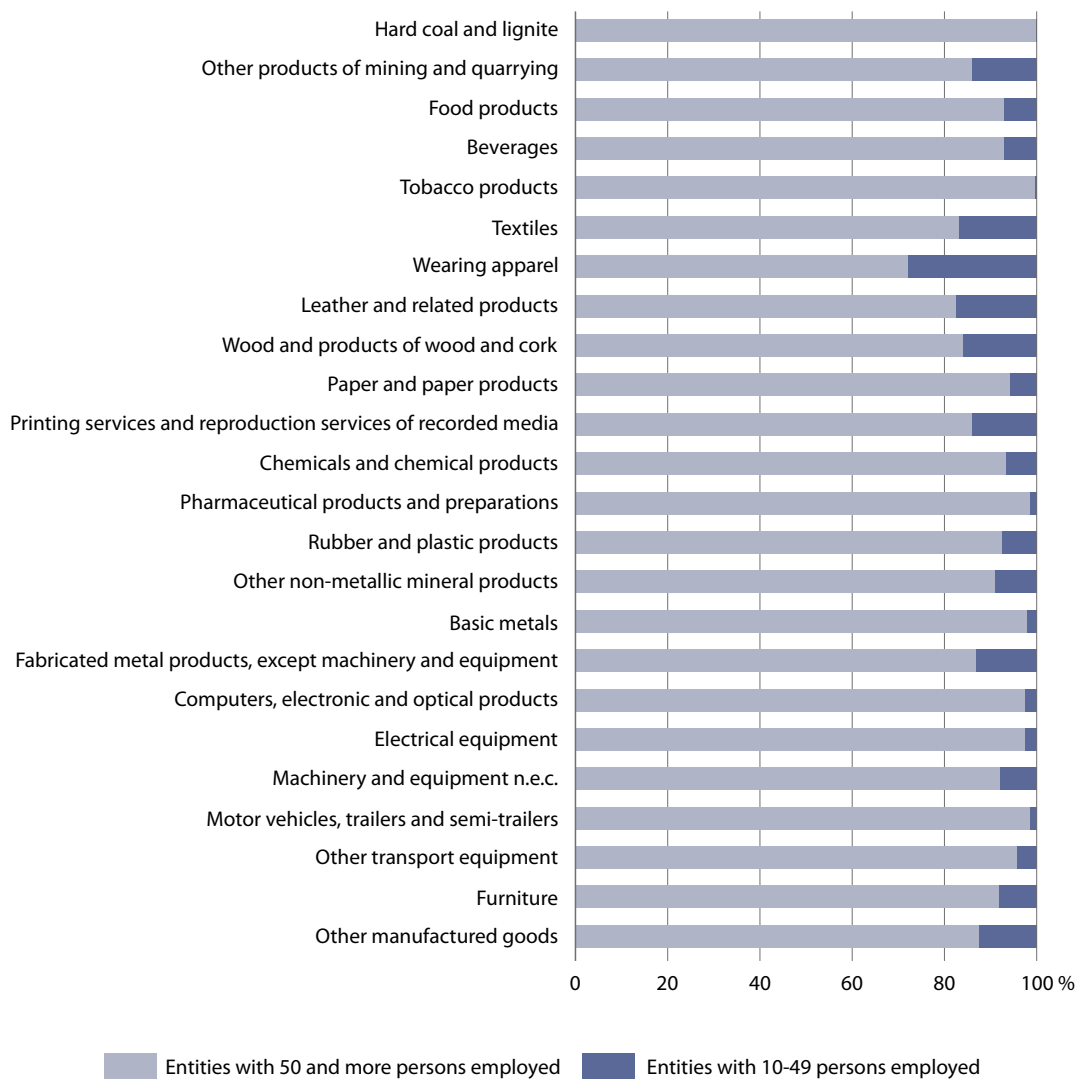
Specification	2020	2021	2022	2023	2024
	w %				
Total	93.7	94.1	94.6	94.5	94.3
Hard coal and lignite	99.7	99.8	99.8	99.9	99.9
Other products of mining and quarrying	85.0	85.1	85.7	86.1	86.1
Food products	91.2	92.3	92.7	92.8	93.0

Table 7. Share of entities with 50 and more persons employed in value of sold production of products by PKWiU divisions (cont.)

Specification	2020	2021	2022	2023	2024
	w %				
Beverages	93.5	93.4	92.8	92.4	92.9
Tobacco products	99.8	99.9	99.9	99.7	99.7
Textiles	82.1	85.5	84.0	83.8	83.2
Wearing apparel	69.0	69.7	71.5	70.5	72.1
Leather and related products	85.6	83.3	84.3	82.0	82.6
Wood and products of wood, cork and straw	84.4	84.7	84.8	84.1	84.0
Paper and paper products	94.6	95.2	95.2	94.5	94.2
Printing services and reproduction services of recorded media	83.2	83.3	84.8	85.1	85.9
Coke, briquette and refined petroleum products	99.7	99.6	99.8	99.7	99.7
Chemicals and chemical products	92.7	92.5	93.1	93.0	93.3
Pharmaceutical products and preparations	98.4	98.1	97.5	97.8	98.6
Rubber and plastic products	92.1	92.3	92.5	92.5	92.5
Other non-metallic mineral products	91.5	91.7	92.0	92.0	91.1
Basic metals	97.1	97.3	97.9	97.9	97.9
Fabricated metal products	87.5	87.1	88.4	87.4	86.8
Computers, electronic and optical products	97.6	98.0	97.9	97.4	97.4
Electrical equipment	97.6	97.7	97.9	97.8	97.5
Machinery and equipment	91.8	92.1	92.4	92.6	92.2
Motor vehicles, trailers and semi-trailers	98.8	98.6	98.8	98.8	98.5
Other transport equipment	92.3	92.9	93.0	93.9	95.8
Furniture	92.3	92.2	92.2	92.4	91.8
Other manufactured goods	88.8	89.6	88.1	87.3	87.6

In 2024, compared to 2023, a decrease in the share of entities with 50 or more persons employed in the value of sold production of products was recorded, among others, for the following divisions: Other non-metallic mineral products (by 0.9 p. p.), Textiles (by 0.6 p. p.), Fabricated metal products (by 0.6 p. p.), Furniture (by 0.6 p. p.). In 9 divisions, an increase in the share of sold production of entities with 50 or more persons employed was recorded, including for the following divisions: Other transport equipment (by 1.9 p. p.), Wearing apparel (by 1.6 p. p.), Pharmaceutical products and preparations (by 0.8 p. p.), Printing services and reproduction services of recorded media (by 0.8 p. p.).

Compared to 2020, the share of entities with 50 or more persons employed in the production of sold products decreased in 12 divisions, including: Leather and related products (by 3.0 p. p.), Other manufactured goods (by 1.2 p. p.), Fabricated metal products (by 0.7 p. p.), Beverages (by 0.6 p. p.). Throughout the entire period under analysis, the largest increase in the share of entities with 50 or more persons employed was recorded in the following divisions: Other transport equipment (by 3.5 p. p.), Printing services and reproduction services of recorded media (by 2.7 p. p.), Food products (by 1.8 p. p.), Other products of mining and quarrying (by 1.1 p. p.), Textiles (by 1.1 p. p.).

Chart 7. Sold production by size classes and PKWiU divisions in 2024

1.5. Sold production of industrial products by kind of activity of entities producing products

Industrial entities are economic entities whose predominant activity according to the Polish Classification of Activities (PKD) is classified into four sections according to PKD 2007: Mining and quarrying, Manufacturing, Electricity, gas, steam, hot water and air conditioning manufacturing and supply; Water supply; sewerage, waste management and remediation activities.

Non-industrial entities are economic entities whose predominant activity according to the PKD 2007 is classified into sections other than: Mining and quarrying, Manufacturing, Electricity, gas, steam, hot water and air conditioning manufacturing and supply; Water supply; sewerage, waste management and remediation activities.

Industrial products classified in the PKWiU sections Mining and quarrying and Manufactured products are mainly produced by industrial entities. The value of sold production of products in 2024 compared to 2020 increased by 48.1% for industrial entities and by 21.4% for non-industrial entities, while compared to 2023, the sold production of products decreased in both industrial entities (by 4.2%) and non-industrial entities (by 3.5%). In 2024, the share of industrial entities in the sold production of products amounted to 96.6%.

Table 8. Sold production of products by predominant activity of entities (PKD 2007)

Specification	2020	2021	2022	2023	2024
	in thousand PLN				
	TOTAL				
Industrial entities	1 119 219 813.8	1 377 551 939.6	1 819 742 932.2	1 730 042 007.1	1 657 823 571.1
Non-industrial entities	47 989 478.6	60 230 109.7	63 137 510.1	60 354 858.5	58 252 866.2
	PRODUCTS OF MINING AND QUARRYING				
Industrial entities	28 431 197.6	37 951 379.2	73 885 358.1	52 420 782.3	39 941 291.8
Non-industrial entities	230 287.4	262 215.7	206 890.1	221 132.8	235 263.2
	MANUFACTURED PRODUCTS				
Industrial entities	1 090 788 616.2	1 339 600 560.4	1 745 857 574.1	1 677 621 224.8	1 617 882 279.3
Non-industrial entities	47 759 191.2	59 967 894.0	62 930 620.0	60 133 725.7	58 017 603.0

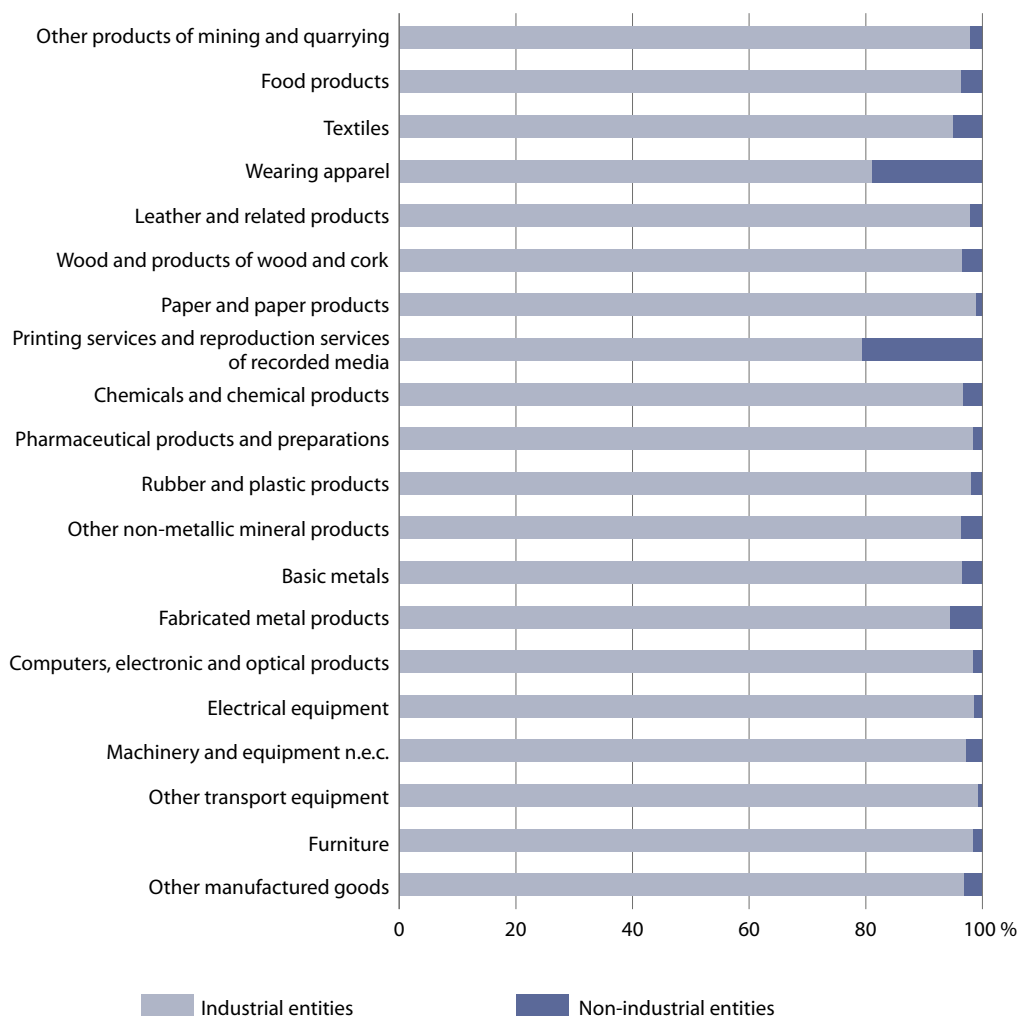
In 2024, the value of sold production of products manufactured by non-industrial entities was 58,252.9 million PLN, of which 96.9% of sold production was reported by entities whose activities were classified in five sections: Wholesale and Retail Trade (section G of PKD 2007), Construction (section F), Agriculture, forestry, hunting and fishing (section A), Information and communication (section J) and Professional, scientific and technical activities (section M). The remaining 3.1% of the sold production of non-industrial entities was mainly from the following sections: Accommodation and food service activities (section I); Transportation and storage (section H); Other service activities (section S); Administrative and support service activities (section N); Human health and social work activities (section Q); Real estate activities (section L); Financial and insurance activities (section K), whose share ranged from 0.1% to 1.3%.

Among non-industrial entities, as much as 76.5% of sold production was reported by entities whose activity was classified in the Wholesale and retail trade section. The highest income from the sale of products were achieved by entities classified, among others, in the following divisions: Tobacco products, Food products and Basic metals. Entities from the Construction section (9.7% share) reported production, among others, in the divisions: Other non-metallic mineral products, Fabricated metal products and Wood and products of wood and cork. Entities with predominant activities classified under the Agriculture, forestry, hunting and fishing section mainly reported products from the Food products division.

Table 9. Sold production of industrial products by predominant kind of activity of non-industrial entities in 2024

PKD Sections	Sold production of industrial products	
	in million PLN	in %
Non-industrial entities	58 252.9	100.0
of which entities classified to sections:		
Wholesale and retail trade	44 582.2	76.5
Construction	5 653.2	9.7
Agriculture, forestry, hunting and fishing	2 454.5	4.2
Information and communication services	2 049.4	3.5
Professional, scientific and technical activities	1 774.5	3.0

In 2024, the largest share of non-industrial entities in the sold production of products was recorded for the following divisions: Printing services and reproduction services of recorded media (20.6%). Wearing apparel (18.9%). Fabricated metal products (5.5%), Textiles (5.1%), Food products (3.7%), Other non-metallic mineral products (3.7%).

Chart 8. Share of industrial and non-industrial entities in the value of sold production of industrial products by selected PKWiU divisions in 2024

The highest consistency of declared predominant activity of entities with the production of industrial products resulting from this activity was observed, among others, for the following divisions: Food products, Pharmaceutical products and preparations, Other non-metallic mineral products – in those divisions, more than 90% of sold production of industrial products was reported by units with a predominant activity in which the production of these products was classified. The lowest correspondence between the manufactured products and the type of predominant activity of entities was observed for the Crude oil and Metal ores divisions. A detailed list of share in value of sold production of industrial products in PKWiU divisions by the most common predominant activity of entities in 2024 can be found in Annex 1.

Table 10. Sales of products reported by entities carrying out activities resulting in the production of products in 2024.

PKWiU Divisions	Sold production in %
Other mining and quarrying	82.0
Food products	95.1
Textiles	66.2
Wearing apparel	76.6

Table 10. Sales of products reported by entities carrying out activities resulting in the production of products in 2024. (cont.)

PKWiU Divisions	Sold production in %
Leather and related products	88.6
Wood and of products of wood and cork, straw and plaiting materials	88.5
Paper and paper products	89.8
Printing services and reproduction services of recorded media	70.4
Chemicals and chemical products	77.5
Pharmaceutical products and preparations	92.7
Rubber and plastic products	86.3
Other non-metallic mineral products	90.0
Basic metals	49.9
Fabricated metal products	73.8
Computers, electronic and optical products	89.4
Electrical equipment	77.1
Machinery and equipment	62.6
Other transport equipment	89.7
Furniture	85.6
Other manufactured goods	76.9

1.6. Sold production of major products

In 2024, the top 10 products with the highest value of sold production included the same products as in 2023. As in previous years, the product with the largest share in the value of total sold production was diesel fuel. The second place was taken by parts and accessories for motor vehicles, and the third place was taken by unleaded motor gasoline, which moved up in the ranking by one place compared to 2023. Lithium-ion batteries were next, dropping from position 2 compared to 2023. In the years 2020-2024 all 4 products occupied first 4 places taking into account the value of sold production.

Diesel trucks with a total weight of up to 5 tons moved up to 5th place. 6th place in the ranking was taken by tobacco cigarettes, which moved up 3 places in the ranking compared to 2023 and 2020. The next places were taken by the same products as in 2023: diesel engines for cars and pieces of birds of the Gallus Domesticus (domestic hen) species, fresh or chilled. Television sets moved up to 9th place, while thermal coal fell to the last place from 7th place.

Compared to 2020, only 2 products were not included in the list of products with the highest value of sold production – diesel engines for motor vehicles and fresh or chilled cuts of chicken (Gallus Domesticus).

Chart 9. Top 10 industrial products by value of sold production

Specification	2024		2023		2020
Diesel fuels	1	↔	1	↔	1
Parts and accessories for motor vehicles, other	2	↑	3	↓	2
Motor gasoline	3	↑	4	↑	4
Lithium-ion batteries	4	↓	2	↑	3
Diesel trucks with a total weight of up to 5 tonnes	5	↑	6	↑	6
Cigarettes of tobacco or tobacco mixtures with its substitutes	6	↑	9	↑	9
Diesel engines for motor vehicles	7	↔	7	↑	-
Fresh or chilled cuts of chicken	8	↔	8	↑	-
TV sets	9	↑	10	↓	5
Thermal coal	10	↓	7	↑	7

Change to the previous year



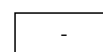
no change



decrease



increase



product outside the top 10.

Table 11. Sold production of products with the largest share in individual PKWiU divisions in 2024

PKWiU Division	Products	Sold production in thousand PLN
Hard coal and lignite	Hard coal	.
Crude petroleum and natural gas	Crude petroleum	.
Metal ores	Lead, zinc and tin ores and concentrates	.
Other products of mining and quarrying	Crushed stone used for construction purposes	4 030 656,9
Food products	Fresh or chilled cuts of chicken	17 767 732,8
Beverages	Beer	12 914 227,3
Tobacco products	Cigarettes	19 267 278,3
Textiles	Furnishing articles including furniture and cushion covers	1 231 781,0
Wearing apparel	Men's or boys' ensembles, of cotton or man-made fibres, for industrial and occupational wear	730 294,1
Leather and related products	Articles of leather or composition leather for technical purposes	.
Wood and products of wood, cork, straw	Particle board of wood	4 859 880,2
Paper and paper products	Cartons, boxes and cases of paper and corrugated paperboard	13 230 668,1
Printing services and reproduction services of recorded media	Printed books, brochures, leaflets and similar printed matter, in single sheets	2 704 619,4
Coke, briquette and refined petroleum products	Diesel oils	.
Chemicals and chemical products	Biodiesel and mixtures thereof	5 617 889,6
Chemicals and chemical products	Biodiesel and mixtures thereof	13 687 703,0
Rubber and plastic products	Windows	13 488 658,1
Other non-metallic mineral products	Ready-mixed concrete	8 260 972,7
Metals	Refined copper wire with a maximum cross-sectional dimension exceeding 6 mm and copper alloy wire	.
Fabricated metal products	Weirs, sluices, and other maritime and waterway structures, of iron or steel, structures and parts of structures of iron or steel, n.e.c	13 531 261,2
Computers, electronic and optical products	TV sets	16 819 379,2
Electrical equipment	Lithium-ion batteries	.
Machinery and equipment	Parts for spark-ignition engines, n.e.c	3 404 668,3
Motor vehicles, trailers and semi-trailers	Parts and accessories n.e.c., for motor vehicles	34 369 146,7
Other transport equipment	Self-propelled railway or tramway coaches, vans and trucks	4 858 400,7
Furniture	Furniture of wood and wood-based materials, of a kind used in dining rooms and living rooms, excluding floor-standing mirrors, seating furniture	10 558 996,2
Other manufactured goods	Candles, tapers and the like	3 999 690,8

1.7. Sold production of products with embedded systems

An embedded system is a digital equipment composed of a processor, memory and input-output systems (microcontroller), intended for real-time control of the product of which it is a part. Personal computers, portable computers, tablets, phones and smartphones and other ICT network devices are not considered products containing embedded systems.

Element of the Internet of Things is a product with an embedded system with the ability to connect to the Internet.

An entity with foreign capital is an entity in which the share of foreign capital in the share capital is 100%.

An entity with a predominant share of foreign capital is an entity in which the share of foreign capital in the share capital is 50.0%-99.9%.

Embedded systems are defined as special-purpose computer systems that become an integral part of the equipment they support. Currently, embedded systems are used in virtually all areas of life and are used in many everyday objects, including:

- consumer electronics and household appliances. e.g. washing machines, refrigerators, dishwashers,
- cars, e.g. in reversing or navigation sensors,
- medical equipment, e.g. for monitoring vital signs,
- industry and automation: e.g. alarm systems (burglary, fire protection), PLC controllers

The Internet of Things (IoT) is a digital network created by interconnected objects and at the same time a network connecting to the physical world. Year by year, the number of devices connected to the network is growing dynamically and their use is becoming more and more common.

1.7.1. Structure of entities reporting data on products with embedded systems

The number of entities declaring the production of products with embedded systems systematically increased in the analyzed period. In 2024, the number of economic entities reporting the production of products with embedded systems amounted to 539, of which 37.1% were entities producing products with elements of IoT.

Table 12. Number of entities producing products with embedded systems

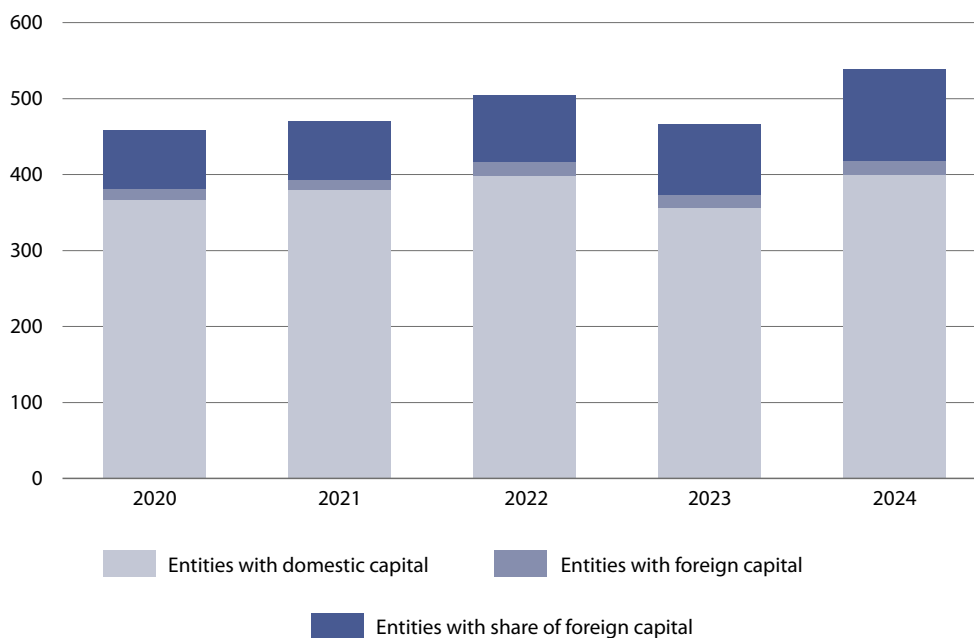
Year	Capital of entity	Entities producing products with embedded systems	
			with IoT
2024	Total	539	200
	with domestic capital	400	148
	with share of foreign capital	18	9
	with foreign capital	121	43
2023	Total	518	185
	with domestic capital	408	145
	with share of foreign capital	17	9
	with foreign capital	93	31
2022	Total	505	210
	with domestic capital	399	163
	with share of foreign capital	18	11
	with foreign capital	88	36

Table 12. Number of entities producing products with embedded systems (cont.)

Year	Capital of entity	Entities producing products with embedded systems	
			with IoT
2021	Total	471	205
	with domestic capital	381	159
	with share of foreign capital	13	8
	with foreign capital	77	38
2020	Total	458	196
	with domestic capital	367	156
	with share of foreign capital	14	8
	with foreign capital	77	32

Considering the origin of capital of economic entities reporting the production of products with embedded systems, the vast majority were entities with domestic capital, with their share in the analyzed period reaching 74.2%. However, in 2024, compared to 2023, the share of entities with domestic capital decreased by 4.6 p.p., in favor of entities with foreign capital (an increase of 4.4 p. p.). The share of entities with a majority foreign capital remained at the same level as in 2023.

In 2024, the number of economic entities reporting the production of products with elements of IoT was 200. Their share among all entities declaring the production of products with embedded systems increased by 1.4 p. p. compared to the previous year, while it decreased by 5.7 p. p. compared to 2020.

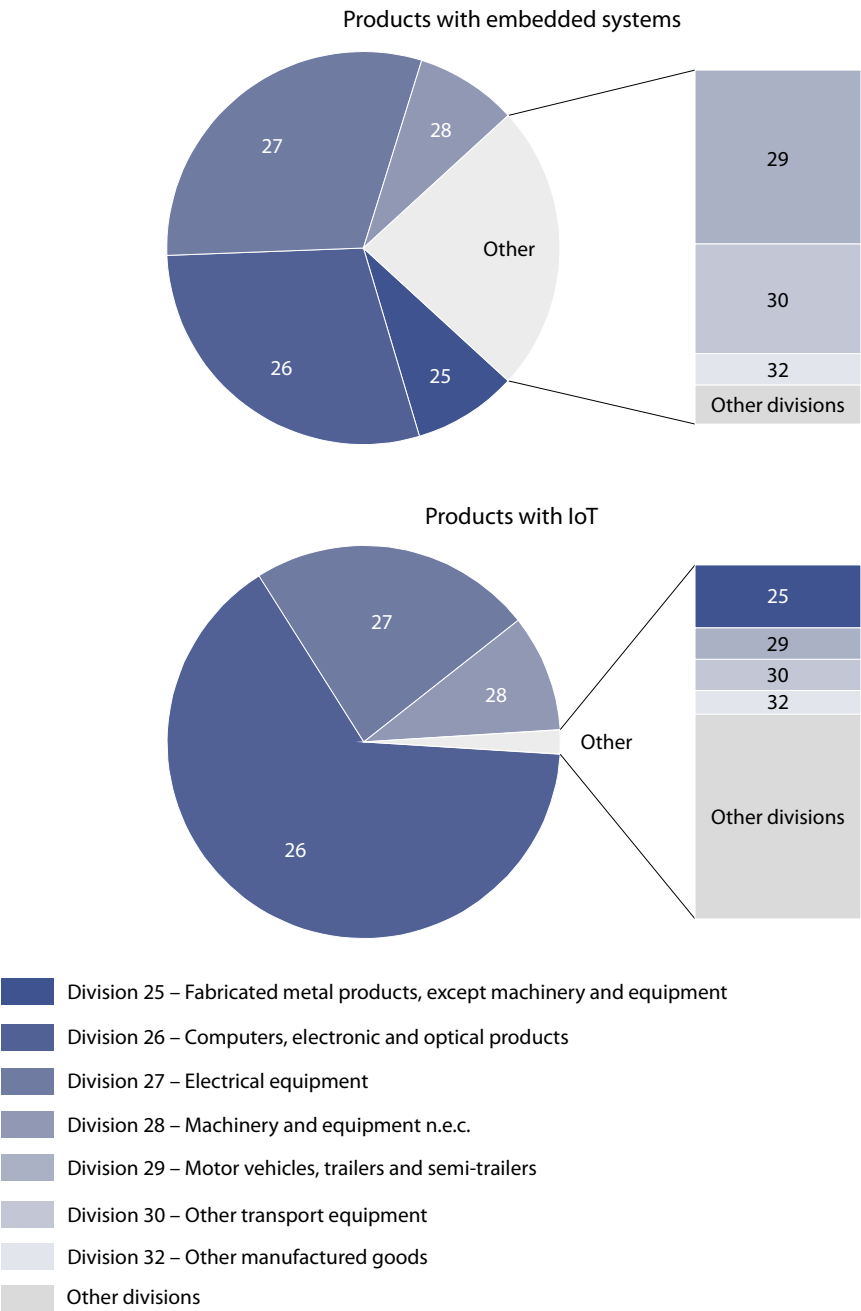
Chart 10. Number of entities declaring sold production of products with embedded systems by origin of capital

Products with embedded systems were produced mainly by entities conducting business activities classified according to the Polish Classification of Activities (PKD 2007) into the following divisions:

- division 25 Manufacture of fabricated metal products, except machinery and equipment
- division 26 Manufacture of computer, electronic and optical products
- division 27 Manufacture of electrical equipment
- division 28 Manufacture of machinery and equipment not elsewhere classified
- division 29 Manufacture of motor vehicles, trailers and semi-trailers excluding motorcycles
- division 30 Manufacture of other transport equipment
- division 32 Other manufacturing

Among the entities producing products with embedded systems, the majority were entities whose predominant kind of activity was classified in division 27 Manufacture of electrical equipment – 30.4% and in division 26 Manufacture of computer, electronic and optical products – 29.0%. Products with elements of IoT were produced primarily by entities whose predominant kind of activity was classified in division 26 Manufacture of computer, electronic and optical products (63.4% of the population of entities producing products with elements of IoT).

Chart 11. Structure of entities producing products with embedded systems and Internet of Things by pre-dominant activity of entities in 2024



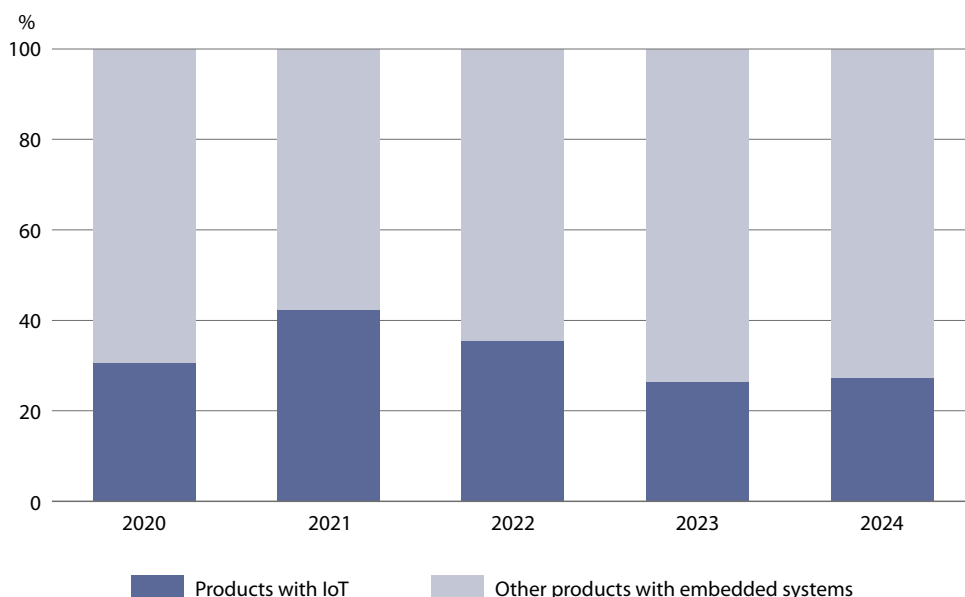
1.7.2. Structure of sold production of products with embedded systems

Over the last 5 years, the sold production of products with embedded systems systematically increased. In 2024, the sold production of products with embedded systems amounted to 42,207.0 million PLN and was higher by 28.8% than in 2023 and by 75.5% than in 2020. For products with elements of IoT the largest increase compared to the previous year in production sold (by 77.2%) was recorded in 2021, and the

largest decrease (by 24.2%) in 2023. In 2024, sold production of products with elements of IoT amounted to 11,594.3 million PLN, and was by 33.5% higher compared to the previous year.

The highest share of the value of sold production of products containing products with elements of IoT in the value of sold production of products with embedded systems was recorded in 2021 – 42.3%. In the entire analyzed period, the share of sold production products with elements of IoT in the sold production of all products with embedded systems decreased from 30.7% in 2020 to 27.5% in 2024.

Chart 12. Sold production of products with embedded systems



In 2020-2024, the highest value of sold production of products containing embedded systems, including products with elements of IoT, was reported by entities with foreign capital. Their share of the value of sold production in 2024 was 68.9% for products with embedded systems and 83.3% for products with elements of IoT. The share of sold production reported by entities with domestic capital in the production of products with embedded systems increased from 27.0% to 30.3% in the analyzed period. Sold production reported by entities with a majority foreign capital in the analyzed period accounted 1.0% in 2020 and 0.8% in 2024.

Table 13. Sold production of products with embedded system and IoT by origin of the company's capital

Specification	2020	2021	2022	2023	2024
	thousand PLN				
Products with embedded systems	24 051 254.3	30 947 213.8	32 252 735.8	32 756 021.7	42 207 020.8
entities with domestic capital	6 482 861.0	6 722 744.4	9 292 929.9	12 330 380.5	12 771 448.4
entities with share of foreign capital	252 456.4	233 365.3	477 657.9	589 435.9	358 624.7
entities with foreign capital	17 315 936.9	23 991 104.1	22 482 148.0	19 836 205.3	29 076 947.7
Products with IoT	7 392 806.7	13 103 091.1	11 464 820.1	8 685 857.1	11 594 265.7
entities with domestic capital	1 428 349.7	1 808 905.8	2 124 357.7	2 184 332.7	1 884 105.4
entities with share of foreign capital	112 606.8	41 746.8	107 394.9	126 813.1	55 805.1
entities with foreign capital	5 851 850.2	11 252 438.5	9 233 067.5	6 374 711.3	9 654 355.2

The sold production of products with embedded systems took place mainly as part of production on own account. In 2024, the value of sold production of products with embedded systems on own account amounted to 41,424.6 million PLN, while the sold production of these products under sub-contracted operations amounted to 782.4 million PLN, which constituted only 1.9% of the total sold production of products with embedded systems. In the case of products with elements of IoT, the value of sold production on own account amounted to 11,437.2 million PLN, while the sold production under sub-contracted operations amounted to 157,0 million PLN, which constituted 0.4% of the total sold production of products with embedded systems. In 2024, the production of products with embedded systems, including products with elements of IoT, was carried out as part of under sub-contracted operations mainly by entities with a predominant kind of activity classified in division 27 Manufacture of electrical equipment.

In the case of production on own account, the largest share in sold production was held by enterprises with a predominant kind of activity classified in division 27 Manufacture of electrical equipment — 30.3% and in division 26 Manufacture of computer, electronic and optical products — 29.3%.

Table 14. Sold production of products with embedded system and IoT in 2024 by predominant activity of entity

PKD	Products containing	Sold production		
		total	on own account	under sub-contracted operations
TOTAL	embedded systems	42 207 020.8	41 424 590.9	782 429.9
	Internet of Things	11 594 265.7	11 437 247.4	157 018.3
division 25	embedded systems	3 645 327.6	3 628 774.1	16 553.5
	Internet of Things	98 386.2	86 620.3	11 765.9
division 26	embedded systems	12 246 486.9	12 154 833.7	91 653.2
	Internet of Things	7 353 350.7	7 320 587.9	32 762.8
division 27	embedded systems	12 826 658.1	12 551 193.3	275 464.8
	Internet of Things	2 627 438.7	2 553 814.7	73 624.0
division 28	embedded systems	3 554 563.5	3 414 392.3	140 171.2
	Internet of Things	1 093 307.2	1 088 886.4	4 420.8
division 29	embedded systems	4 875 716.2	4 773 301.2	102 415.0
	Internet of Things	49 854.4	49 854.4	—
division 30	embedded systems	3 079 703.0	3 079 703.0	—
	Internet of Things	49 970.0	49 970.0	—
division 32	embedded systems	877 680.5	794 952.5	82 728.0
	Internet of Things	36 686.9	36 686.9	—

The highest value of sold production in 2024 for products with embedded systems was recorded for entities with a predominant kind of activity classified in division 27 Production of electrical equipment – 12,826.7 million PLN. Among these entities, the majority were enterprises with foreign capital – 83.7%. Meanwhile, the highest value of sold production of products with elements of IoT was recorded for entities with a predominant kind of activity classified in division 26 Production of computer, electronic and optical products – 7,353.4 million PLN. Similarly to products with embedded systems, the producers of products with elements of IoT were entities with foreign capital (92.3%).

Table 15. Sold production of products with embedded system and IoT in 2024 by predominant activity of entity and origin of capital

PKD	Capital of entity	Sold production of products	
		with embedded systems	products with IoT
		thousand PLN	
TOTAL	total	42 207 020.8	11 594 265.7
	domestic	12 771 448.4	1 884 105.4
	with share of foreign capital	358 624.7	55 805.1
	foreign capital	29 076 947.7	9 654 355.2
division 25	total	3 645 327.6	98 386.2
	domestic	3 470 362.0	91 579.9
	with share of foreign capital	2 358.3	2 358.3
	foreign capital	172 607.3	4 448.0
division 26	total	12 246 486.9	7 353 350.7
	domestic	2 467 880.9	560 241.5
	with share of foreign capital	31 219.8	6 485.0
	foreign capital	9 747 386.2	6 786 624.2
division 27	total	12 826 658.1	2 627 438.7
	domestic	1 895 746.0	412 898.0
	with share of foreign capital	192 192.4	14 091.5
	foreign capital	10 738 719.7	2 200 449.2
division 28	total	3 554 563.5	1 093 307.2
	domestic	2 010 124.8	596 474.5
	with share of foreign capital	109 142.4	29 650.6
	foreign capital	1 435 296.3	467 182.1
division 29	total	4 875 716.2	49 854.4
	domestic	774 367.8	—
	with share of foreign capital	—	—
	foreign capital	4 101 348.4	49 854.4
division 30	total	3 079 703.0	49 970.0
	domestic	1 387 075.0	20 786.0
	with share of foreign capital	—	—
	foreign capital	1 692 628.0	29 184.0
division 32	total	877 680.5	36 686.9
	domestic	97 361.5	16 394.9
	with share of foreign capital	—	—
	foreign capital	780 319.0	20 292.0

Chapter 2. Manufactured production of selected industrial products

2.1. Food and beverages

Food industry products include, among others, meat and meat products, fish and crustaceans, processed fruits and vegetables, oils and fats, both animal and vegetable, dairy products, grain milling products, animal feed and feedstuffs, and alcoholic and non-alcoholic beverages.

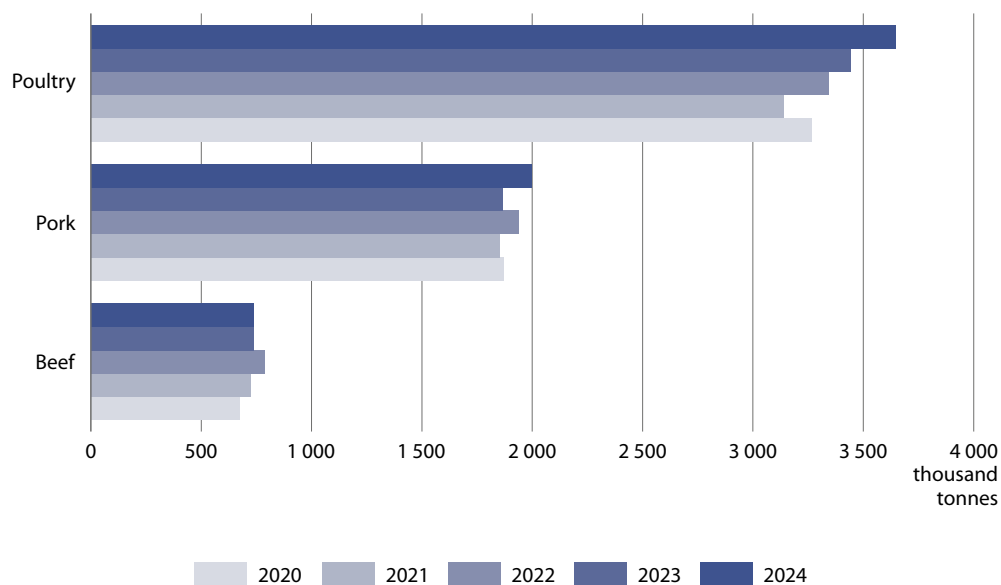
In the 2024 annual survey, statistical observations covered 558 products, and production was reported for 502 products.

Cattle and calf slaughter products in 2024 amounted to 197 thousand tonnes, which means a decrease by 13.6% compared to 2020 and by 5.0% – to 2023. In the case of pig slaughter products, an increase was recorded in the same period – in 2024, production reached 1,410 thousand tonnes, i.e. 23.7% more than in 2020 and 11.4% more than in the previous year. In 2024 beef and veal meat was produced 741 thousand tonnes, which means an increase of 9.6% compared to 2020, but a slight decrease of 0.2% compared to 2023. Pork meat was produced 2,009 thousand tonnes – 6.9% more than in 2020 and 7.1% more than in 2023. The largest production among all types of meat in 2024 was recorded for poultry meat, which remains the dominant segment in the meat sector – in 2024, production amounted to 3,667 thousand tonnes, an increase of 6% compared to 2023 and 11.6% compared to 2020.

In the case of meat products, including cured and canned meats, in the years 2020-2024 the highest production volume was observed in cured meat products and sausages (excluding poultry meats). Production in 2024 amounted to 705 thousand tonnes compared to 2020, it decreased by 4.6% and by 3.7% compared to 2023. Canned beef and veal meat reached 2.6 thousand tonnes in 2024 – 30.2% less than in 2020, but 12.8% more than in the previous year. Canned pork production increased in 2024 to 75.7 thousand tonnes, i.e. by 8.9% compared to 2020 and by 11.7% compared to 2023.

Table 16. Manufactures production of slaughter products and processed meat

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Slaughter products of cattle and calves	1000 t	228	230	217	207	197	86.4	95.0
Slaughter products of pigs	1000 t	1 140	1 359	1 342	1 265	1 410	123.7	111.4
Meat of beef and veal, fresh or chilled	1000 t	676	726	792	742	741	109.6	99.8
Pork meat, fresh or chilled	1000 t	1 880	1 861	1 949	1 875	2 009	106.9	107.1
Cured meat products and sausages (excluding cured poultry meat)	1000 t	739	775	796	732	705	95.4	96.3
Canned beef and veal meat	1000 t	3.8	2.7	3.2	2.3	2.6	69.8	112.8
Canned pig meat	1000 t	69.5	65.4	71.2	67.8	75.7	108.9	111.7

Chart 13. Manufactured production of meat

The production of preserved fruits and vegetables constitutes a significant part of the food industry, specifically food processing, in Poland. In 2024, the largest production was recorded for frozen vegetables, which reached 646,358 tonnes, representing increase by 16.9% compared to 2020 and by 20.3% compared to 2023. 426,632 tonnes of canned vegetables were produced in 2024, representing increase by 6.8% compared to 2020, but decrease by 10.4% compared to 2023.

The production of frozen, cooked, or uncooked fruit and nuts was on a downward trend – in 2024, it amounted to 331,298 tonnes, which is by 15.1% less than in 2020 and by 2.2% less than in the previous year. Strawberries and wild strawberries accounted for the largest production within these products – In 2024 it amounted to 66,169 tonnes, which was by 22.3% lower than in 2020, but increased by 3.9% compared to 2023.

Among other items, an increase compared to the previous year was recorded for frozen currants (by 3.4%), while a decrease was recorded for frozen raspberries (by 15.5%) and frozen cherries (by 9.8%). Compared to 2020, decreases were recorded for raspberries, currants, and cherries by 14.8%, 4.4%, and 12.5%, respectively.

Table 17. Production of preserved vegetables and fruits

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Frozen vegetables	tonnes	552 691	571 736	566 841	537 250	646 358	116.9	120.3
Canned vegetables	tonnes	399 312	452 840	450 317	476 163	426 632	106.8	89.6
Frozen fruit and nuts, cooked or uncooked	tonnes	390 264	378 997	393 639	338 856	331 298	84.9	97.8
of which:								
strawberries and wild strawberries, frozen	tonnes	85 110	73 103	61 536	63 707	66 169	77.7	103.9
raspberries, frozen	tonnes	43 115	47 692	47 142	43 490	36 728	85.2	84.5
currants, frozen	tonnes	60 083	62 017	71 027	55 545	57 439	95.6	103.4
cherries, frozen	tonnes	56 394	59 772	70 366	54 678	49 342	87.5	90.2

In the manufacture of food products production of milk and dairy products plays important role. In the years 2020-2024, milk production in packages up to 2 litres showed a downward trend. For milk with a fat content of up to 1% by weight, it amounted to 194 thousand hectolitres in 2024, representing decrease by 50.1% compared to 2020 and by 18.3% compared to 2023.

In the case of milk with a fat content exceeding 1% but not exceeding 6% by weight, a slight decline was also recorded – in 2024, production reached 17,696 thousand hectolitres, i.e. by 6.4% less than in 2020 and by 1.7% less than in the previous year.

Production increased for milk in packages more than 2 litres. The largest increase was observed for milk with a fat content exceeding 1% but not exceeding 6% by weight – its production in 2024 amounted to 1,787 thousand hectolitres, which was an increase by 95.4% compared to 2020 and by 14.3% compared to 2023. In 2024, 1,789 thousand hectolitres of milk with a fat content of up to 1% by weight was produced, representing increase by 2.0% compared to 2020 and by 8.4% compared to 2023.

In 2024, production of plant-based beverages made from plants such as soy, oats, almonds, and coconut, reached 2,926 hectolitres.

Table 18. Manufactured production of milk

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Milk and cream of a fat content by weight of $\leq 1\%$, in immediate packings of a net content ≤ 2 l	1000 hl	388	324	285	237	194	49.9	81.7
Milk and cream of a fat content by weight of $> 1\%$ but $\leq 6\%$, in immediate packings of a net content ≤ 2 l	1000 hl	18 900	18 358	18 620	18 011	17 696	93.6	98.3
Milk and cream of a fat content by weight of $\leq 1\%$, in immediate packings of a net content > 2 l	1000 hl	1 754	1 486	1 942	1 650	1 789	102.0	108.4
Milk and cream of a fat content by weight of $> 1\%$ but $\leq 6\%$, in immediate packings of a net content > 2 l	1000 hl	914	1 137	1 120	1 564	1 787	195.4	114.3

2.2. Chemicals and chemical products

The group of products of the chemical industry includes basic chemicals, which are the starting point for various industrial processes, as well as chemical products, e.g. artificial fertilizers, pesticides, plastics, paints and varnishes, artificial fibers, cosmetics and detergents. In the Chemicals and chemical products section, 649 products are subject to the study, of which in 2024 production data for 475 products were reported.

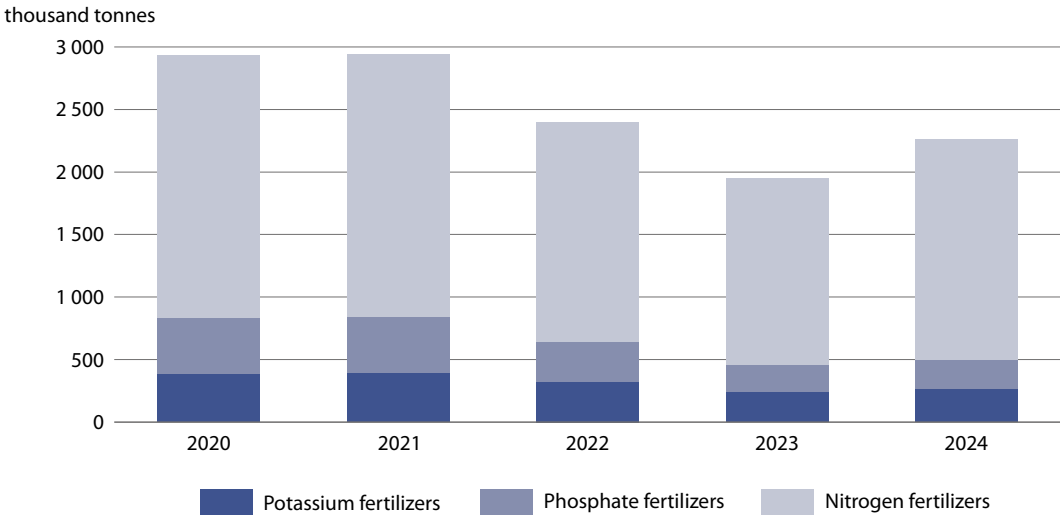
The first group discussed are basic chemicals (technical acids, sodium hydroxide, ammonia), which are the starting point for many different chemical processes. In the years 2020-2024, the highest production was for nitric acid and anhydrous ammonia. In the case of the former, production increased by 18.6% compared to 2023, however, compared to 2020, it decreased by 2.2%. The production of anhydrous ammonia was similar showed a similar pattern – compared to 2023 production increased by 16.8%, and compared to 2020, it decreased by 20.2%. The largest decrease in production was recorded for phosphoric acid both compared to 2020 (by 52.0%) and to 2023 (by 6.9%).

Table 19. Manufactured production of basic chemicals

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Hydrochloric acid	1000 t HCl	44.9	43.7	43.5	41.6	40.3	89.6	96.8
Sulphuric acid	1000 t H ₂ SO ₄	1 800	1 865	1 674	1 381	1 364	75.2	98.0
Phosphoric acid	1000 t P ₂ O ₅	272	272	185	140	130	48.0	93.1
Nitric acid	1000 t HNO ₃	2 413	2 460	2 033	1 988	2 359	97.8	118.6
Anhydrous ammonia	1000 t NH ₃	2 646	2 597	2 106	1 800	2 103	79.5	116.8
Sodium hydroxide	1000 t NaOH	446	435	455	338	353	79.2	104.5

Artificial fertilizers are among the most important products of the chemical industry, their production is directly related to food production. The production of artificial fertilizers in 2020-2021 remained on the similar level, nearly 3 million tonnes (per pure component). In 2022 there was a noticeable decline in their production, what was related to the Russian-Ukrainian war, and in the first place the increase in the prices of the raw material – natural gas. In 2023, this downward trend continued, as gas prices stabilized at high level, and there was an influx of cheap fertilizers from Russia and Belarus into the market, which reduced the profitability of domestic production. In 2024, there has been an increase in their production and 2,262.4 thousand tons of artificial fertilizers were produced, and nitrogen fertilizers dominated among them (1,767.5 thousand tons of pure component). The production of phosphorus and potassium fertilizers was at a similar level – 225.7 thousand tons and 269.2 thousand tons (in terms of pure component), respectively.

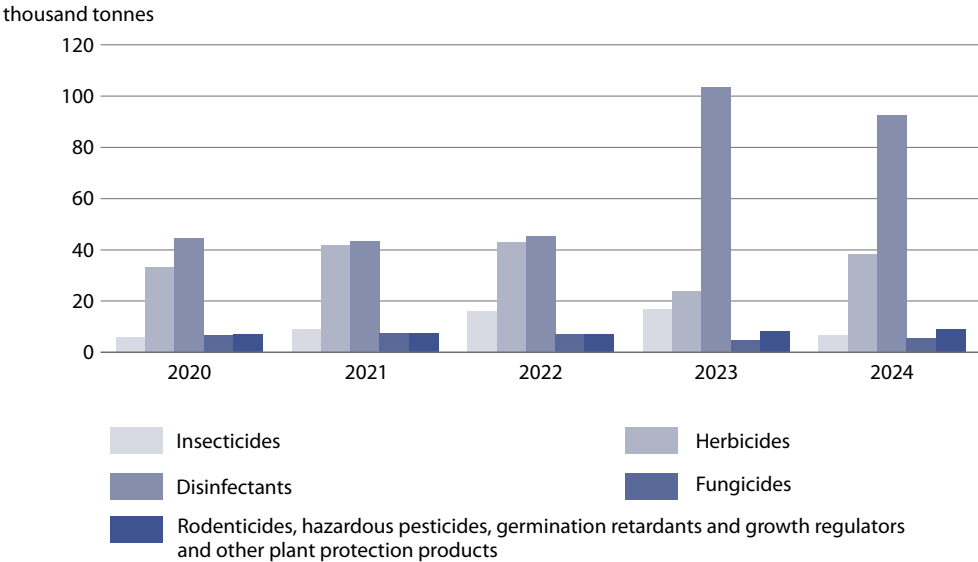
Chart 14. Manufactured production of chemical fertilizers*



*per tonne of pure active ingredient, including compound fertilizers

In the period under review, there was also an increase in pesticide production from 96.8 thousand tonnes in 2020 to 152.3 thousand tonnes in 2024. Its large jump in 2020 resulted from a significant increase in the production of disinfectants (COVID-19 epidemic), which are included in this grouping of products. Another sharp increase in the production of these agents occurred in 2023 due to higher market demand. In 2024, pesticides were dominated by the production of disinfectants, accounting for 60.8% of the total pesticides.

Chart 15. Manufactured production of pesticides

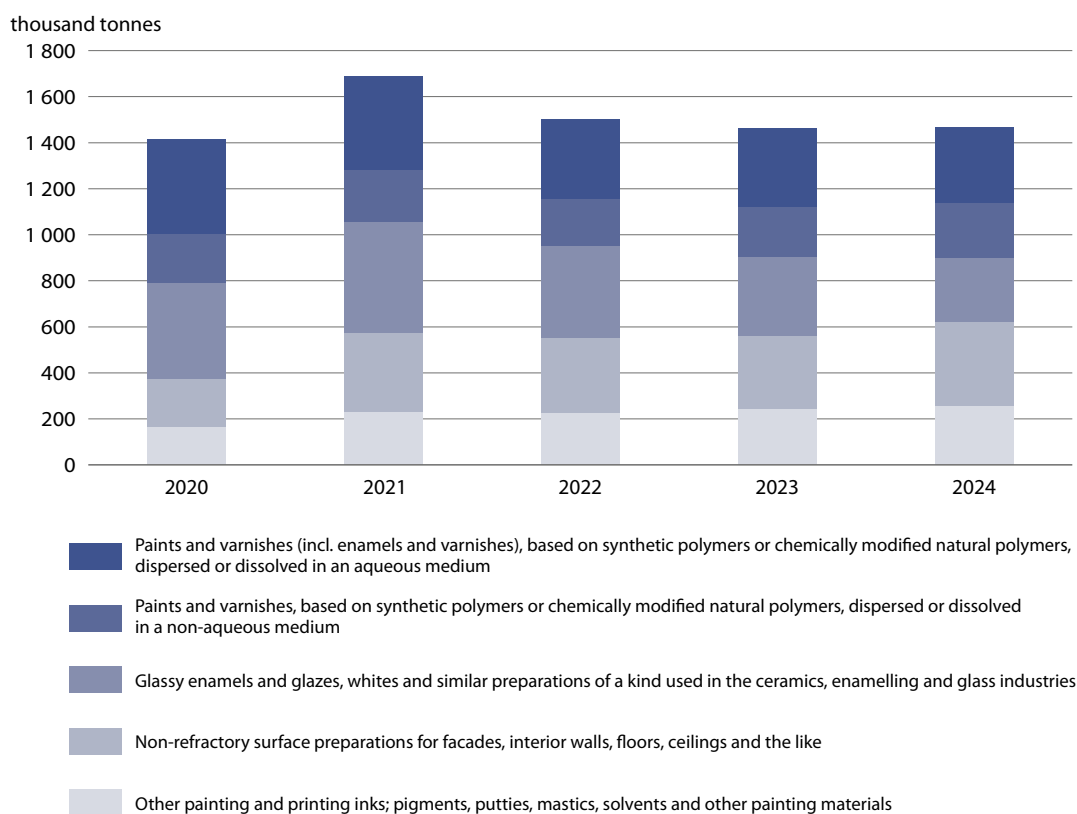


Another important product of the chemical industry is plastics, which are used in all branches of industrial production. Their production in 2023 fell slightly due to high commodity prices (oil and natural gas), but in 2024 it increased again by 12.2%. In 2024, the production of urea resins (19.6% share), polyvinyl chloride (11.1%) and polyethylene and polypropylene (9.4% each) dominated among selected plastics.

Table 20. Manufactured production of selected plastics

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Total plastics	1000 t	3 695	3 692	3 663	3 141	3 525	95.4	112.2
polyethylene	1000 t	348	266	348	290	331	94.9	114.1
polystyrene	1000 t	168	183	170	161	150	89.3	93.2
polyvinyl chloride	1000 t	426	374	432	311	391	91.9	125.7
poly(ethylene terephthalate)	1000 t	222	223	219	223	218	98.1	98.1
polypropylene	1000 t	351	313	334	301	330	94.2	109.9
polyamides	1000 t	202	240	204	158	206	102.2	130.4
urea resins	1000 t	832	854	803	653	690	83.0	105.7
polyurethanes	1000 t	30.7	29.7	29.5	38.7	33.2	108.3	85.8

The production of paints, varnishes and other painting products increased in the period under review until 2021, in 2022 a certain decline was noted down, however, the production volume remained at a very high level. In 2024, the production of paints, varnishes and other painting products amounted to 1,468.4 thousand tons. Among this group of products, the largest number of non-refractory surface preparations for façades, etc., accounted for 24.6% of the production of paints and painting materials in 2024.

Chart 16. Manufactured production of paints and painting materials

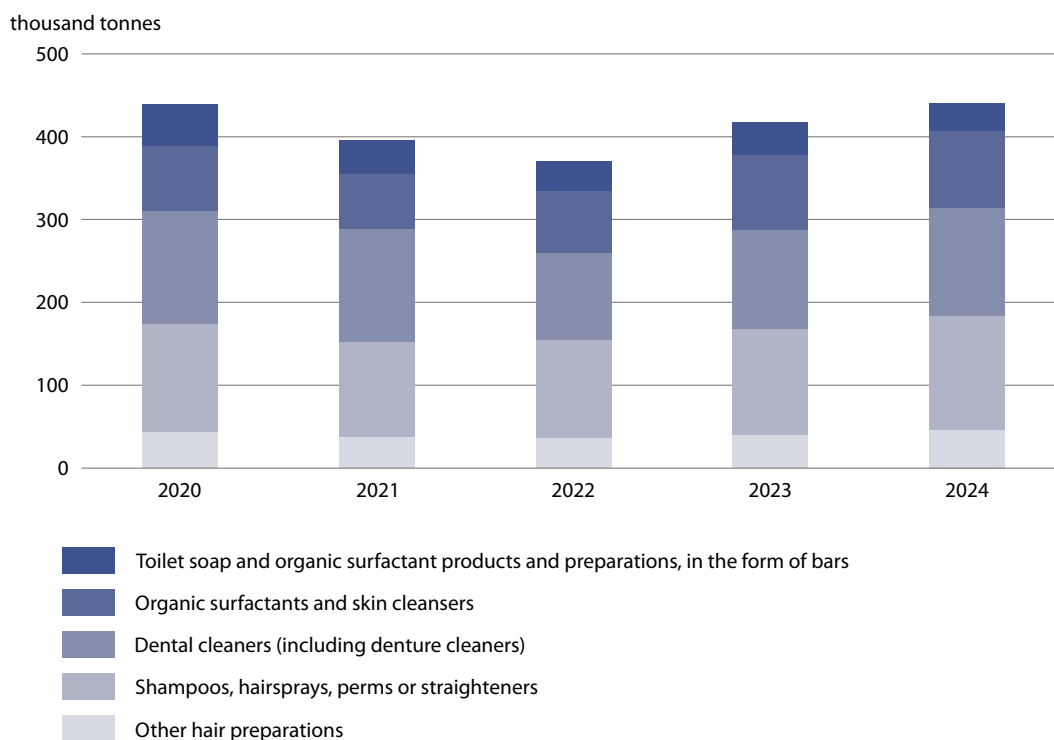
An important position among the products of the chemical industry are everyday products such as soaps, detergents and cleaning products. In the analysed period, soap production increased by 5.6% and in 2024 it amounted to 337 thousand tonnes. Mainly dominated the production of soap in another form, which includes, m.in. liquid soap. The production of detergents and washing preparations increased by 10.9% compared to 2020 and by 8.1% compared to 2023, reaching 1,206 thousand tonnes.

Table 21. Manufactured production of cleaning products

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Soap	1000 t	319	293	318	334	337	105.6	101.1
soap in the form of bars, pieces, etc.	1000 t	28.5	33.4	33.8	33.9	33.7	118.4	99.3
soap in the form of flakes, granules or powders	1000 t	11.7	7.3	19.4	11.9	13.8	117.8	116.1
soap in other forms (pastes, liquids, pieces of paper or cloth saturated with soap, etc.)	1000 t	151	144	155	158	163	108.4	103.0
Detergents and washing preparations	1000 t	1 088	1 080	1 109	1 116	1 206	110.9	108.1

Another important group of products in this section are cosmetics and toiletries. Their production has regained its upward trend after a decline in 2022. In the group, shampoos and hairsprays dominated, accounting for 31.0% of production, their production in 2024 amounted to 137 thousand tonnes and increased by 6.7% compared to 2023.

Chart 17. Manufactured production of selected toiletries



2.3. Rubber and plastic products

Products of the rubber industry and plastic products include, among others: rubber tyres and inner tubes, plastic plates, sheets, pipes and profiles, plastic packagings, plastic products for construction. In the Rubber and plastic products division there were observed 185 products and product groups. In 2024 production data were collected for 182 of them.

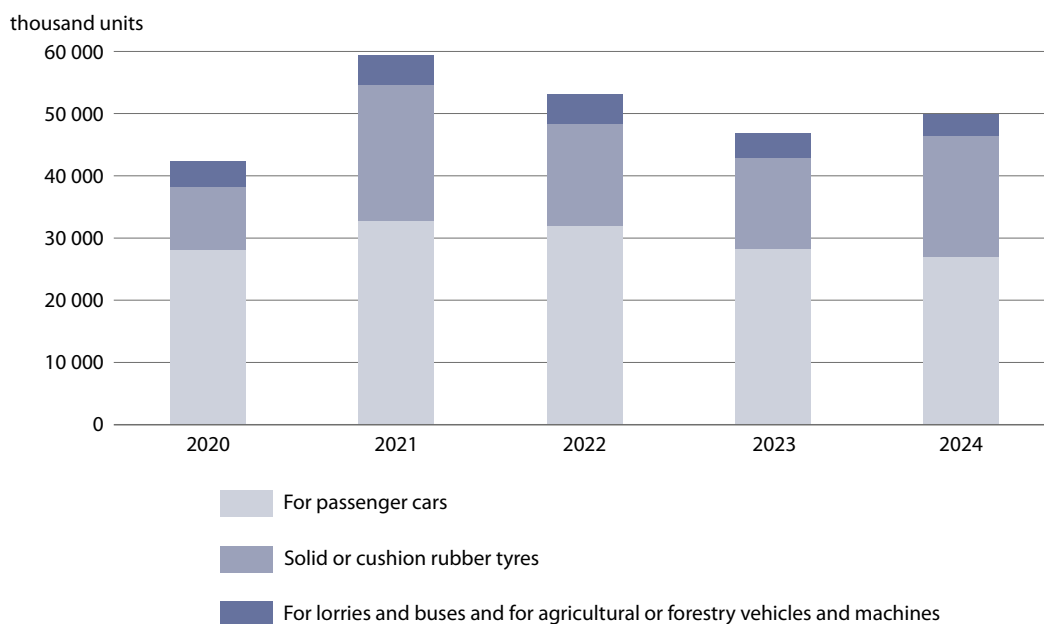
The largest share among rubber products held tyres. In 2021, was recorded a significant increase (by 40.1%) compared to the previous year, but in the following two years, production decreased by 10.7% and by 11.7%, respectively, compared to the previous year. In 2024, compared to the previous year, production increased again by 6.5%, and compared to 2020, the increase was 17.7%.

Table 22. Manufactured production of tyres

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Tyres; excluding bicycle, moped, motorbike and rethreaded tyres	tonnes	482 290	564 289	549 874	475 615	431 422	89.5	90.7
	1000 units	42 424	59 444	53 089	46 900	49 934	117.7	106.5
tyres for passenger cars	tonnes	258 121	301 260	294 239	267 504	254 985	98.8	95.3
	1000 units	28 055	32 676	31 979	28 233	26 946	96.0	95.4

In the total production of tyres in Poland in 2024, the production of tyres for passenger cars accounted for 54.0% and was at the level of 26,946 thousand units. The smallest production volume was for tyres for agricultural vehicles and machinery – 416 thousand units.

Chart 18. Manufactured production of tyres by type



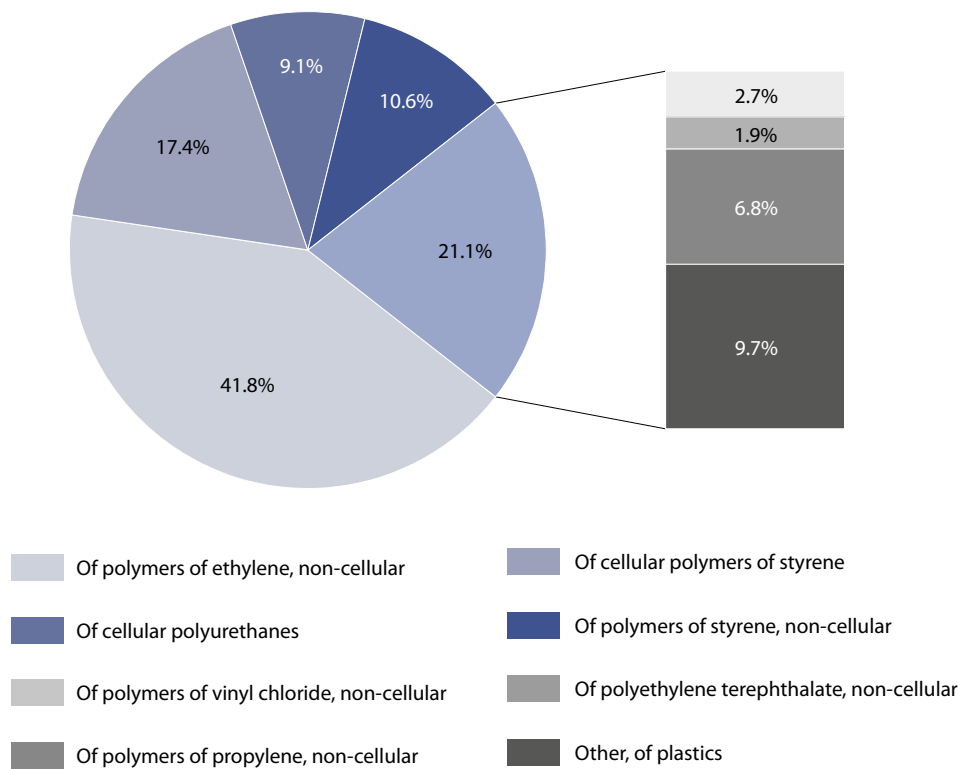
In the group of plastic products, the highest production in 2024 was recorded for plastic plates, sheets, films, foils, tapes and belts (1,813,924 tonnes). The second largest production volume was the production of plastic doors, windows, their frames and thresholds (550,061 tonnes), and the third largest production volume was the production of plastic pipes, cables and hoses (493,705 tonnes).

Plastic boards are used, among others, for: thermal insulation on walls, roofs and floors – mainly polystyrene or polyurethane boards. Polycarbonate plates are used in roof glazing and facades, thanks to their high light transmittance and impact resistance.

In the analysed period, the production of plastics plates, sheets, films, foils and strips initially increased – in 2021 and 2022, it was respectively higher by 3.4% and by 4.0%, compared to the previous year. In 2023, there was recorded a slight decrease in production by 3.9%, compared to the previous year, and in 2024, there was recorded again a decrease by 0.6%. The largest share in this group of product was held by plates, sheets, films, foils, tapes and strips of non-cellular ethylene polymers – 41.8% in 2024.

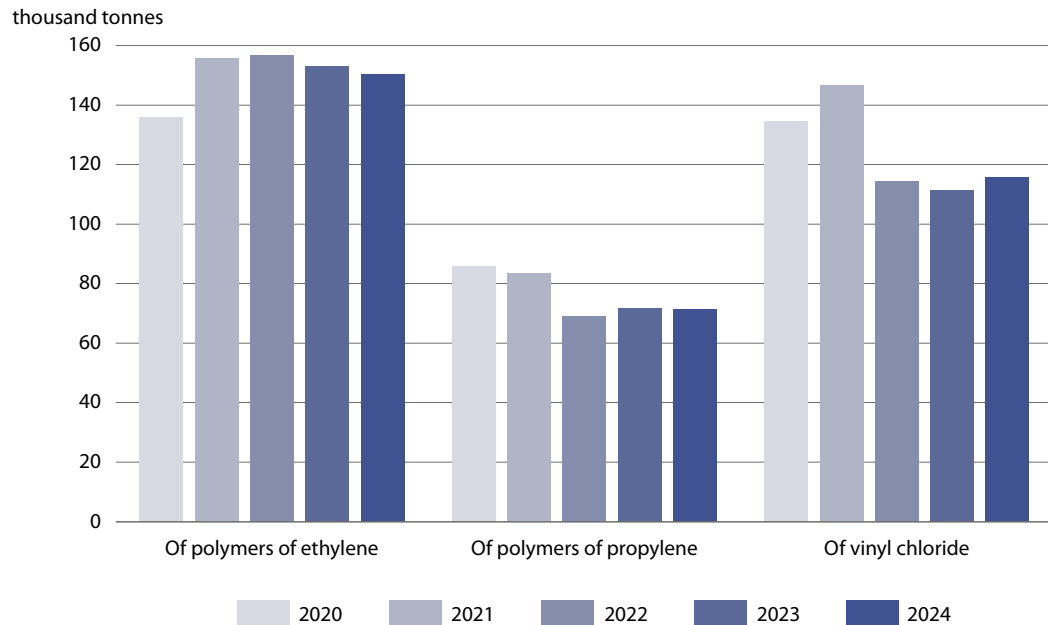
Among the plastic plates, sheets, films, foils, tapes and belts, a significant role have also plates, sheets, films, foils and strip of cellular polyurethanes, the share of which in the total production of plastic plates in 2024 was 9.1% and plates, sheets, films, foils and strips of non-cellular polyethylene terephthalate with a share of 6.8%

Chart 19. Structure of manufactured production of plates, sheets, film, foil and strip by types



Another group of plastic products are pipes. They have wide application mainly in construction. Pipes of polyvinyl chloride or of polyethylene, valued for their strength and flexibility, are used, among others, in water supply and sewage systems due to their corrosion resistance, lightness and ease of installation.

In a group of plastic pipes, tubes and hoses the largest production in 2024 was recorded for pipes, tubes, and hoses of polymers of ethylene – 150,330 tonnes. Compared to the previous year, the production decreased by 1.8%, but compared to 2020, it increased by 10.8%. The second in terms of production volume came pipes, tubes, and hoses of polymers of vinyl chloride. In 2024, the production of pipes, tubes and hoses made of polymers of vinyl chloride reached 115,562 tonnes, which is more by 3.9% than in 2023, but less by 14.2% than in 2020.

Chart 20. Manufactured production of selected plastic pipes

In 2024, the production volume of plastic windows increased reaching 9,934,739 units, in comparison to 2023 it was higher by 15.2% and in comparison to 2020 – by 12.5%.

In 2024, were produced 366,677 of units plastic doors and in comparison to 2020, it was a decrease by 21.9% and in comparison to 2023 – by 3.4%.

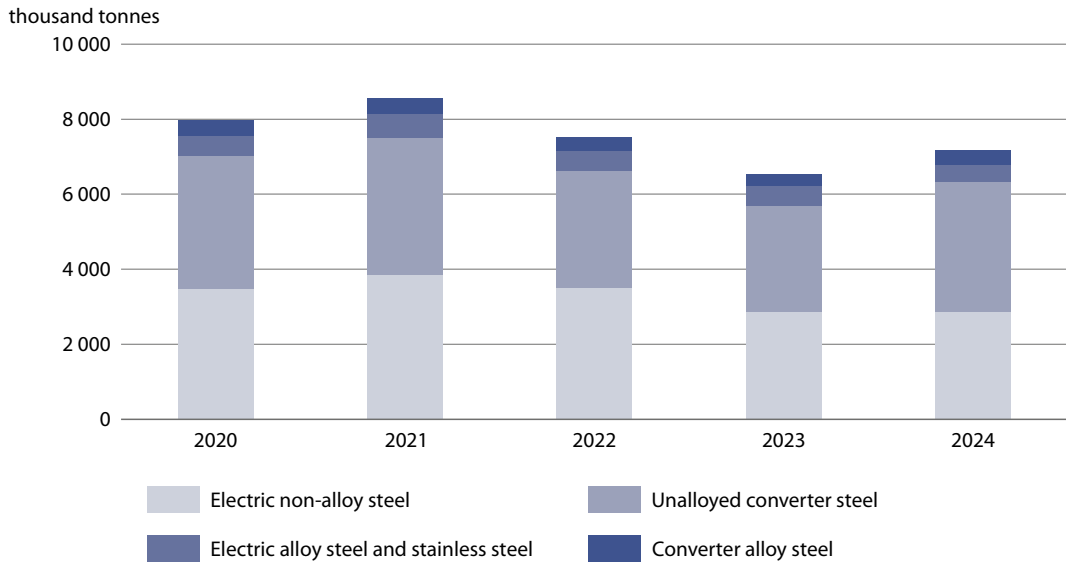
Table 23. Manufactured production of plastic windows and doors for building industry

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Windows	tonnes	483 371	532 535	552 882	498 649	575 972	119.2	115.5
	1000 units	8 830	9 568	9 623	8 621	9 935	112.5	115.2
Doors	tonnes	26 776	27 597	30 468	28 185	27 515	102.8	97.6
	1000 units	453	415	441	367	354	78.1	96.6

2.4. Metal and products of metal

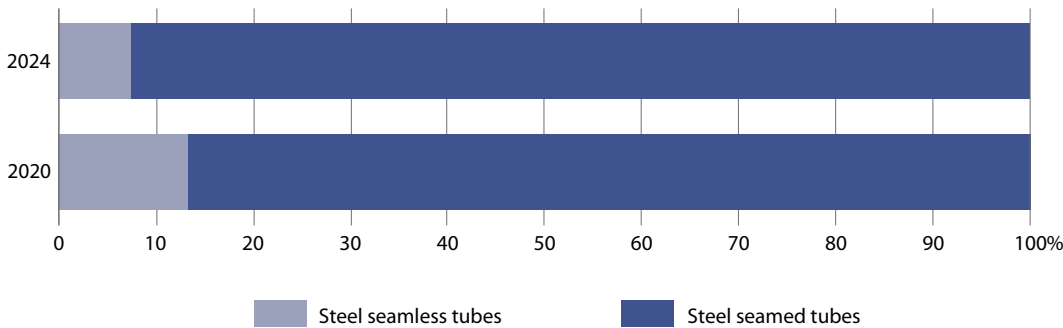
The Basic metals division covers metallurgical products such as steel, steel tubes, steel products, and precious metals. In 2024, statistical monitoring covered 402 products, and production was reported for 303 products.

Chart 21. Manufactured production of crude steel



Crude steel is an alloy composed primarily of iron and carbon, which has high mechanical strength, which translates into its applications in a wide range of steel products used in construction, machinery, automotive, and various steel tools. In 2024, crude steel production amounted to 7,167 thousand tonnes, an increase of 9.9% compared to 2023, which saw the lowest production level in the analysed period (the highest steel production during this period was in 2021 with 8,552 thousand tonnes). The largest production volumes were unalloyed converter steel (share in steel production in 2024 – 48.4%) and electric non-alloy steel (40.2%). In 2024, 2,880 thousand tonnes of electric non-alloy steel were produced, and this was by 17.2% less than in 2020, while unalloyed converter steel – 3,468 thousand tonnes (2.3% less than in 2020). In 2024 there was produced 0.2 thousand tonnes of stainless steel, which is used in the production of, among others, electric kettles, and this was by 83.0% less than in 2020.

Chart 22. Structure of manufactured production of steel tubes



Steel tubes can be divided into steel seamless tubes, used in water, gas, and heating systems, and steel seamed tubes, used in rainwater, sanitary and sewage systems. Domestic production was dominated by steel seamed tubes, whose production in 2024 reached 872 thousand tonnes, a 5.8% increase compared

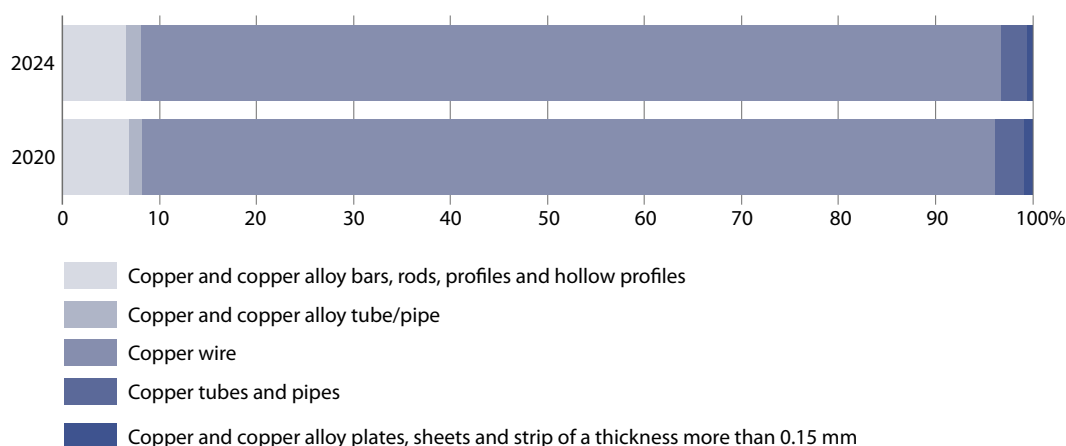
to 2020. Steel seamed tubes accounted for 92.5% of all steel tubes production. The production of seamless tubes in 2024 amounted to 70.7 thousand tonnes and was lower compared to 2020 (by 34.2%).

Table 24. Manufactured production of aluminium plates

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Aluminium plates, sheets and strip, of a thickness > 0,2 mm	tonnes	184 434	197 222	171 750	96 353	124 149	67,3	128,8

One of the most important non-ferrous metal products produced during the period under review were aluminium plates, which are primarily used in the production of fuel-efficient motor vehicles and lightweight, durable construction structures. In 2024, the production of aluminum plates amounted to 124 thousand tonnes, which was by 28.8% higher compared to the previous year, but decreased by 32.7% compared to 2020.

Chart 23. Structure of manufactured production of copper products



In the production of copper products, copper wire, widely used in electricity and electronics due to its high electrical conductivity, predominates. Copper flat bars, plates, tubes, and copper and copper alloy tube/pipe are used in construction as high-quality construction materials. In 2024, copper wire production accounted for 89.0% of the production of analysed copper products, reaching 328 thousand tonnes. Copper and copper alloy bars, rods, profiles and hollow profiles production accounted for 6.6% of copper products in 2024, copper tubes – for 2.6%, and copper plates used as the most corrosion-resistant roofing material for roofing – for 0.6%. During the period under review, copper product production increased by 9.3% compared to 2020.

In the division Fabricated metal products, except machinery and equipment, 357 products and product groups were observed, and in 2024 there were shown data on production for 315 groupings.

Among metal products, an important group of products are metal structures and their elements, like prefabricated buildings; bridges and bridge-sections; towers and lattice masts; equipment for scaffolding, shuttering, propping/pit-propping; cylindrical structures, elements made of profiled or flat sheet; maritime and waterway structures like weirs, sluices, lock-gates, landing stages, fixed docks, the production of which in 2024 amounted to 2,796,726 tonnes and compared to the previous year, there was a decrease by 2.4% (by 2.2% to 2020).

Table 25. Manufactured production of metal construction

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Prefabricated buildings (including modular building units), of iron or steel	tonnes	119 313	147 408	178 137	174 872	154 617	129.6	88.4
Prefabricated buildings, of aluminium	tonnes	4 375	5 494	5 371	6 112	5 086	116.3	83.2
Iron or steel bridges and bridge-sections	tonnes	65 257	86 120	80 244	62 915	61 076	93.6	97.1
Iron or steel towers and lattice masts	tonnes	141 545	165 834	173 945	174 044	163 477	115.5	93.9
Iron or steel equipment for scaffolding, shuttering, propping/pit-propping including pit head frames and superstructures, extensible coffering beams, tubular scaffolding and similar equipment	tonnes	497 361	531 874	533 094	452 497	431 675	86.8	95.4
Other structures principally of sheet such as cylindrical steel structures, construction elements made of profiled or flat sheet metal	tonnes	544 091	623 828	675 231	644 524	656 671	120.7	101.9
Structures and parts of structures of iron or steel, n.e.c.; Weirs, sluices, lock-gates, landing stages, fixed docks and other maritime and waterway structures, of iron or steel	tonnes	1433 722	1558 156	1590 204	1307 428	1260 859	87.9	96.4
Aluminium structure and parts of structures, n.e.c.	tonnes	54 623	68 939	52 017	42 549	63 265	115.8	148.7

Another large representation of metal products are other fabricated metal products, which are represented by a very wide range of products, including household, table and kitchen ware; safes and cash registers, as well as doors and deposit cabinets for strongrooms; cast, forged or turned products; pallets and similar platforms for handling goods; other articles of iron, steel or other metal used in the construction industry (other than windows and doors).

The largest group in other metal products are widely understood cast iron or steel articles, the production of which in 2024 amounted to 256,273 tonnes and in analysed period decreased by 13.5%. The second largest group consists of other aluminium products, among which aluminium alloy castings accounted for 72.3% of the total production of these products. In 2024 were produced 89,739 tonnes of aluminium alloy castings and compared to the previous year it was a decrease by 13.0%. The third largest production volume was the production of articles of non-malleable cast iron, of which 83,984 tonnes were produced in 2024 and in comparison to the previous year there was noted a decrease by 6.3% and to 2020 – by 13.4%.

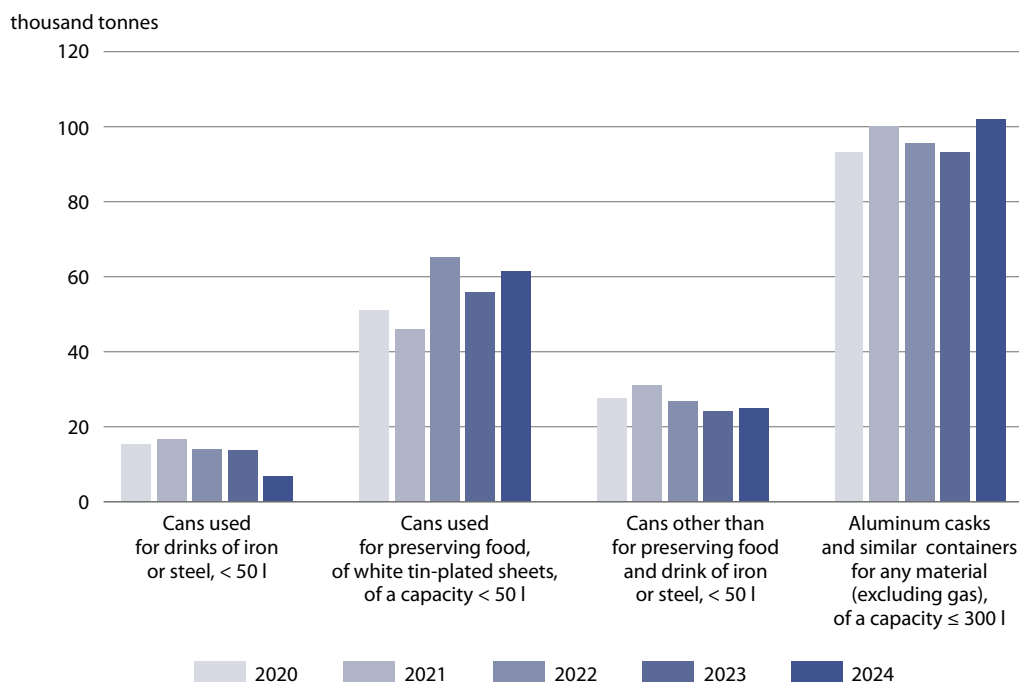
Table 26. Manufactured production of selected fabricated metal products

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Table, kitchen or household articles and parts thereof, of iron, steel, copper or aluminium	tonnes	19 396	24 453	20 696	19 145	19 869	102.4	103.8
Armoured or reinforced safes, strongboxes and doors and safe deposit lockers for strongrooms, of base metal	tonnes	17 990	18 402	27 406	29 906	29 406	163.5	98.3

Table 26. Manufactured production of selected fabricated metal products (cont.)

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Articles of non-malleable cast iron, n.e.c.	tonnes	96 981	101 392	92 757	89 663	83 984	86.6	93.7
Cast articles of iron or steel other than non-malleable, n.e.c. e.g. grinding balls and similar articles for mills	tonnes	50 932	42 730	45 026	40 211	55 831	109.6	138.8
Forged or stamped articles of iron or steel, n.e.c. e.g. grinding balls and similar articles for mills	tonnes	63 885	70 638	76 539	78 295	75 030	117.4	95.8
Iron or steel pallets and similar platforms for handling goods	tonnes	47 013	51 599	53 349	51 952	40 997	87.2	78.9
Iron or steel non-mechanical ventilators, guttering, hooks and similar articles used in the building industry	tonnes	22 711	24 810	19 581	33 171	28 012	123.3	84.4
Articles of iron or steel, n.e.c.	tonnes	296 292	318 563	325 671	268 078	256 273	86.5	93.9
Articles of aluminium, n.e.c. (e.g. covers for building installations, radiators, installation ducts, control traps, gutters, blinds with adjustable slats)	tonnes	108 478	125 191	131 049	136 657	124 115	114.4	90.8
aluminium alloy castings	tonnes	87 549	98 520	101 360	103 181	89 739	102,5	87,0

A slightly smaller group of metal products are packaging with a capacity of not exceeding 300 litres. In this group of product, the largest production was recorded for aluminium casks and similar containers for any material (excluding gas), which in 2024 reached 102 thousand tonnes. In 2024, were produced 61,490 tonnes of food cans of iron or steel, which was higher by 10.2% than in the previous year and by 20.3% than in 2020. The production of cans other than food cans, of iron or steel, with a capacity not exceeding 50 litres, reached 24,751 tonnes in 2024 and, despite a slight increase by 1.8% compared to the previous year, in the analysed period decreased by 10.7%.

Chart 24. Manufactured production of metal packings

Another group of metal products includes wire products, chains, and springs. The majority of this group of products consists of wire products such as grilles, mesh, fencing, and wire screens; nails and similar articles; strands, cables, plaited bands, and similar articles of metal, not electrically insulated; wires, rods, pipes, plates, electrodes coated or cored with flux; barbed wire and similar. In 2024, there were produced 583,234 tonnes of wire products, chains, and springs and compared to the previous year there was noted a decrease by 8.4% and to 2020 – by 3.9%.

In the analysed period, the highest production among wire products was recorded for welded grill, netting, fencing and expanded metal. In 2024 there were produced 196,345 tonnes of welded grill, netting, fencing and expanded metal, and compared to 2020 there was a decrease in production by 16.5%. The second group in terms of production volume in the group of wire products are springs and leaves for springs, of iron, steel or copper – in 2024 there were produced 105,962 tonnes of springs and leaves for springs and compared to 2020, there was an increase by 12.4%.

Table 27. Manufactured production of wire products, chain and springs

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Conductors not electrically insulated of steel, copper or aluminium used for the flow of electricity	tonnes	47 311	54 210	61 417	62 481	54 963	116.2	88.0
Wire mesh, fencing and grille	tonnes	235 111	270 723	254 768	219 554	196 345	83.5	89.4
Nails, tacks, drawing pins, corrugated nails, staples and similar articles of iron, steel, copper, aluminium	tonnes	121 324	131 115	123 686	88 341	90 959	75.0	103.0
Wire, rods, tubes, plates, electrodes, coated or cored with flux material	tonnes	29 090	27 590	25 689	27 380	28 947	99.5	105.7
Springs and leaves for springs, of iron, steel or copper	tonnes	94 236	109 492	103 297	105 794	105 962	112.4	100.2
Chain (except articulated link chain) and parts thereof	tonnes	9 502	9 330	10 946	10 208	9 327	98.2	91.4

2.5. Electrical equipment

The division with a significant share in industrial production is the Electrical equipment division, which includes, among others, electric motors, generators, transformers and electricity distribution and control apparatus, batteries and accumulators, insulated wires and conductors, as well as wiring devices, electric lighting equipment and household appliances. In the annual survey for 2024, 309 products were observed in this division, and manufactured production was reported for 269 products.

In Electrical equipment division the two most important classes are Batteries and accumulators and Electric household appliances.

During the analysed period, in the Batteries and accumulators class, there was a decline in battery production compared to 2020 (by 27.9%) as well as to 2023 (by 7.8%). The largest share in accumulators production was held by nickel-cadmium, nickel metal hydride, lithium-ion, lithium polymer, nickel-iron accumulators and other electric accumulators, of which lithium-ion accumulators accounted for 68.5% of production in 2024, decreasing by 8.0 p. p. compared to 2020. Lithium-ion accumulators are an essential component of modern technology, used in consumer electronics (e.g., laptops), the energy sector (e.g., UPS systems), as well as in industry (robotics) and electric vehicles.

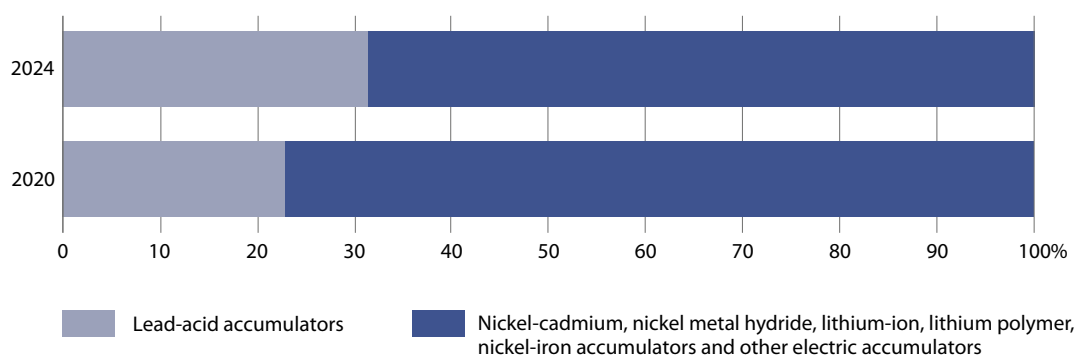
Table 28. Manufactured production of accumulators

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Accumulators ^a	1000 units	29 239	32 708	27 235	22 843	21 071	72.1	92.2
nickel-cadmium, nickel metal hydride, lithium-ion, lithium polymer, nickel-iron accumulators and other electric accumulators	1000 units	22 531	24 840	21 038	15 830	14 443	64.1	91.2
lithium-ion accumulators (excluding used ones)	1000 units	22 373	24 836	21 034	15 827	14 439	64.5	91.2

^a Includes also lead-acid accumulators

The second group of accumulators, aside from nickel-cadmium, nickel metal hydride, lithium-ion, lithium polymer, nickel-iron accumulators and other electric accumulators, are lead-acid accumulators, accounting for 31.5% of production (2024 – 6,627,419 units), which represents an increase of 8.5 p.p. compared to 2020. However, the production of lead-acid accumulators during the period under review decreased by 1.2% and 5.5% compared to 2020 and 2023, respectively.

Chart 25. Structure of manufactured production of accumulators



In the class of Electric household appliances, a decline in production can be observed in comparison to 2020 for most of the major household appliances – the production decrease both up to 2020 and 2023 occurred for, among others: domestic food grinders, mixers and fruit or vegetable juice extractors, with a self-contained electric motor (by 87.5% and 6.5%, respectively), domestic electric hobs for building-in (by 48.0% and 14.9%), domestic electric cookers with at least an oven and a hob (including combined gas-electric appliances) (by 37.9% and 3.3%), and combined refrigerators-freezers, with separate external doors or drawers, or combinations thereof (by 24.9% and 18.0%). Among household appliances, production growth both in comparison to 2020 and to 2024 occurred for, among others: dishwashers (by 1.9% and 5.4%, respectively), household-type automatic cloth drying machines with a single-load capacity not exceeding 10 kg of dry laundry (by 1.7% and 31.1%). Additionally, a decline in production compared to 2020, but an increase compared to 2023, was noted for: domestic electric ovens for building-in (by 16.9% and by 5.5%), household-type automatic washing machines (by 10.9% and by 4.7%), and vacuum cleaners with a self-contained electric motor (by 10.1% and by 13.3%).

Table 29. Manufactured production of selected household appliances

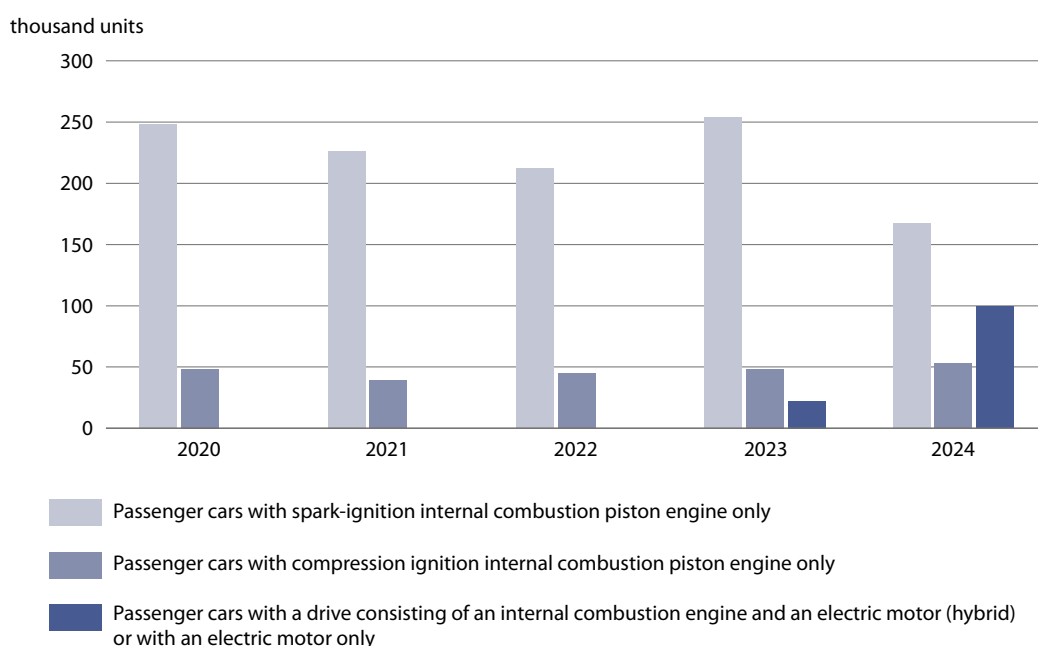
Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Refrigerators and freezers, including combined refrigerators-freezers	1000 units	3 519	3 943	3 508	3 452	2 888	82.1	83.7
combined refrigerators-freezers, with separate external doors or drawers, or combinations thereof	1000 units	3 118	3 441	2 997	2 857	2 342	75.1	82.0
Dishwashing machines	1000 units	4 944	5 886	5 581	4 782	5 038	101.9	105.4
Domestic washing and drying machines	1000 units	10 012	10 912	9 367	8 277	9 327	93.2	112.7
automatic washing machines (including machines which both wash and dry)	1000 units	6 773	7 013	6 329	5 763	6 032	89.1	104.7
Domestic electric ovens for building-in	1000 units	3 066	3 787	2 812	2 415	2 549	83.1	105.5

2.6. Transport equipment

Transport equipment include two divisions of PKWU: Motor vehicles, trailers and semi-trailers and Production of other transport equipment. In 2024, 232 products from these divisions were subject to statistical observation, of which production data were reported for 154 products.

One of the most important types of transport produced in Poland are passenger cars. In 2023, the downward trend in their production that has persisted since the COVID-19 epidemic was overcome, when production increased by 17.7% compared to the previous year. In 2024, there was another decline in the production of passenger cars powered solely by an internal combustion engine (by 22.0%). In 2024, 97,808 all-electric passenger cars and 1,433 hybrid cars were produced, with power drive consisting of an internal combustion piston engine and an electric motor.

Chart 26. Production of passenger cars with different types of motor

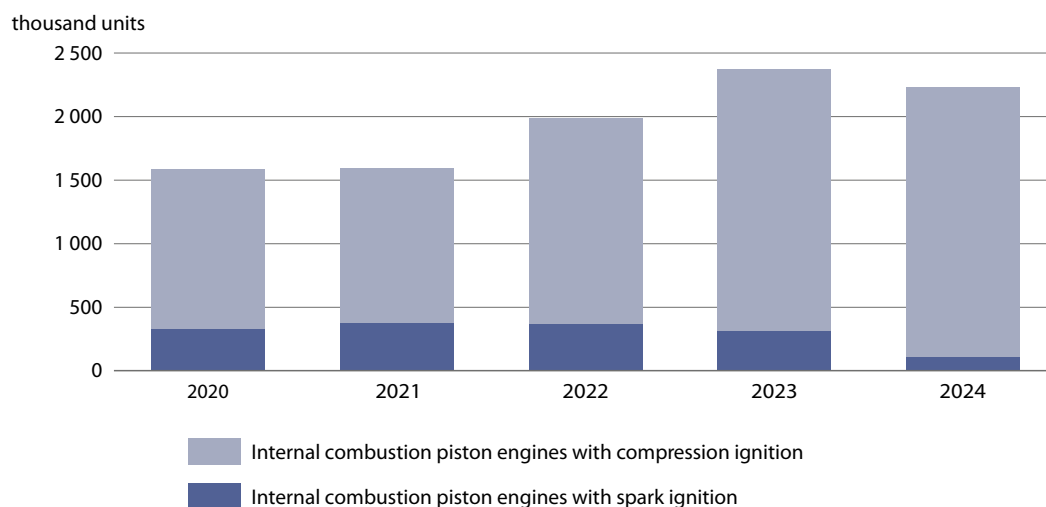


In the analysed period the production of trucks doubled compared to 2020 and by 12.1% compared to 2023. In 2024, production of road tractors increased to the highest level in 2023 (28.4 thousand units) in 2023 but in 2024 it significantly decreased (by 32.3%).

Table 30. Manufactured production of trucks, road tractors and trailers

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Trucks and lorries	unit	155 893	154 043	203 586	279 151	312 928	200.7	112.1
Road tractors for semi-trailers	unit	9 261	16 997	19 592	28 422	19 115	206.4	67.3
Trailers and semi-trailers	unit	61 619	82 781	69 410	64 070	56 397	91.5	88.0

In 2024, compared to the previous year, there was a decrease in the production of automotive internal combustion engines. It was mainly related to a decrease in the production of spark-ignition engines (by 64.2%). For compression-ignition engines (diesel engines), on the other hand, there was a slight increase of 2.9%.

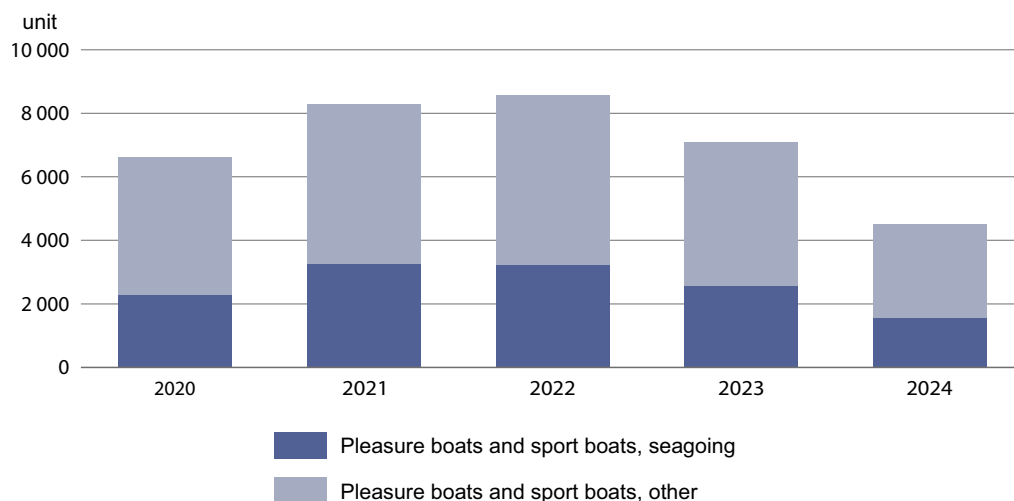
Chart 27. Manufactured production of internal combustion engines for motor vehicles

In 2024, the production of motor vehicles for the transport of 10 or more people, i.e. buses, decreased. A decrease was recorded for all their categories, with the exception of buses with electric drive and with a spark-ignition internal combustion engine with a capacity of over 2,800 cm³. For the first time in the period under review, the production of buses with an internal combustion engine with a combustion engine (diesel engine) with a capacity of no more than 2,500 cm³ was reported, which in 2024 amounted to 534 units.

Table 31. Manufactured production of motor vehicles for the transport of 10 or more persons (buses)

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Motor vehicles for the transport of 10 or more persons (buses)	unit	6 037	5 250	5 089	5 229	4 263	70.6	81.5
buses with diesel engine of a cylinder capacity not more than 2500 cm ³	unit	—	—	—	—	534	—	—
buses with diesel engine of a cylinder capacity more than 2500 cm ³	unit	2 006	1 252	1 310	969	469	23.4	48.4
buses with a spark-ignition engine of cylinder capacity not more than 2800 cm ³	unit	—	18	25	97	137	—	141.2
buses with a spark-ignition engine of cylinder capacity more than 2800 cm ³	unit	2 727	3 213	2 611	1 922	1 330	48.8	69.2
hybrid electric buses (electric motor + internal combustion engine)	unit	717	252	514	1 103	669	93.3	60.7
buses with electric motor drawing energy from on-vehicle battery	unit	457	396	491	738	802	175.5	108.7
buses with electric motor drawing energy from overhead contact line (trolley buses)	unit	130	119	72	203	179	137.7	88.2

Production of leisure and sports boats in 2024 decreased, continuing the downward trend initiated in 2023. In the analysed period, the production of seagoing boats dominated, of which 2,938 units were produced in 2024

Chart 28. Production of boats for pleasure or sport

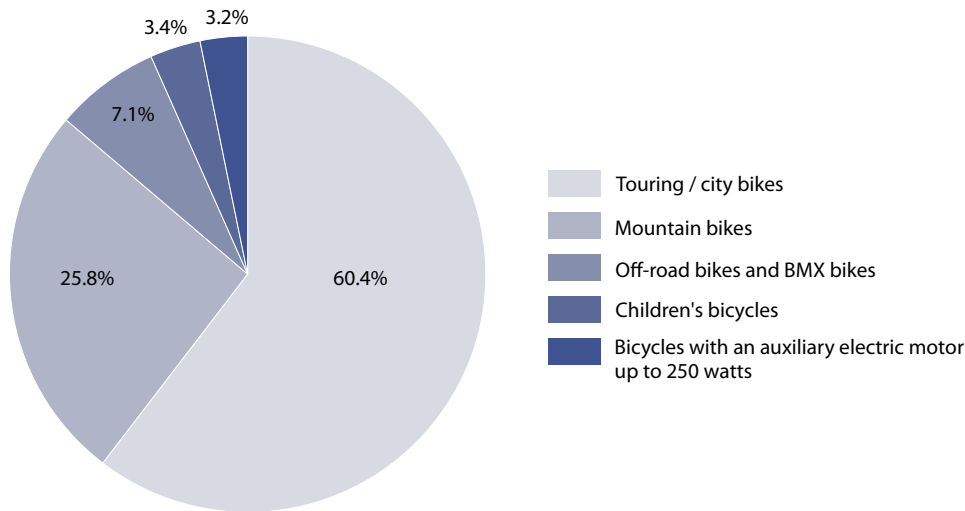
The production of combined multiple units classified as self-propelled passenger cars decreased in 2024 compared to 2023 (by 19.9%), as did the production of freight cars (by 26.9%). On the other hand, the production of locomotives increased (by 73.6%).

Table 32. Production of railroad rolling stock

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Electric locomotives	unit	61	23	12	53	92	150.8	173.6
Passenger cars, freight or transport wagons, railway or tramway, self-propelled	unit	616	652	675	709	568	92.2	80.1
Railway or tram passenger coaches, not self-propelled	unit	365	525	506	452	290	79.5	64.2
Railway or tram freight wagons, not self-propelled	unit	1 884	1 683	2 275	2 858	2 089	110.9	73.1

Bicycle production in 2024 remained at a level similar to the previous year (1,075 thousand, an increase by 0.8%). Most of the bicycles produced are touring/city bikes (60.4% of all the bicycles), but their production decreased by 8.6% compared to 2023 and by 21.3% to 2020, as did the production of children's bicycles (by 31.4% to 2023). On the other hand, an increase compared to 2023 was recorded in the production of mountain bikes (by 30.0%), off-road/BMX bikes (by 16.8%) and bicycles with an auxiliary electric motor (by 16.6%, in 2024 the production amounted to 30,293 units).

Chart 29. Structure of production of bicycles



2.7. Other products

2.7.1. Energy raw materials

Energy products are products intended for heating or driving purposes. These include primarily hard coal lignite, coke, pellets, gasoline, heating and diesel oils. Energy products may also include vegetable oils, aliphatic and cyclic hydrocarbons, alcohols, organic surfactants, anti-knock agents intended for use, offered for sale or used as heating fuels or as additives or admixtures for heating fuels.

Table 33. Manufactured production of selected energy raw materials

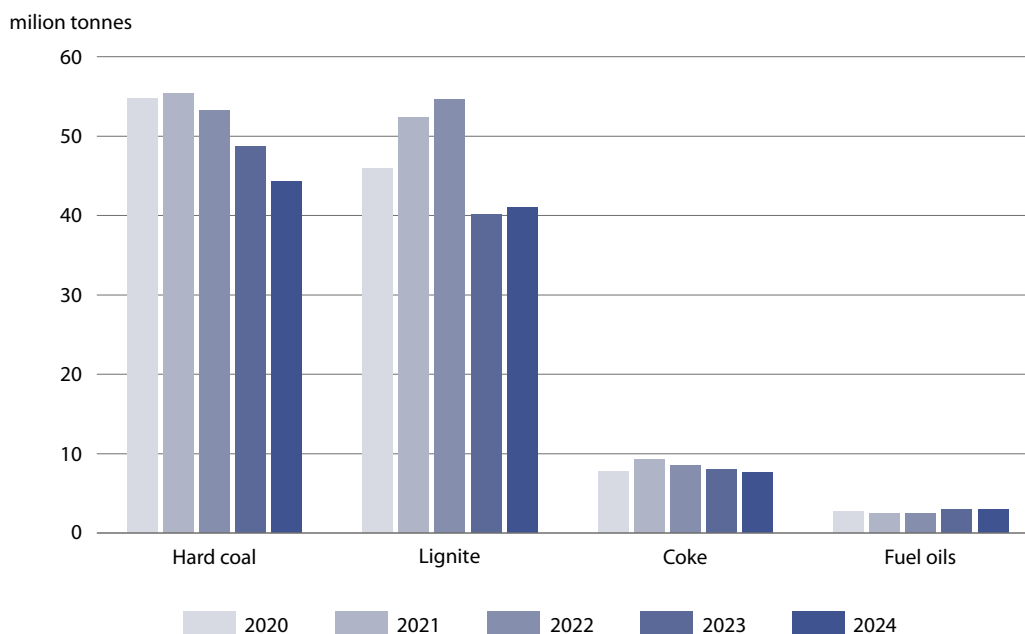
Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Oils from crude oil	tonnes	937 462	888 082	854 050	825 880	802 945	85.7	97.2
Natural gas	hm ³	5 302	5 274	5 172	5 280	5 140	96.9	97.3
	PJ	157	155	152	147	144	91.7	98.0

Hard coal is a key energy resource. In the analysed period, a decline in hard coal extraction was observed, and a slight increase in production compared to the previous year occurred only in 2021 (by 1.1%). In 2024, hard coal extraction reached 44,305 thousand tonnes, which constituted a decline by 9.0% compared to 2023 and by 19.1% compared to 2020.

Lignite is another important energy resource, next to hard coal. Lignite extraction has fluctuated over the last 5 years, reaching the highest level in 2022 (54,621 thousand tonnes). In 2024, lignite extraction reached 41,026 thousand tonnes, which resulted in an increase by 2.3% compared to the previous year, while compared to 2020, a decrease in production was recorded (by 10.8%).

Another important energy product is coke. In Poland, there is mainly produced ordinary and stabilized blast furnace coke, used in the steel industry for iron smelting. It is also used as a high-quality fuel for firing heating boilers (both in boiler rooms, workshops and individual farms) and in metal foundries. In the analysed period, the coke production systematically decreased, except for 2021 when production increased by 19.3% compared to the previous year. In 2024, coke production amounted to 7,625,028 tonnes and compared to the previous year it was lower by 4.7%, and compared to 2020 – by 2.1%.

In the group of energy products resulting from the refining of crude oil intended for use as heating products, there are distinguished heating oils, the production of which in 2024 amounted to 2,911,768 tonnes.

Chart 30. Manufactured production of fuel products

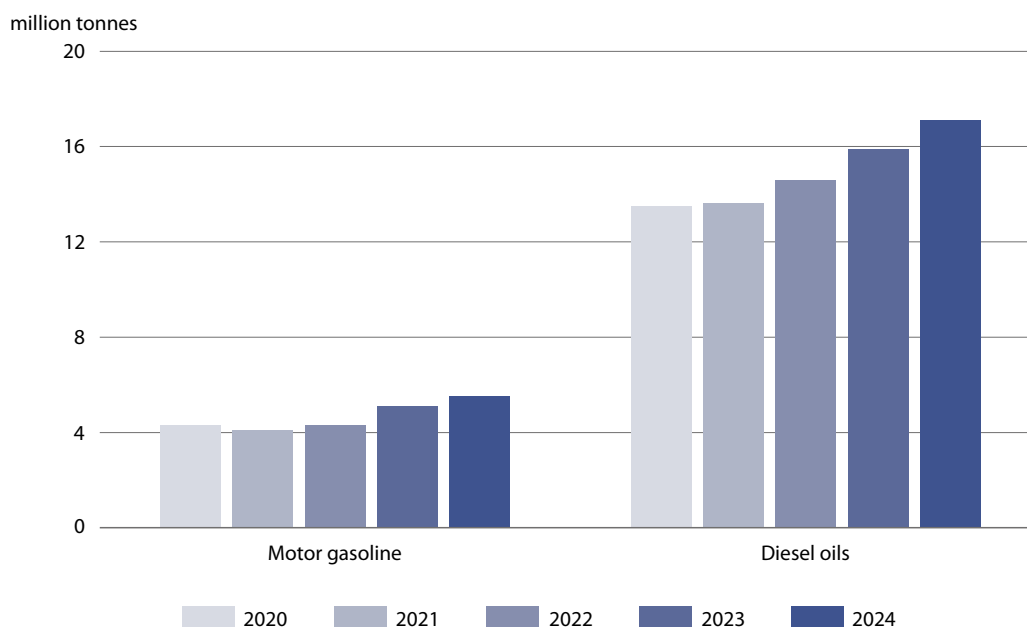
Among fossil fuels the production of oils from crude oil plays a significant role in industry, however, since 2020, a systematic decline in its production in Poland has been observed – in 2024, the production of oils from crude oil amounted to 803 thousand tonnes and was lower both compared to 2023 (by 2.8%) and to 2020 (by 14.3%).

Natural gas also plays a significant role among energy resources. In the analysed period, a decline in natural gas production was observed, with a slight increase in production compared to the previous year occurring only in 2023 (by 2.1%). In 2024, production reached 5,140 hm³, which represented a decrease by 2.7% compared to 2023 and by 3.1% in relation to 2020.

In the group of energy products resulting from the refining of crude oil intended for use in motor vehicles, there are distinguished diesel fuel and gasoline. In 2024, significant production was recorded for diesel fuel – 17,141,561 tonnes. Motor gasoline production in 2024 amounted to 5,508,062 tonnes.

The production of diesel fuel increased throughout the analysed period, in 2024, it increased by 7.6% compared to the previous year, and by 27.1% compared to 2020.

In the analysed period, motor gasoline production also steadily increased, with the exception of 2021, when production declined by 4.0% compared to the previous year. In 2024, the amount of gasoline produced was higher by 7.9% compared to the previous year and compared to 2020 – higher by 27.7%.

Chart 31. Manufactured production of fuels for vehicles**2.7.2. Products made of non-metallic mineral products**

Products made of non-metallic mineral products include, among others: glass products, refractory products, ceramic building materials, porcelain and ceramic products, cement, lime and gypsum products, concrete products for construction purposes and abrasive products.

In construction, the most commonly used building material is float glass and surface ground or polished glass, in sheets, but not otherwise worked. In 2020-2024, a decrease in the production of this product was recorded only in 2023 (by 6.4%). In 2024, production amounted to 172,568 thousand m² and was higher in relation to both 2023 and 2020 (by 3.6% and 4.1%, respectively).

Table 34. Manufactured production of selected building materials used in construction

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Float glass and surface ground or polished glass	1000 m ²	165 726	177 063	177 964	166 495	172 568	104.1	103.6
Ceramic tiles and flags	1000 m ²	116 130	122 737	109 558	97 155	94 174	81.1	96.9
Cement	1000 t	19 049	19 625	19 055	16 785	18 013	94.6	107.3
Ready-mixed concrete	1000 t	51 690	55 056	56 960	50 906	56 032	108.4	110.1
Products of heat insulating of mineral wools	tonnes	619 950	767 444	714 339	510 520	502 067	80.9	98.3

Ceramic tiles and flags are also a widely used product in the construction industry, but over the last five years, tile production increased only in 2021 (by 5.7%). In 2024, production reached 94,174 thousand m², what constituted a decrease by 3.1% compared to 2023 and by 18.9% compared to 2020.

Cement is also an important product and one of the basic building material. In 2020-2024, cement production increased in 2021 and 2024 (by 3.0% and 7.3%, respectively). In 2024, production amounted to 18,013 thousand tonnes, what constituted a decrease by 5.4% compared to 2020.

Ready-mixed concrete is also widely used in construction, with production in 2024 reached 56,032 thousand tonnes, which was higher than in both 2023 and 2020 (by 10.1% and 8.4%, respectively).

Products of heat insulating of mineral wools also play a significant role among construction materials, but the only increase in production of this product over the last five years was recorded in 2021 (by 23.8%). In 2024, production amounted to 502,067 tonnes, which resulted in a decrease by 1.7% compared to the previous year and by 19.1% compared to 2020.

2.7.3. Textile, clothing and leather products

Products of the textile, clothing and leather industry include a very wide range of products, m.in. yarn and threads, fabrics, knitted fabrics, finished textile products, carpets, pavements and other textile floor coverings, rope products, non-woven fabrics and non-woven products, technical and industrial textile products, leather, knitted and fabricated clothing, work and protective clothing, outerwear, underwear, clothing accessories, fur products, hosiery, leather and leather goods and footwear.

In the divisions Textile products, Clothing and Leather and leather products there were observed 381 products and assortment groups. In 2024, data on manufactured production for 330 groupings were reported.

The Textile products division includes yarns and threads, fabrics, knitted fabrics, finished textile products, carpets, rugs and other textile floor coverings, rope products, non-woven fabrics and other technical and industrial textile products. The most important products are classified in the class of finished textile products, which include, among others, table and bed linen, blankets and plaids, textile products for toilets and kitchens, curtains and curtains, bedspreads, tarpaulins, tents, sails, parachutes, bedding and floor cloths.

In the analysed period, the highest increase of manufactured production in the group of finished goods was recorded for tarpaulins, awnings and sun curtains, which amounted to 20.5% compared to 2020. In the same period, increased the production of tents (by 13.9%), duvets, pillows, sleeping bags and poufs (by 7.8%) and curtains, draperies and lambrequins (by 2.4%) also increased. The production of bed linen decreased by 45.6% during this period. Compared to the previous year, the production of tarpaulins, awnings and sun curtains increased (by 33.3%), duvets, pillows, sleeping bags and poufs (by 19.0%) and bed linen (by 6.4%). A decrease in production was recorded in the case of tents (by 11.4%) and curtains, draperies and lambrequins (by 8.5%).

Table 35. Manufactured production of selected textile products

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Bed linen	tonnes	20 849	21 281	16 138	10 660	11 344	54.4	106.4
Curtains and interior blinds, curtain or bed valances	tonnes	8 580	10 293	8 783	9 600	8 785	102.4	91.5
Tarpaulins, awnings and sunblinds	tonnes	17 229	28 286	17 272	15 573	20 755	120.5	133.3
Tents, including caravan awnings	tonnes	1 974	2 335	1 386	2 539	2 249	113.9	88.6
Articles of bedding	1000 units	41 578	45 678	38 610	37 667	44 838	107.8	119.0

Among clothing, the production of outerwear is the largest in terms of value. Coats (including raincoats), jackets, capes, suits, windbreakers and similar articles, men's or boys' (other than knitted fabrics) account for 14.8% of the value of the Apparel division. Their production in 2024 increased by 70.4% compared to 2020 and by 5.0% compared to the previous year. A significant increase in the production of men's coats in the analysed period occurred in 2022, by 185,075 units, which was an increase of 68.3% compared to the previous year. Production of coats (including raincoats), jackets, capes, suits, windbreakers and similar women's and girls' items, decreased by 31.8% compared to 2020 and by 27.2% compared to 2023.

The production of men's trousers as well as women's trousers decreased in 2024 compared to the previous year (by 37.2% and 27.4%, respectively). The largest decrease in the production of dresses, skirts and skirts-trousers (by 584,530 units) was recorded in 2022 (by 31.6% compared to 2021). Compared to 2020, production decreased by 51.6% and compared to 2023 – by 14.0%.

Table 36. Manufactured production of selected types of wearing apparel

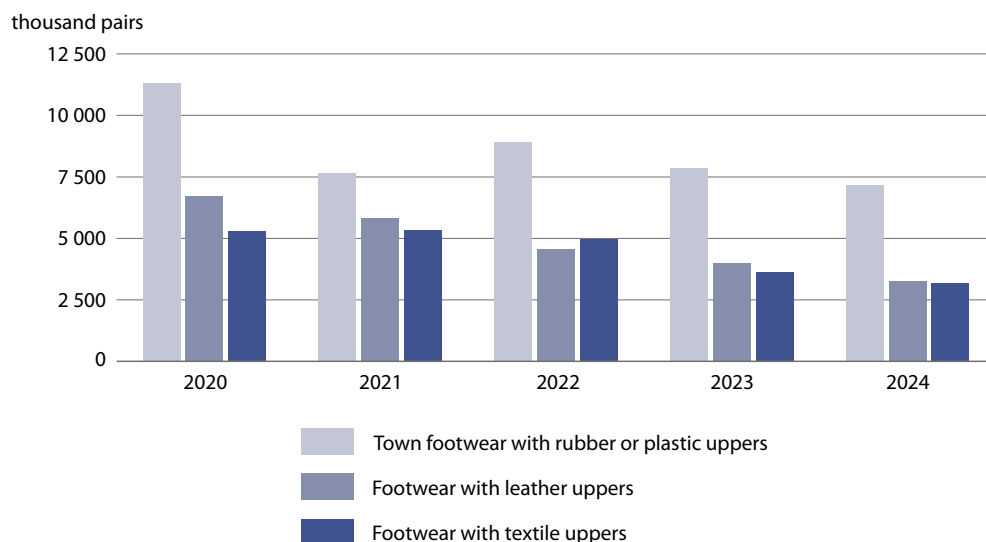
Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Coats (including raincoats), jackets, capes, suits, windbreakers and similar articles, men's or boys' (other than knitted fabrics)	unit	272 967	271 172	456 247	443 171	465 207	170.4	105.0
Coats (including raincoats), jackets, capes, suits, windbreakers and similar articles, women's or girls' (other than knitted fabrics)	unit	262 701	217 360	196 175	246 372	179 270	68.2	72.8
Trousers, dungarees, breeches and shorts, men's or boys' (other than knitted fabrics)	unit	2 323 644	2 756 875	2 738 227	2 747 312	1 726 654	74.3	62.8
Trousers, dungarees, breeches and shorts, women's or girls' (other than knitted fabrics)	unit	1 626 720	1 620 632	1 618 830	1 008 394	731 671	45.0	72.6
Dresses, skirts and skirt-trousers, women's or girls' (other than knitted fabrics)	unit	2 055 703	1 848 487	1 263 957	1 157 755	995 382	48.4	86.0

In the Leathers and leather products section, footwear production is of the greatest importance. In the analysed period, a significant decrease in total footwear production was recorded, from 28,848 thousand pairs in 2020 to 18,220 thousand pairs in 2024, which meant a decrease by 36.8%. The largest decrease in this group of products was recorded for footwear with uppers made of leather, the production of which decreased by more than half (by 52.2%) over the entire analysed period to 3,275 thousand pairs in 2024 (a decrease of 17.6% by 2023). In 2024, the production of footwear with uppers made of leather was slightly higher than the production of footwear with uppers made of fabrics (by 112 thousand pairs), while in 2020 this difference was 1.4 million pairs.

Table 37. Manufactured production of footwear

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Footwear, total	1000 pairs	28 848	26 226	24 542	19 841	18 220	63.2	91.8
of which:								
rubber or plastic footwear	1000 pairs	11 307	7 645	8 895	7 840	7 174	63.4	91.5
footwear with leather uppers	1000 pairs	6 714	5 832	4 568	3 975	3 275	48.8	82.4
footwear with fabric uppers	1000 pairs	5 310	5 323	4 983	3 644	3 163	59.6	86.8

In the analysed period, rubber and plastic footwear was the most produced in Poland (7.2 million pairs), which accounted for 39.4% of total footwear production in 2024. Compared to 2020, the production of this type of footwear decreased by 36.6%, while compared to previous year – by 8.5%.

Chart 32. Manufactured production of footwear by type

2.7.4. Products of wood and paper industry

In two divisions classified under the wood and paper industry: Wood, products of wood and cork, except furniture; articles of straw and plaiting materials, as well as Paper and paper products, the annual survey for 2024 covered 211 products, and entities reported production for 173 products. Wood industry products include, among others, sawmilling and planing of wood, veneer sheets and wood-based panels, assembled parquet floors, other builders' carpentry and joinery, wooden containers, products of wood; manufacture of articles of cork, straw and plaiting materials. Paper industry products include, among others, paper and paperboard as well as products made of paper and paperboard.

One of the most important products of the wood industry is sawnwood, the production of which in 2024 amounted to 4,154,659 m³, which was lower compared to both 2020 and 2023 by 11.0% and 1.4%, respectively. In Poland, coniferous sawnwood was produced mainly (in 2024, 3,807,521 m³), while non-coniferous sawnwood accounted for only 8.3% of total sawnwood production, and its share decreased by 1.3 p. p. compared to 2020. In 2024, 46.7% of the production of coniferous sawnwood was pine wood (*Pinus* spp.) sawn or chipped lengthwise, sliced or peeled, of thickness exceeding 6 mm. Meanwhile, 99.3% of non-coniferous sawnwood production consisted of wood, sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6 mm (excluding coniferous and tropical woods and oak blocks, strips and friezes).

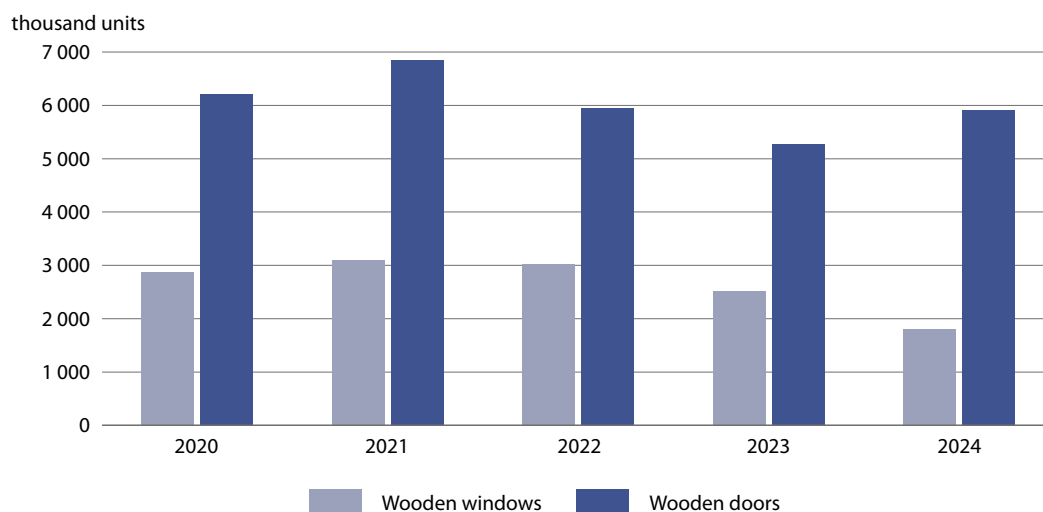
In 2024, despite a 5.9% increase in particle board production compared to 2023, the level of production was lower than in 2020 (by 8.2%). Among particle board, particle board of wood had the largest share in 2024 (82.6%).

During the period under review, the production of fibreboards reached its highest level in 2021 (767 million m²), after which, similarly to particle boards, production declined and remained lower until 2023. In 2024, production increased by 2.3% to reach 617 million m², but compared to 2020 it fell by 9.6%. The largest share of fibreboard production was medium density fibreboard (MDF), of a thickness not exceeding 5 mm, which in 2024 accounted for 67.5%.

Table 38. Manufactured production of selected products of wood industry

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Sawnwood	dam ³	4 666	5 001	4 799	4 213	4 155	89.0	98.6
coniferous sawnwood	dam ³	4 217	4 538	4 333	3 841	3 808	90.3	99.1
Particle board	dam ³	6 571	7 160	5 880	5 693	6 031	91.8	105.9
particle board of wood	dam ³	5 419	6 040	4 970	4 768	4 983	92.0	104.5
Fibreboards	1000 m ²	681 890	766 561	681 014	603 043	616 709	90.4	102.3

Wooden windows and wooden doors are among the most important products of the wood industry. During the analysed period, the production of wooden windows and wooden doors, like other major wood industry products, reached its highest production level in 2021. In 2024, the production of wooden windows decreased compared to both 2020 and 2023, by 37.2% and by 28.1% respectively, while the production of wooden doors fell by 4.9% compared to 2020, but increased by 12.2% compared to 2023.

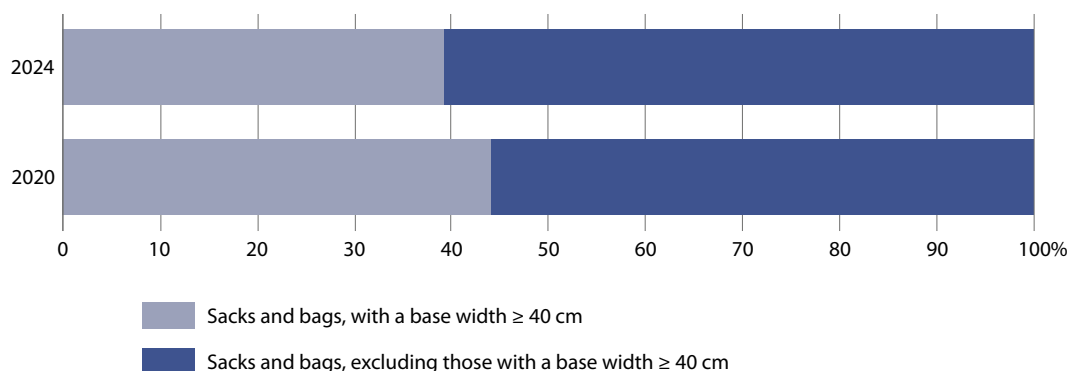
Chart 33. Manufactured production of wooden windows and wooden doors

In the Paper and paper products division, 128 products were statistically monitored in 2024, and production was recorded for 102 products.

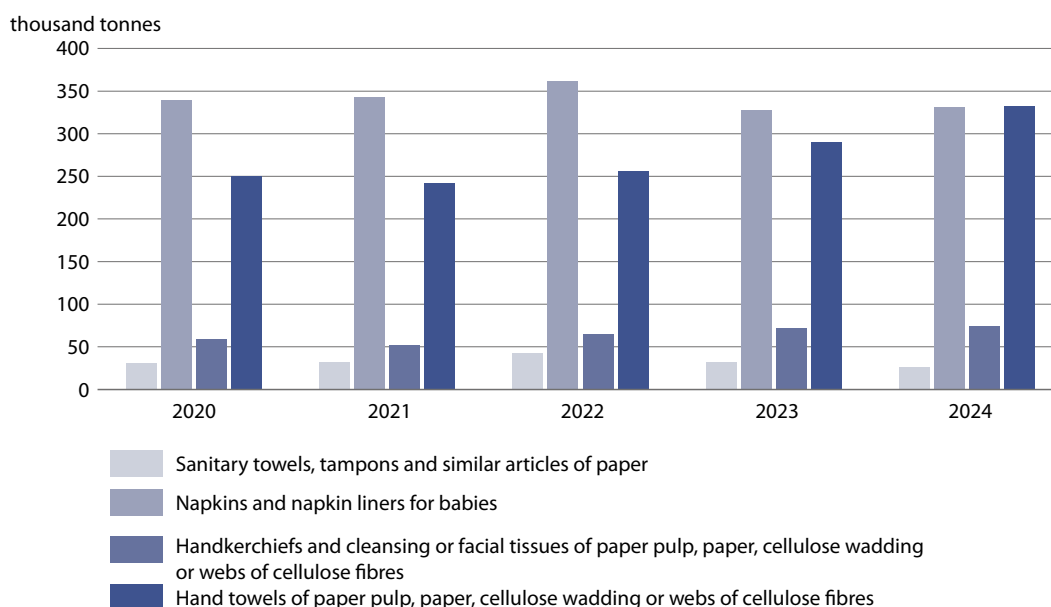
Table 39. Manufactured production of paper and cardboard and cartons

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Paper and cardboard	1000 t	5 129	5 326	5 234	4 623	4 940	96.3	106.9
Cartons, of corrugated paper or paperboard	1000 t	2 583	2 964	2 938	2 806	2 915	112.8	103.9
Folding cartons, of non-corrugated paper or paperboard	1000 t	660	758	792	635	587	89.0	92.4

Paper and cardboard production in 2024 increased by 6.9% year-on-year, but decreased by 3.7% compared to 2020. During the period under review, 2021 was the year with the highest paper and cardboard production (5,326 thousand tonnes). In 2024, compared to the previous year, the production of cartons, boxes and cases, of corrugated paper or paperboard increased by 3.9%, to 2,915 thousand tons.

Chart 34. Structure of manufactured production of sacks and bags of paper

In the production of paper sacks and bags, the most significant is the production of sacks and bags, excluding those with a base width ≥ 40 cm, which reached 113 thousand tonnes (60.6%) in 2024, which is 18.9% more than in 2020. The production of sacks and bags, with a base width ≥ 40 cm in 2024 amounted to 73,500 tonnes, which is by 4.8% less than in 2020.

Chart 35. Manufactured production of paper hygiene products

Among the manufactured paper hygiene products, hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres had the largest share in 2024 (333 thousand tonnes, 14.4% more than the previous year and 33.0% more than in 2020), followed by napkins and napkin liners for babies (332 thousand tonnes) and tissues (75 thousand tonnes). Sanitary towels, tampons and similar articles of paper production in 2024 amounted to 25.9 thousand tonnes, less by 18.0% compared to 2023 and by 15.3% compared to 2020.

2.7.5. Computer, electronic and optical products

The computer, electronics and optical industry comprises the production of electronic components and boards, computers and peripheral equipment, communication equipment, consumer electronics, measuring, testing and navigation instruments, watches and clocks, irradiation, electromedical and electrotherapeutic

equipment, optical instruments and photographic equipment and magnetic and optical media, not recorded. In the annual survey for 2024, 263 products from this industry were surveyed, and manufactured production was reported for 175 products. The most significant part of them are products classified as consumer electronic equipment, accounting for 53.5% of the production value of the products in question in 2024.

Among consumer electronics, the largest in terms of value is the production of television receivers. In 2024 there was a rise of the production of television receivers by 7.8% compared to 2023, but compared to 2020 the production was by 6.8% lower. The second type of consumer electronics in terms of production value is radio receivers, in 2024 production reached a level by 16.2% higher than in 2020.

Table 40. Manufactured production of television receivers and radio receivers

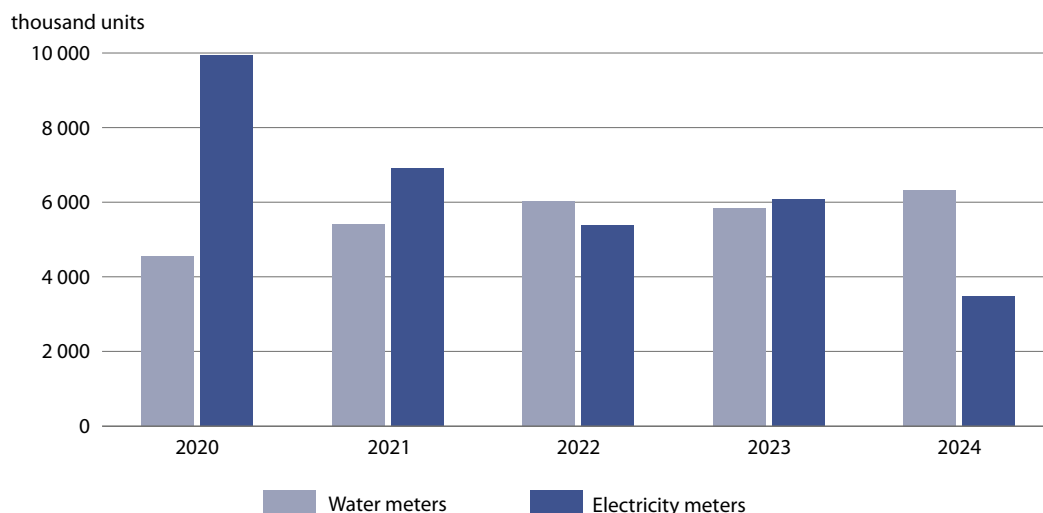
Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
TV receivers including monitors	1000 units	16 707	19 326	17 178	14 446	15 578	93.2	107.8
Radio receivers	1000 units	4 290	6 206	4 025	4 673	4 983	116.2	106.6

The production of digital data processing machines in 2024 rose by 13.6% compared to 2023 but it was by 8.3% lower than in 2020. Laptops and notebooks constitute a relatively small part of the digital data processing machines manufactured, their production increased until 2022 (in 2021 by 39.8%), but then years of decline followed and in the entire period under discussion it decreased by 48.9%.

Table 41. Manufactured production of data processing machines

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Data processing machines	unit	3 360 524	3 508 280	3 371 221	2 714 493	3 082 999	91.7	113.6
Laptops, notebooks	unit	5 254	7 347	7 936	4 218	2 687	51.1	63.7

Another important group of products in the discussed production area are measuring, testing and navigation instruments, including utility meters, among others. Water meter production increased in 2024 by 8.4% and was higher than in 2020 by 39.2%. Production of electricity meters was significantly decreasing till 2022 (by 30.5% in 2021), then there was some growth in 2023, but a substantial decline in the last surveyed year brought production to a level by 65.1% lower than in 2020.

Chart 36. Manufactured production of water and electricity meters

2.7.6. Machinery and equipment except electrical

Another area of production discussed in this subchapter is the production of machines and equipment, n.e.c. which comprises the production of general-purpose machinery, agricultural and forestry machinery, material forming machinery and machine tools, and of other special-purpose machinery.

In the annual survey for 2024, 675 products from this industry were surveyed, and manufactured production was reported for 482 products. The largest share in value is of general-purpose machinery, which accounted for 69.3% of production value of the products in question in 2024.

Ball or roller bearings are a typical product included in general-purpose machinery. In the years 2020–2024, the production of bearings measured in units declined – the decrease was by 10.3%. The largest reduction in production compared to the previous year was recorded in 2023 – by 16.1%. Another product classified as general-purpose machinery are heat exchangers for chemical industry. The production in tonnes of this type of heat exchangers between the years 2020 and 2024 changed relatively little, with only 2023 seeing a more significant increase (by 15.1%) compared to the previous year. In 2024 production was by 10.5% higher than in 2020. Refrigerated show-cases and counters except for frozen food storage are also considered general-purpose machines. Their production rose significantly in 2021 (by 30.8%), and then a decline began that continued till 2023. An increase that followed in 2024 (by 14.6%) brought the production to a level almost exactly the same as in 2020.

Table 42. Manufactured production of selected items of general-purpose machinery

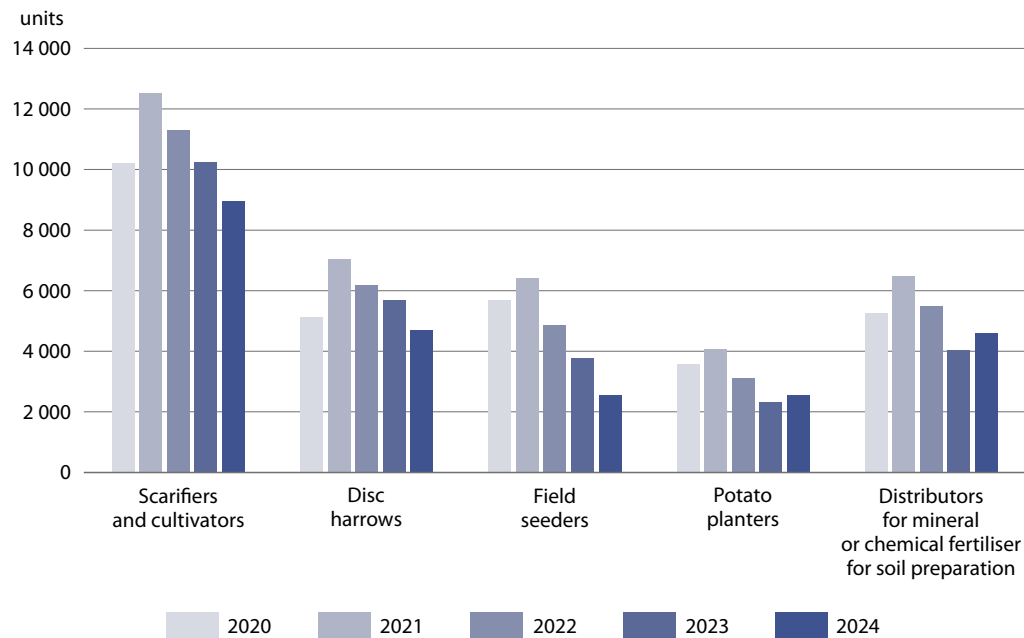
Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Ball or roller bearings	1000 units	169 687	211 479	199 511	167 377	152 240	89.7	91.0
Heat exchangers for chemical industry	tonnes	2 891	3 038	2 809	3 234	3 195	110.5	98.8
Refrigerated show-cases and counters except for frozen food storage	unit	52 129	68 180	62 582	45 519	52 173	100.1	114.6

Machinery for agriculture and forestry accounted for 9.8% of the sold value in 2023 of machinery and equipment discussed here (a decrease compared to 2023, when the share was 12.1%).

A comparison of production of many important types of agricultural machinery in 2024 with production in 2020 shows a decline in manufactured production volume, especially in the years 2022 and 2023, after previous years of growth.

The production of scarifiers and cultivators rose significantly (by 22.5%) in 2021, but decreased in the following years. As a result, in 2024 it was lower by 12.5% than in 2020. Changes in the production of disc harrows followed a quite similar pattern – a significant increase in 2021 (by 37.7%) and then a gradual reduction until 2024, when it reached a level by 8.6% lower than in the first year of the period under review. The production of field seeders also rose in 2021 and decreased in the subsequent years (in 2024 compared to 2023 by 32.7%), reaching in the last year a level by 55.4% lower than in the first year. The pattern of production of potato planters was slightly different – in 2024 there was an increase, but over the entire period under consideration production decreased by 28.7%. Similarly, in the production of distributors for mineral or chemical fertilizer increased in 2024 compared to 2023, but to a level lower than in 2020 by 12.6%.

Chart 37. Manufactured production of selected soil machinery



In the production of mowers designed to be carried by a tractor production systematically decreased until 2023, there was a rise in 2024 (by 13.7%), but in the entire discussed period the production was reduced by 38.3%. The production of potato diggers remained at a high level in the first two years (3,993 units in 2020), in the following years there was decline, which led to a reduction in production by 38.9% in 2024 compared to 2020. The production of combine harvester-threshers was in the last year of the period under review lower than in 2020 by 7.6%.

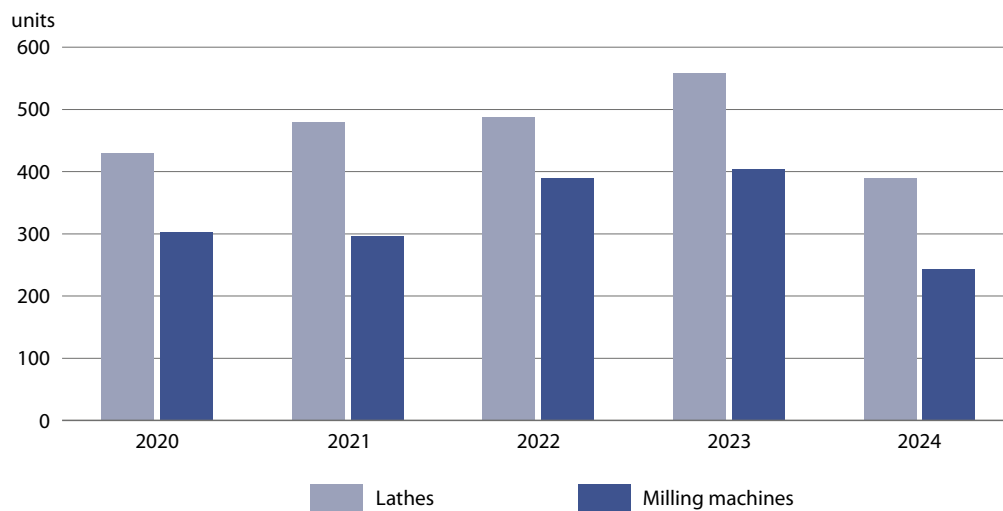
Table 43. Manufactured production of selected harvesting machinery

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Mowers, designed to be carried by a tractor	unit	15 298	12 157	11 509	8 296	9 436	61.7	113.7
Potato-diggers	unit	3 993	3 971	3 314	2 883	2 441	61.1	84.7
Combine harvester-threshers	unit	1 519	2 688	1 990	2 163	1 403	92.4	64.9

Another group of machinery is machine tools and material forming machinery with production accounting for 3.8% of the value of production of machinery and equipment discussed here.

The production of lathes for removing metal increased till 2023 and then a significant decline occurred in 2024 (by 30.4%) – to the level lower by 9.3% than in the initial year of the discussed period. The production of metal milling machines saw a slight decline in 2021, but continued to grow in the following two years (by 31.8% in 2022). In 2024, as in the case of lathes, production decreased significantly (by 39.9%) and was by 19.5% lower than in 2020.

Chart 38. Manufactured production of selected machine tools for working metal



The production of other special-purpose machinery accounted in 2024 for 17.1% of the value of sold production of machinery and equipment discussed here.

This type of machinery includes bulldozers, angledozers and shovel loaders, their production in 2024 was by 96.1% lower than in 2020. Production of self-propelled front-end shovel loaders designed for underground use was in 2024 by 17.5% higher than in 2020.

Table 44. Manufactured production of selected machinery and equipment for construction and road building

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Self-propelled bulldozers and angledozers	tonnes	3 063	1 926	3 882	1 187	119	3.9	10.0
Wheeled or crawler front-end shovel loaders, specially designed for underground use	tonnes	2 342	2 023	2 679	2 696	2 753	117.5	102.1

2.7.7 Furniture

Products classified in the Furniture division include furniture made from various materials, including wooden, metal, and plastic furniture for home, office, and retail furnishing, as well as furniture parts and mattresses. In the 2024 annual survey, statistical monitoring covered 36 products, and production was reported for 35 of them.

In 2020-2024, as in previous years, the production of wooden furniture and wood-based materials dominated. The largest increase in production occurred in the group of wooden furniture used in dining-rooms and living-rooms, which in 2024 accounted for 74.6% of the total production of wooden

furniture – 59,668 thousand units were produced, which means an increase by 8.0% compared to 2023. The largest decline was recorded for wooden fitted kitchen units– In 2024 their production amounted to 812 thousand units, representing decrease by 36.0% compared to 2020 and by 27.6% to 2023.

In 2024, production of wooden furniture for bedroom reached 9,481 thousand units, with a slight decrease of 3.3% compared to 2023. In 2024, production of office furniture reached 4,573 thousand units, representing increase by 17.6% compared to 2020 and decrease by 4.7% compared to 2023.

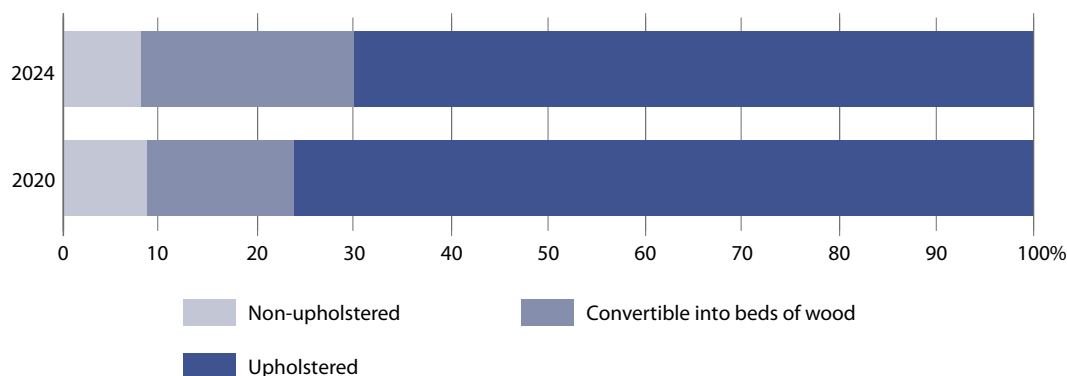
Table 45. Manufactured production of wooden furniture

Specification	Unit	2020	2021	2022	2023	2024	2024	
							2020=100	2023=100
Wooden fitted kitchen units	1000 units	1 266	1 131	1 235	1 104	812	64.1	73.6
Wooden furniture for bedroom	1000 units	7 142	8 053	7 557	9 800	9 481	132.7	96.7
Wooden furniture for the dining-room and living-room	1000 units	32 073	33 703	39 226	55 258	59 668	186.0	108.0
Wooden furniture of a kind used in offices	1000 units	3 890	4 404	3 188	4 798	4 573	117.6	95.3

A separate category of wooden furniture is seating furniture, their production in 2024 amounted to 13,779,600 units, a decrease by 9.1% compared to the previous year and by 27.7% compared to 2020.

In 2020-2024, upholstered furniture dominated among wooden seating furniture, with production three times greater than that of convertible furniture convertible into beds. The lowest production among seating furniture was recorded for swivel and height-adjustable furniture, with production in 2024 reaching 14,800 units.

Chart 39. Structure of manufactured production of wooden seating furniture



2.7.8 Secondary raw materials

The survey of the recovery of secondary raw materials was implemented in the survey of the production of products in 2019. In 2020, secondary raw materials from wood were added to the scope of the survey, while it was not until 2022 that the division of metallic raw materials into types of recovered metal was introduced. In 2024, for the first time, the survey covered secondary mineral raw materials from construction works. Due to the availability of a short time series, it is currently not possible to conduct a detailed retrospective analysis that would allow conclusions to be drawn on the recovery of secondary raw materials.

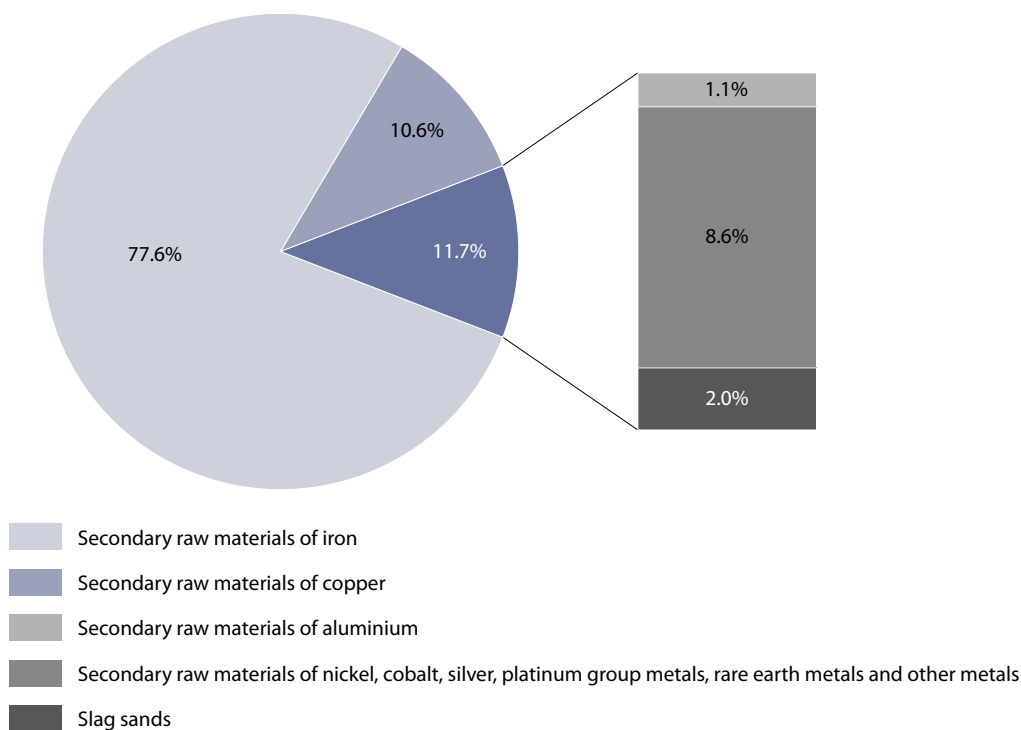
In 2024, 20 types of secondary raw materials were statistically observed, and recovery data were reported for 19 of them.

In 2024, there was an increase in the recovery of all types of metallic secondary raw materials covered by the survey, with the exception of silver secondary raw materials. The structure of secondary raw materials recovered from metals continued, as in previous years, to be dominated by secondary raw materials made of iron and ferrous metals. In second place was slag sands, the recovery of which increased six times compared to the previous year. The next place was taken by the recovery of secondary raw materials from aluminium. The recovery of secondary raw materials from copper for the last three years has remained at the level of over 15 thousand tonnes.

Table 46. Recovery of metallic secondary raw materials

Specification	Unit	2022	2023	2024	2023=100
Secondary raw materials of iron and ferrous metals	tonnes	1 197 739	920 861	1 054 791	114.5
Secondary raw materials of copper	tonnes	15 711	15 103	15 176	100.5
Secondary raw materials of nickel	tonnes	214	182	591	324.7
Secondary raw materials of aluminium	tonnes	35 904	63 251	116 523	184.2
Secondary raw materials of cobalt	tonnes	—	—	—	—
Secondary raw materials of silver	tonnes	—	1	0.1	5.0
Secondary raw materials of platinum group metals	tonnes	—	0.4	1	233.0
Secondary raw materials of rare earth metals	tonnes	3	2 440	2 792	114.4
Secondary raw materials of other metals	tonnes	28 526	20 454	24 416	119.4
Slag sands	tonnes	23 618	19 477	144 551	742.2

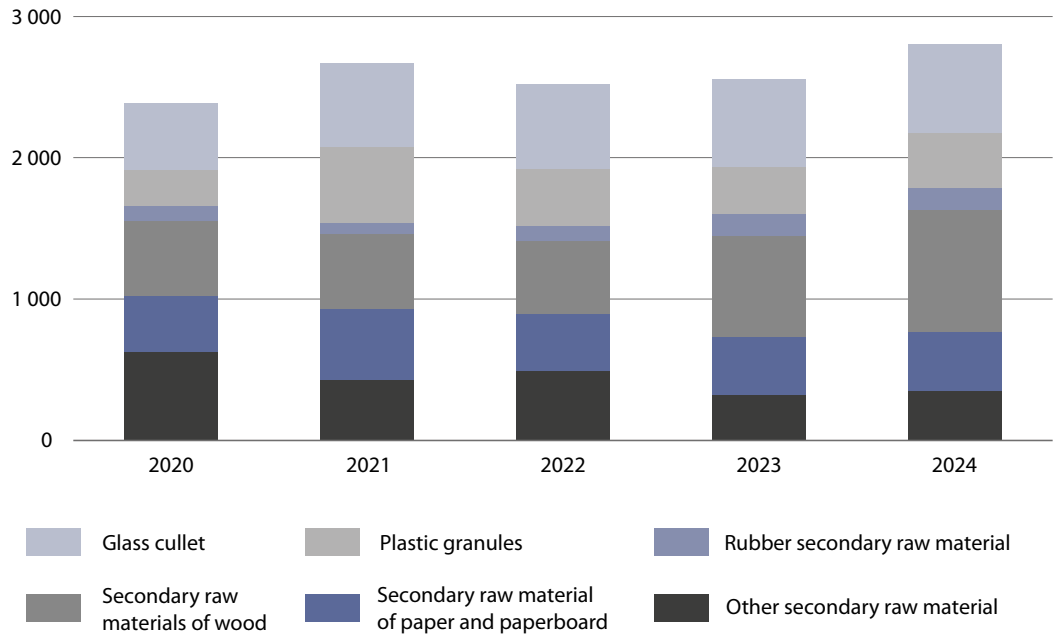
Chart 40. Structure of processing of metallic secondary raw materials in 2024



In 2024, an increase was recorded for all categories of non-metallic secondary raw materials, except for waste paper, for which there was a slight decrease (by 0.3%). In terms of quantity, this group was still dominated by secondary raw materials from wood, while cullet was in the second place. The least recyclable material was recovered from rubber.

Chart 41. Recovery of non-metallic secondary raw materials

thousand tonnes

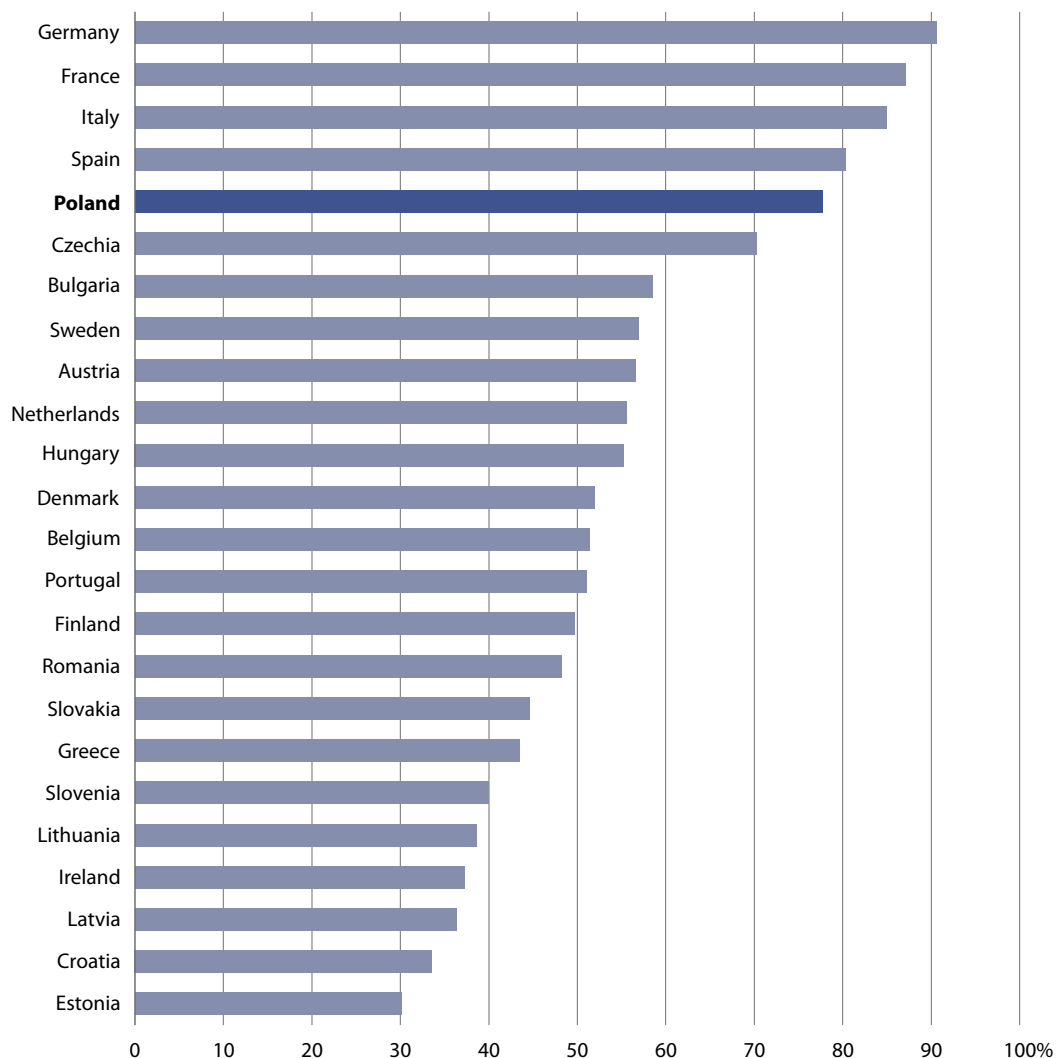


Chapter 3. Production of industrial products in Poland compared to other European Union countries

The PRODCOM Community Survey of industrial production provides information on the production of manufactured goods and services by enterprises located in the national territory. It is conducted on the basis of the PRODCOM List, which includes products from the Mining and quarrying products and Manufactured products sections. From 2019, it also includes two groups of secondary raw materials: metallic and non-metallic from the Water supply, sewerage, waste management and remediation services section. The PRODCOM list is based on the EU product classification CPA and is linked to the Combined Nomenclature (CN). The PRODCOM survey is annual and covers a slightly narrower range of products than the industrial products production survey conducted in Poland, which also takes into account the information needs of national users. Energy raw materials are excluded from the PRODCOM List, while in the Coke and refined petroleum products section are excluded important products, among others: coke from coal and fuels and oils derived from petroleum. For almost all products on the PRODCOM List, production sold is surveyed, while the volume of production manufactured is only surveyed for a limited number of products. The source of PRODCOM data are surveys conducted in the countries; these surveys are designed to provide comparable results. From the reporting year 2021 onwards, in the PRODCOM surveys there is separately covered sold production that was carried out on own account and subcontracted production. The data presented below refer to total production: on own account and subcontracted

The PRODCOM Community Survey of industrial production is conducted on the basis of the PRODCOM List which in 2024 contained 4 044 items covering products or homogeneous product assortment groups. Three European Union member states did not participate in the survey: Cyprus, Luxembourg and Malta, which are exempted from transmitting production data due to the small share of their manufacturing in the European Union economy.

In 2024, similar to 2020-2023, Poland ranked fifth, after Germany, France, Italy and Spain, in terms of the number of PRODCOM items for which production was reported. Czechia ranked sixth. In 2024 Poland reported production data for 3 144 products and product assortment groups, which constitutes 77.7% of all items covered by the survey. The highest percentage of products was reported by Germany – 90.6%. The fewest products among EU countries were reported by Croatia and Estonia, with 33.6% and 30.1% of the surveyed items, respectively.

Chart 42. Percentage of PRODCOM headings for which sold production was reported for 2024 by EU countries

Because of the disclosure control in case of the data reported by individual countries, the EU aggregates for certain products are rounded by Eurostat for publication. The figures presented in this section are based on numbers published by Eurostat.

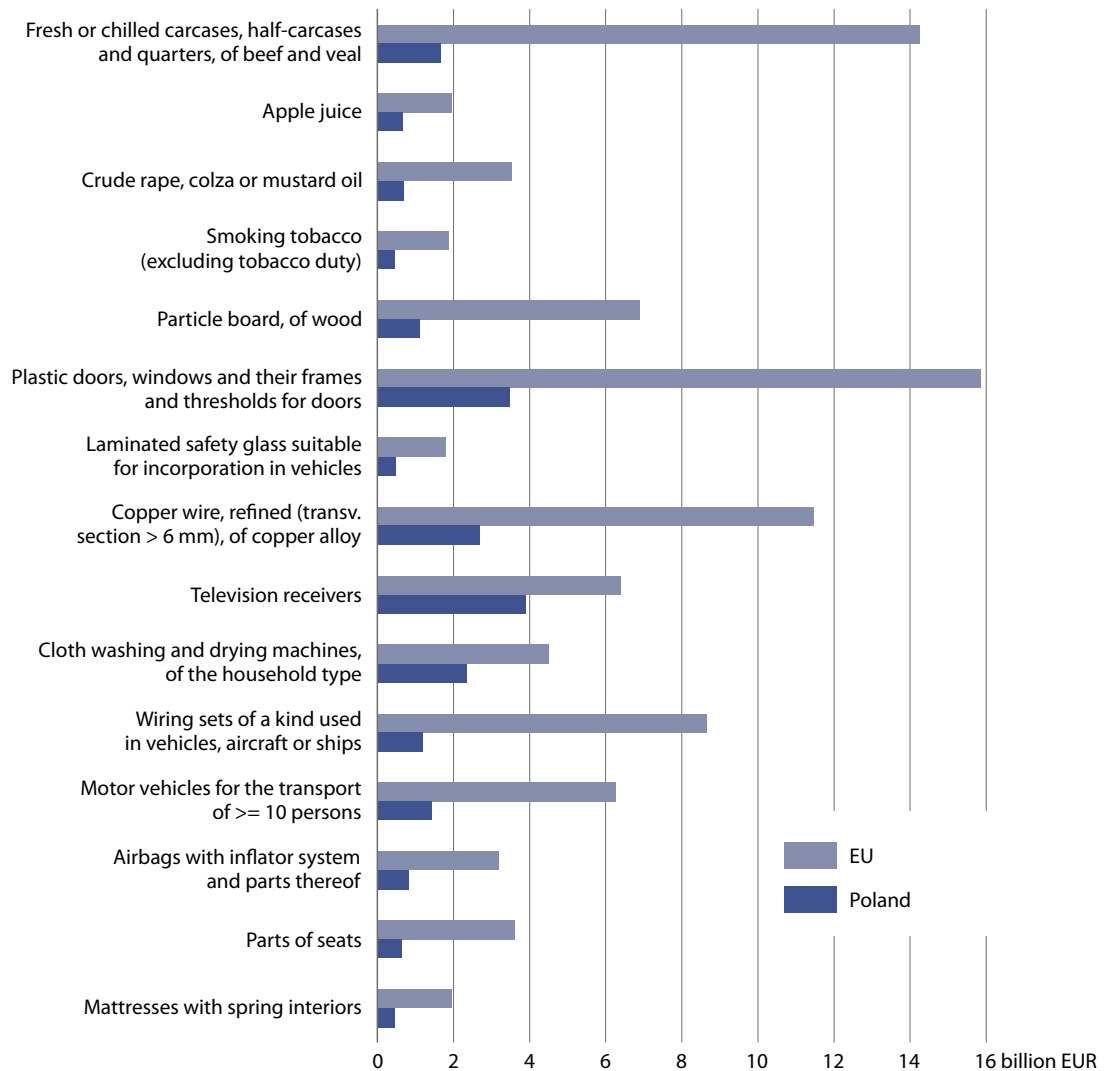
The value of sold production of all products reported by Poland in the PRODCOM survey in 2024 was 365 502.2 million EUR. Poland's share in EU production in various sectors of manufacturing industry differs quite significantly. The largest share was recorded in the following divisions: Tobacco products – 25.7%, Furniture – 14.5%, Electrical equipment – 10.0%, Rubber and plastic products – 9.5%, Other non-metallic mineral products – 8.5%, Paper and paper products – 8.0%, Wood and products of wood, cork and straw – 7.6%. The lowest share in the value of sold production was recorded in the divisions: Metal ores, Pharmaceutical products and preparations.

Table 47. Sold production of products covered by PRODCOM survey by selected CPA divisions in 2024

Specification	European Union	Poland	
	in million EUR		in %
Tobacco products	10 002.3	2 568.7	25.7
Textiles	55 391.0	2 956.2	5.3
Wearing apparel	27 100.5	1 487.7	5.5
Wood and products of wood, cork and straw	108 281.6	8 215.1	7.6
Paper and paper products	171 375.8	13 764.8	8.0
Pharmaceutical products and preparations	263 372.2	3 848.3	1.5
Rubber and plastic products	271 052.5	25 860.4	9.5
Other non-metallic mineral products	193 933.0	16 453.7	8.5
Basic metals	362 809.6	23 155.5	6.4
Electrical equipment	272 908.7	27 411.6	10.0
Motor vehicles, trailers and semi-trailers	706 641.4	45 647.6	6.5
Furniture	80 050.6	11 615.1	14.5
Waste collection, treatment and disposal services; materials recovery services	24 712.2	1 069.7	4.3

In 2024, for about 400 products, Poland's share in European Union sold production in value terms ranged from 10.1% to 20.0%. The largest number of products with a share between 10.1% and 20.0% was recorded in the divisions: Food products – 56 products, Chemicals and chemical products – 37, Rubber and plastic products – 35, Fabricated metal products – 31 and Machinery and equipment – 29 products.

Poland's share of over 20% in the value of production sold in the European Union was recorded for 268 products, including television receivers (61.1%), cloth washing and drying machines, of household type (52.5%), apple juice (35.2%), laminated safety glass suitable for incorporation in vehicles (27.0%), airbag with inflator system and parts thereof (26.4%), smoking tobacco (excluding excise duty) (24.3%).

Chart 43. Sold production value of selected products in Poland and in the European Union in 2024

For most products on the PRODCOM List, the volume of sold production in physical unit of measurement is surveyed. A measure of Poland's share in the total volume of production sold in European Union countries in various industrial sectors can be the number of products with a significant share of Poland in the volume of EU production in particular sector. Most of the products in which Poland had a share in the production ranging from 10.1% to 20.0% were classified in the following divisions: Food products, Chemicals and chemical products, Rubber and plastic products, Machinery and equipment and Electrical equipment. The largest number of products in which the share of Polish production exceeded 50.0% were classified in the following sections: Electrical equipment, Computers, electronic and optical products, Chemicals and chemical products, and Other products.

Among the products in which Poland's share in production exceeded 50% were: frozen whole fresh water fish, raw sugar, medium density fibreboard (MDF) of a thickness not exceeding 5 mm, handmade paper and paperboard, scouring pastes and powders and other scouring preparations, steel plaited bands, television receivers, domestic electric toasters, potato-diggers and potato harvesters, steering wheels, steering columns and steering boxes and parts thereof, seats convertible into beds, of wood and candles.

Table 48. Number of products with percentage of more than 10% in EU volume of sold production in 2024

Specification	10.1%–20.0%	20.1%–30.0%	30.1%–40.0%	40.1%–50.0%	> 50.0%
Metal ores	0	0	0	0	0
Other products of mining and quarrying	3	1	0	5	0
Beverages	3	1	1	0	0
Tobacco products	1	1	0	2	0
Textiles	13	5	3	1	3
Wearing apparel	18	2	2	1	1
Leather and related products	2	1	2	0	1
Wood and products of wood, cork and straw	11	2	2	1	4
Chemicals and chemical products	46	5	5	3	6
Pharmaceutical products and preparations	0	0	0	0	0
Rubber and plastic products	31	6	5	0	3
Other non-metallic mineral products	20	9	4	2	5
Basic metals	26	6	5	6	3
Electrical equipment	22	4	7	1	12
Motor vehicles, trailers and semi-trailers	11	6	3	0	1
Furniture	6	2	1	1	3
Recovery of sorted materials	0	0	0	0	0

In 2024, of the five EU member states reporting production for the largest number of PRODCOM items, Poland accounted for the largest share of EU sold production volume of, among others: medium density fibreboard (MDF) of a thickness not exceeding 5 mm (62.5%), mattresses of cellular plastics (50.8%), granite, crude or roughly trimmed (46.0%), fish fillets, dried, salted or in brine, but not smoked (37.2%), frozen cuts of turkey (33.4%), apple juice (32.6%), vodka of an alcoholic strength by volume of $\leq 45.4\%$ (30.1%), disc harrows (28.5%), plastic baths, showers-baths, sinks and wash-basins (23.3%), groats and meal of cereals (excluding wheat) (23.0%), plastic doors, windows and their frames and thresholds for doors (22.4%), limestone, dolomite and other calcareous stone, broken or crushed (20.1%), multiple-walled insulating units of glass (18.8%).

Table 49. Share in EU sold production volume of selected products of five selected EU member states in 2024

Specification	France	Spain	Germany	Poland	Italy
	in %				
Granite, crude or roughly trimmed	.	9.9	0.1	46.0	1.0
Limestone, dolomite and other calcareous stone, broken or crushed	12.3	5.2	9.0	20.1	0.8
Fresh or chilled carcasses, halfcarcases and quarters with bone in, of beef and veal	11.6	16.5	19.7	10.5	21.9
Frozen cuts of turkey	.	13.7	4.4	33.4	5.6
Fish fillets, dried, salted or in brine, but not smoked	1.4	12.3	0.8	37.2	10.2
Apple juice	8.5	8.4	29.6	32.6	5.0
Frozen vegetables and mixtures of vegetables, uncooked or cooked by steaming or boiling in water (excluding potatoes)	11.4	24.2	3.6	11.8	10.8
Refined rape, colza or mustard oil	6.5	.	36.6	15.1	0.5
Milk and cream of a fat content of $> 6\%$ but $\leq 21\%$, not concentrated and nor sweetened	26.8	6.0	27.7	13.7	3.6

Table 49. Share in EU sold production volume of selected products of five selected EU member states in 2024 (cont.)

Specification	France	Spain	Germany	Poland	Italy
	in %				
Butter of a fat content by weight $\leq 85\%$	20.8	.	26.4	14.0	4.8
Fresh cheese (unripened or uncured cheese)	10.8	.	21.8	11.7	23.9
Groats and meal of cereals (excluding wheat)	10.7	18.9	5.6	23.0	17.1
Uncooked pasta, containing eggs	3.7	0.8	12.2	5.6	65.2
Toffees, caramels and similar sweets	1.0	1.9	31.0	18.1	26.2
Herbal Infusions; incl. bark of African cherry (<i>Prunus africana</i>)	1.4	6.2	42.5	10.3	1.2
Prepared feeds for poultry (excluding premixtures)	17.0	10.7	13.2	14.5	10.0
Vodka of an alcoholic strength by volume of $\leq 45.4\%$	11.3	1.2	9.5	30.1	5.0
Track-suits, of knitted or crocheted textiles	2.4	55.3	.	15.4	2.0
Medium density fibreboard (MDF) of a thickness not exceeding 5 mm	.	12.5	10.3	62.5	0.4
Doors and their frames and thresholds, of wood	.	18.5	17.5	13.6	3.9
Corrugated paper and paperboard in rolls or sheets	5.4	.	15.2	13.1	30.9
Biodiesel and mixtures thereof, not containing or containing < 70 % by weight of petroleum oils or oils obtained from bituminous minerals	8.6	10.6	25.6	8.2	9.7
Plastic baths, showers-baths, sinks and wash-basins	3.8	23.1	8.8	23.3	11.2
Plastic doors, windows and their frames and thresholds for doors	.	4.1	18.4	22.4	6.6
Multiple-walled insulating units of glass	19.0	9.1	18.1	18.8	4.7
Portland cement	.	13.2	8.3	11.9	14.9
Liquid supply or production meters	.	2.2	9.7	8.5	55.2
Insulated coaxial cables for data and control purposes	.	1.1	15.4	16.8	21.1
Hydraulic cylinders	.	2.3	33.0	18.8	5.0
Accounting machines and similar machines incorporating a calculating device	10.6	0.3	2.3	13.6	6.4
Refrigerated show-cases and counters, excluding for frozen food storage	.	38.8	2.6	7.7	6.0
Vehicles with only spark-ignition engine of a cylinder capacity $\leq 1\,500\text{ cm}^3$	.	36.8	13.3	4.4	.
Containers for carriage, including containers for transporting fluids	9.1	4.9	22.3	16.7	7.8
Mattresses of cellular plastics	.	6.7	13.7	50.8	1.8

Methodological notes

The data were compiled on the basis of a annual survey of production of industrial products on the P-01 form "Questionnaire on production". In case of electricity and thermal energy from steam or hot water, the data are derived from specialist surveys conducted by Minister responsible for energy and the President of Energy Regulatory Office. The survey of the production of industrial products is carried out in accordance with the requirements of the Community industrial production survey PRODCOM.

Data are collected according to groupings indicated in the PRODPOL nomenclature for annual surveys in the reporting year. The nomenclature is based on the Polish Classification of Goods and Services (PKWiU 2015) introduced on January 1, 2016 for use in statistics, registration, documentation and accounting, and also in official registers and public administration information systems (Regulation of the Council of Ministers of 4 September 2015, Journal of Laws, item 1676) and on the PRODCOM List used in the European Union. For longer time series, the data has been obtained thanks to the use of keys between PRODPOL nomenclatures used for subsequent reporting years.

1. Subject and scope of the study

The annual survey cover legal entities, organizational units without legal personality (excluding budgetary units and establishments) and natural persons conducting business activities, having the number of persons employed 10 or more; in the field of pellet production survey covers also entities employing less than 9 people. Units producing electricity and thermal energy from steam or hot water are included in the survey regardless of the number of persons employed. The survey applies to all business entities which manufacture products specified in the PRODPOL nomenclature for a given reporting year, regardless of the kind of economic activity classified according to NACE Rev.2. The use of embedded systems in products is observed in reporting units whose predominant kind of activity is classified in Section C „Manufacturing“, with the exception of the divisions covering the food industry (NACE 10-12), the chemical and pharmaceutical industry (NACE 20-21), the manufacture of non-metallic mineral products (NACE 23), the manufacture of basic metals (NACE 24) and the jewellery, bijouterie and related products group (NACE 32.1).

The survey of production of industrial products does not include the following units:

- trade units, which ordered the manufacture of goods in a production enterprise and did not provide raw materials for the manufacture of these goods,
- running only publishing activities and not directly involved in the printing preparation process or printing process,
- engaged only in activities related to the production of films, video recordings, television programs, sound and music recordings and not directly involved in the process of reproduction of sound recordings, video recordings or reproduction of computer storage media.

The survey provides data on:

- the quantity of production of finished products manufactured on own account or under subcontracting, from material provided by the customer (subcontracting services), as of the end of the reporting year; the processing or modification of a purchased product, which did not change the characteristics of its use and purpose, is not considered as production,
- quantity and value of sold own production or output outsourced to another enterprise from materials outsourced, which were sold outside the enterprise.
- value of finished products consisted the embedded system, including the Internet of Things elements

Sold production value at current prices without VAT includes:

- received and due amounts for sold during the year – outside the enterprise – own finished products, semi-finished products and parts of own production, resulting from multiplying the number of sold pro-

ducts, semi-finished products and parts by unit sales price, adjusted for due subsidies, rebates, discounts or contractual amounts due for sales,

- the value of products not included in the sale, treated equally with sales, i.e. the value of own products transferred to own retail outlets, as well as to its own catering establishments and its own warehouses,
- value of manufactured goods, treated equally with sales, i.e. products transferred free of charge to the social fund and own investments, for the purposes of representation and advertising, personal needs of the taxpayer and employees, and donations of products and services without payment.

The amount of production of industrial products is expressed in physical units of measurement. The basic principle in determining the quantity of production is its homogeneity which allows aggregation of particular product ranges.

In order to obtain comparable data on the production of industrial products, the PRODPOL nomenclature is used. It contains a list of products with the symbol and the name of the product or assortment group and assigned to them units of measure in which production should be reported. This allows the units to report the data on production of products which belong to the same category but are traded under different own names, in one PRODPOL grouping under the same name and in the same unit of measure.

The PRODPOL nomenclature is compliant at three, four, five and six-digit level with the PKWiU 2015 classification and at eight-digit level with the PRODCOM List. 10- and 12-digit groupings result from the demands reported by domestic users. The PRODPOL nomenclature is updated annually and is available on the Statistics Poland website [PRODPOL](#).

It is very important to determine the unit of measurement for each grouping that corresponds to physical characteristics and intended use of particular type of product.

In most cases, the data is collected in the physical units of measure. For non-homogeneous product groupings, if they have at least one common feature defining their properties, conventional units of measure are used. A typical example of the use of conventional units of measure are chemical products in which the quantity is expressed in terms of pure ingredient. For groupings containing products of considerable diversity, e.g. pharmaceutical products, it is not possible to use physical units of measure. In this case, data are collected only on the value of sold production in current prices expressed in thousands zloty (PLN).

In cases where one unit of measure does not specify sufficiently the functional features of a given product as well as the volume of its production, several units of measure are used at the same time.

The annual data on the production of industrial products may be reviewed three times a year for a period of four years after the end of the reporting year. In exceptional cases, the data may be subject to revision in the long term, due to the specificity of the production of industrial products survey related to the difficulties in classifying certain products to the relevant groupings of PKWiU / PRODPOL.

2. Main definitions

Manufactured production is the result of manufacturing processes, mutually interrelated and conditioned, occurring at a given time.

Manufactured production includes the total quantity of finished products produced in the reporting period, both from manufacturer's own raw material and from raw material provided by another enterprise or individual person. It also includes the total volume of semi-finished products, parts, sets of machinery and equipment, regardless of whether they were intended for sale or to the parent company, to other plants of the same company, or intended for further processing (assembly) in the enterprise. Therefore, manufactured products include products manufactured by the enterprise, meeting certain standards, technical conditions or contractual terms concluded between the contractor and the recipient. Products made of secondary raw material are considered as production, if they are of utility and are a direct result of the manufacturing work of the enterprise. The production also includes the so-called by-products, created in the production process simultaneously with the main product.

Sold production of industrial products is the quantity and value of products of own production or production ordered in another enterprise from provided materials, sold outside of the enterprise in the reporting period, regardless of the moment of their production.

Finished products are products that are not further processed within the same enterprise in which they were produced, that means products completely finished and completed, after passing the entire production process. Finished goods should comply with certain standards, and in case of lack of such requirements – with specifications or contractual conditions concluded between the manufacturer and the recipient.

Sold production under sub-contracted operations (subcontracted production service) is the manufacture of products on order by a contractor from material entrusted by the principal, where the value of the entrusted materials must exceed 80% of the value of the materials used in production. The value of a subcontracting service is the income received from activities to produce products made on behalf of another company from materials entrusted by that company. The contractor also provides, in whole or in part, technical specifications, patterns, blanks, recipes.

Contract manufacturing from entrusted material occurs when:

- the value of entrusted material is more than 80% of the value of the materials used in production,
- entrusted material (raw material) has a lower value than 80% of the value of the materials used in production, but constitutes the basic material (raw material) for the manufacture of a new product

Recovery means any operation, the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfill a particular function, or by which waste being prepared to fulfil that function, in the plant or in the wider economy.

Secondary raw materials – materials resulting from processing (mechanical or chemical) of production wastes, pre-sorted municipal wastes or scrap and used products, suitable for direct use in industrial production (replacing the primary raw material), not being a new final product.

The embedded system is a digital hardware consisting of a processor, memory and input-output devices (microcontroller), designed for real time control of the product which it is a part of. Personal computers, laptops, tablets, telephones and smartphones and other communication network equipment are not considered to be products containing embedded systems.

The Internet of Things element is a product with an embedded system with an Internet connection.

Entity with foreign capital is the entity in which the share of foreign capital in the basic capital is 100%.

Entity with a majority share of foreign capital is the entity in which the share of foreign capital in the share capital in the basic capital is 50,0%–99,9%.

Foreign capital is the capital contributed to the unit in the form of financial resources (cash, shares, bonds), tangible fixed assets (machines, equipment, means of transport, real estate) and intangible assets (patents, licenses, etc.) by a foreign entity. A foreign entity may be: a natural person without Polish citizenship; a legal person located abroad; an organizational unit without legal personality located abroad

The share of foreign capital in core capital is determined on the basis of an annual survey of entities with foreign capital conducted for the previous reference year.

Annex 1

Share in value of sold production of industrial products in PKWiU divisions by the most common predominant activity of entities in 2024

Industrial activity		Non-industrial activity	
Other products of mining and quarrying			
Other mining and quarrying	82.0%	Land transport and transport via pipelines	0.8%
Manufacture of other non-metallic mineral products	10.0%	Works related to construction of civil engineering	0.6%
Manufacture of chemicals and chemical products	3.0%		
Food products			
Manufacture of food products	95.1%	Wholesale trade	2.1%
Manufacture of chemicals and chemical products	.	Retail trade	0.8%
Manufacture of basic pharmaceutical substances and medicines and other pharmaceutical products	0.3%	Crop and animal production. hunting	0.6%
Textiles			
Manufacture of textiles	66.2%	Wholesale trade	4.2%
Manufacture of rubber and plastic products	13.0%	Retail trade	0.2%
Manufacture of furniture	.		
Manufacture of fabricated metal products	2.9%		
Manufacture of motor vehicles, trailers and semi-trailers excluding motorcycles	.		
Manufacture of wearing apparel	1.7%		
Wearing apparel			
Manufacture of wearing apparel	76.6%	Retail trade	14.5%
Manufacture of textiles	2.8%	Wholesale trade	3.6%
Other manufacturing	0.8%		
Leather and related products			
Manufacture of leather and related products	88,6%	Wholesale trade	1.4%
Manufacture of textiles	.	Retail trade	
Manufacture of wearing apparel	1.9%		
Wood and products of wood and cork; articles of straw and plaiting materials			
Manufacture of wood and of products of wood and cork	88.5%	Wholesale trade	1.7%
Manufacture of furniture	3.8%	Construction of buildings	1.1%
Manufacture of paper and paper products	2.8%		
Paper and paper products			
Manufacture of paper and paper products	89.8%	Wholesale trade	0.7%
Printing and reproduction of recorded media	6.9%		
Manufacture of rubber and plastic products	1.2%		
Printing services and reproduction services of recorded media			
Printing and reproduction of recorded media	70.4%	Publishing activities	17.4%
Manufacture of rubber and plastic products	.	Advertising and market research	0.7%
Manufacture of paper and paper products	2.5%		

Chemicals and chemical products			
Manufacture of chemicals and chemical products	77.5%	Wholesale trade	2.9%
Manufacture of coke and refined petroleum products	10.3%		
Manufacture of rubber and plastic products	1.7%		
Manufacture of other non-metallic mineral products	1.3%		
Manufacture of beverages	1.1%		
Manufacture of food products	0.9%		
Manufacture of basic metals	0.8%		
Pharmaceutical products and preparations			
Manufacture of basic pharmaceutical products	92.7%	Wholesale trade	.
Manufacture of food products	4.0%		
Rubber and plastic products			
Manufacture of rubber and plastic products	86.3%	Wholesale trade	1.1%
Manufacture of motor vehicles, trailers and semi-trailers	3.7%		
Manufacture of chemicals and chemical	2.2%		
Manufacture of wood and of products of wood and cork	1.3%		
Other non-metallic mineral products			
Manufacture of other non-metallic mineral products	90.0%	Works related to construction of civil engineering	1.9%
Manufacture of chemicals and chemical	2.2%	Construction of buildings	0.8%
Manufacture of rubber and plastic products	1.6%	Wholesale trade	0.6%
Other mining and quarrying	1.0%		
Basic metals			
Manufacture of basic metals	49.9%	Wholesale trade	2.9%
Mining of metal ores	.		
Manufacture of fabricated metal products	14.6%		
Manufacture of machinery and equipment	0.7%		
Fabricated metal products			
Manufacture of fabricated metal products	73.8%	Wholesale trade	2.8%
Manufacture of basic metals	6.2%	Specialised construction activities	0.8%
Manufacture of machinery and equipment	3.4%		
Manufacture of motor vehicles, trailers and semi-trailers	2.9%		
Manufacture of rubber and plastic products	2.8%		
Manufacture of electrical equipment	1.0%		
Computers, electronic and optical products			
Manufacture of computer, electronic and optical products	89.4%	Wholesale trade	1.1%
Manufacture of electrical equipment	3.3%		
Manufacture of other non-metallic mineral products	.		
Manufacture of motor vehicles, trailers and semi-trailers	.		
Manufacture of machinery and equipment	0.8%		
Electrical equipment			
Manufacture of electrical equipment	77.1%	Wholesale trade	0.9%
Manufacture of computer, electronic and optical products	7.3%	Specialised construction activities	0.2%
Manufacture of motor vehicles, trailers and semi-trailers	6.1%		
Manufacture of machinery and equipment	2.6%		
Manufacture of fabricated metal products	2.0%		

Machinery and equipment			
Manufacture of machinery and equipment	62.6%	Wholesale trade	2.3%
Manufacture of motor vehicles, trailers and semi-trailers	12.6%		
Manufacture of fabricated metal products	12.4%		
Manufacture of rubber and plastic products	2.1%		
Manufacture of electrical equipment	2.0%		
Manufacture of computer, electronic and optical products	1.2%		
Other transport equipment			
Manufacture of other transport equipment	89.7%	Wholesale trade	0.3%
Manufacture of fabricated metal products	2.8%		
Manufacture of computer, electronic and optical products	.		
Manufacture of basic metals	.		
Other manufacturing	.		
Furniture			
Manufacture of furniture	85.6%	Wholesale trade	0.7%
Manufacture of fabricated metal products	3.1%	Retail trade	0.7%
Manufacture of textiles	2.0%		
Manufacture of wood and of products of wood and cork	1.7%		
Manufacture of motor vehicles, trailers and semi-trailers	.		
Other manufactured goods			
Other manufacturing	76.9%	Wholesale trade	1.9%
Manufacture of rubber and plastic products	7.0%	Retail trade	0.8%
Manufacture of fabricated metal products	1.4%		
Manufacture of basic pharmaceutical products	1.3%		
Manufacture of computer, electronic and optical products	1.1%		
Manufacture of other non-metallic mineral products	.		

Annex 2

Abbreviations of descriptions of sections, divisions, products and units

Complete name	Abbreviation
Division of NACE	
Crop and animal production, hunting, including service activities	Crop and animal production, hunting
Manufacture of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	Manufacture of products of wood, cork, straw and plaiting materials
Manufacture of basic pharmaceutical substances and medicines and other pharmaceutical products	Manufacture of pharmaceutical products
Manufacture of fabricated metal products, except machinery and equipment	Manufacture of fabricated metal products
Manufacture of machinery and equipment not elsewhere classified	Manufacture of machinery and equipment
Manufacture of motor vehicles, trailers and semi-trailers excluding motorcycles	Manufacture of motor vehicles, trailers and semi-trailers
Wholesale trade, excluding motor vehicles	Wholesale trade
Retail trade, except retail trade of motor vehicles	Retail trade
Architectural and engineering activities; technical testing and analysis	Architectural and engineering activities
Divisions of PKWiU	
Wood and products of wood and cork except furniture; articles of straw and plaiting materials	Wood and products of wood and cork; articles of straw and plaiting materials
Coke, briquette and similar solid fuels from coal or peat, and refined petroleum products	Coke and refined petroleum products
Basic pharmaceutical products, medicaments and other pharmaceutical preparations	Pharmaceutical products and preparations
Basic metals	Metals
Fabricated metal products, except machinery and equipment	Fabricated metal products
Machinery and equipment n.e.c.	Machinery and equipment
Products of PKWiU/PRODPOL	
Hard coal, excluding coal briquettes and similar solid fuels	Hard coal
Lignite, excluding coal briquettes and similar solid fuels	Lignite
Petroleum oils and oils obtained from bituminous minerals, crude	Oils from crude oil
Natural gas in liquid or gas state	Natural gas
Produkty uboju bydła i cieląt wliczane do wydajności poubojowej w wadze poubojowej ciepłej	Produkty uboju bydła i cieląt
Produkty uboju trzody chlewnej wliczane do wydajności poubojowej w wadze poubojowej ciepłej	Produkty uboju trzody chlewnej
Fresh or chilled carcasses, half-carcasses and quarters with bone in, of beef and veal	Fresh or chilled carcasses, half-carcasses and quarters, of beef and veal
Canned pork, beef, veal meat, including shoulders and hams and canned edible meat offal	Canned beef and veal meat
Frozen vegetables and mixtures of vegetables, uncooked or cooked by steaming or boiling in water (excluding potatoes)	Frozen vegetables

Complete name	Abbreviation
Refined rape, colza or mustard oil and their fractions (excluding chemically modified)	Refined rape, colza or mustard oil
Milk and cream of a fat content by weight of $\leq 1\%$, not concentrated nor containing added sugar or other sweetening matter, in immediate packings of a net content $\leq 2\text{ l}$	Milk and cream of a fat content by weight of $\leq 1\%$, in immediate packings of a net content $\leq 2\text{ l}$
Milk and cream of a fat content by weight of $\leq 1\%$, not concentrated nor containing added sugar or other sweetening matter, in immediate packings of a net content $> 2\text{ l}$	Milk and cream of a fat content by weight of $\leq 1\%$, in immediate packings of a net content $> 2\text{ l}$
Milk and cream of a fat content by weight of $> 1\%$ but $\leq 6\%$, not concentrated nor containing added sugar or other sweetening matter, in immediate packings of a net content $\leq 2\text{ l}$	Milk and cream of a fat content by weight of $> 1\%$ but $\leq 6\%$, in immediate packings of a net content $\leq 2\text{ l}$
Milk and cream of a fat content by weight of $> 1\%$ but $\leq 6\%$, not concentrated nor containing added sugar or other sweetening matter, in immediate packings of a net content $> 2\text{ l}$	Milk and cream of a fat content by weight of $> 1\%$ but $\leq 6\%$, in immediate packings of a net content $> 2\text{ l}$
Milk and cream of a fat content by weight of $> 6\%$ but $\leq 21\%$, not concentrated nor containing added sugar or other sweetening matter, in immediate packings of $\leq 2\text{ l}$	Milk and cream of a fat content of $> 6\%$ but $\leq 21\%$, not concentrated and nor sweetened
Unripened or uncured cheese (fresh cheese) (including whey cheese and curd)	Fresh cheese (unripened or uncured cheese)
Groats and meal of oats, maize, rice, rye, barley and other cereals (excluding wheat)	Groats and meal of cereals (excluding wheat)
Uncooked pasta, containing eggs (excluding stuffed or otherwise prepared)	Uncooked pasta, containing eggs
Preparations used for farm animal feeding (excluding premixtures): poultry	Prepared feeds for poultry (excluding premixtures)
Vodka of an alcoholic strength by volume of $\leq 45,4\%$	Vodka
Articles of bedding including quilts and eiderdowns, cushions, pouffes, pillows, excluding mattresses, sleeping bags	Articles of bedding
Tents, including a tent-awning attached to a mobile home	Tents
Waterproof footwear, with outer soles and uppers of rubber or plastics, other than footwear incorporating a protective metal toe-cap	Rubber or plastic footwear
Footwear with uppers of leather, other than sports footwear, footwear incorporating a protective metal toe-cap and miscellaneous special footwear	Footwear with leather uppers
Footwear with uppers of textile materials, other than sports footwear	Footwear with textile uppers
Medium density fibreboard (MDF), of wood or other ligneous materials, whether or not bonded with resins or other organic substances, of a thickness not exceeding 5 mm	Medium density fibreboard (MDF) of a thickness not exceeding 5 mm
Windows, french windows, of wood	Windows of wood
Sacks and bags, with a base width $\geq 40\text{ cm}$, of paper, paperboard, cellulose wadding or webs of cellulose fibres	Sacks and bags, with a base width $\geq 40\text{ cm}$
Sacks and bags of paper, paperboard, cellulose wadding or webs of cellulose fibres (excluding those with a base width $\geq 40\text{ cm}$)	Sacks and bags, excluding those with a base width $\geq 40\text{ cm}$
Sanitary towels, tampons and similar articles of paper pulp, paper, cellulose wadding or webs of cellulose fibres	Sanitary towels, tampons and similar articles of paper
Napkins (diapers) and napkin liners and similar sanitary articles of paper pulp, paper, cellulose wadding or webs of cellulose fibers, (excluding toilet paper, sanitary towels, tampons and similar articles)	Napkins and napkin liners for babies

Complete name	Abbreviation
Coke and semi-coke obtained from coal, lignite, peat; retort carbon	Coke
Plastics in primary forms	Plastics
Polymers of styrene, in primary forms	Polystyrene
Poly(ethylene terephthalate), in primary forms	Poly(ethylene terephthalate)
Polypropylene, in primary forms	Polypropylene
Insecticides prepared in forms or packages for retail sale or in the form of preparations and articles	Insecticides
Herbicides prepared in forms or packages for retail sale or in the form of preparations and articles	Herbicides
Anti-sprouting products and plant growth regulators put up in forms or packings for retail sale, or in the form of preparations or articles	Anti-sprouting products and plant growth regulators
Fungicides prepared in forms or packages for retail sale or in the form of preparations and articles	Fungicides
Soap, organic surface-active products and preparations used as soap	Soap
Soap in forms excluding bars, cakes or moulded shapes, paper, wadding, felt and non-wovens impregnated or coated with soap/detergent, flakes, granules or powders	Soap in other forms (pastes, liquids, pieces of paper or cloth saturated with soap, etc.)
Plates, sheets, film, foil and strip, of polymers of ethylene, non-cellular, not reinforced, laminated	Plates, sheets, film, foil and strip, of polymers of ethylene, non-cellular
Plates, sheets, film, foil and strip, of polymers of propylene, non-cellular, not reinforced, laminated	Plates, sheets, film, foil and strip, of polymers of propylene, non-cellular
Plates, sheets, film, foil and strip, of polymers of styrene, not reinforced, laminated	Plates, sheets, film, foil and strip, of polymers of styrene
Plates, sheets, film, foil and strip, of polymers of vinyl chloride, non-cellular, not reinforced, laminated	Plates, sheets, film, foil and strip, of polymers of vinyl chloride, non-cellular
Plates, sheets, film, foil, strip, of polyethylene terephthalate, non-cellular, not reinforced, laminated	Plates, sheets, film, foil, strip, of polyethylene terephthalate, non-cellular
Plastic windows for building industry	Windows
Float glass and surface ground or polished glass, in sheets, but not otherwise worked	Float glass
Laminated safety glass, of size and shape suitable for incorporation in motor vehicles, aircraft, spacecraft, vessels and other vehicles	Laminated safety glass suitable for incorporation in vehicles
Portland cement, aluminous cement, slag cement and similar hydraulic cements	Cement
Ready-mixed concrete	Ready-mixed concrete
Crude steel: unalloyed steel produced in electric furnaces	Electric non-alloy steel
Crude steel: unalloyed steel produced in a manner other than electric furnaces	Unalloyed converter steel
Crude steel: Alloy steel other than stainless steel produced in electric furnaces	Electric alloy steel
Crude steel: alloy steel other than stainless steel produced by processes other than electric furnaces	Converter alloy steel
Raw steel: stainless steel and heat-resistant steel produced in electric furnaces	Stainless steel
Unwrought unalloyed refined copper (excluding rolled, extruded or forged sintered products)	Unwrought, unalloyed refined copper

Complete name	Abbreviation
Copper and copper alloy bars, rods, profiles and hollow profiles (excluding bars and rods obtained by casting or sintering, copper wire rod in coils)	Copper and copper alloy bars, rods, profiles and hollow profiles
Copper and copper alloy tube/pipe fittings including couplings, elbows, sleeves, tees and joints excluding bolts and nuts used for assembling/fixing pipes/tubes, fittings with taps, cocks, valves	Copper and copper alloy tube/pipe
Copper and copper alloy plates, sheets and strip of a thickness > 0,15 mm (excluding expanded copper metal, insulated electric strip)	Copper and copper alloy plates, sheets and strip of a thickness more than 0.15 mm
Digital automatic data processing machines, comprising in the same housing at least a central processing unit and an input and an output unit, whether or not combined	Desktop computers
Laptop PCs and palm-top organisers	Laptops, notebooks
Other television receivers, whether or not combined with radio-broadcast receivers or sound or video recording or reproduction apparatus n.e.c.	Television receivers
Liquid supply or production meters (including calibrated) (excluding pumps)	Liquid supply or production meters
Electricity supply or production meters (including calibrated) (excluding voltmeters, ammeters, wattmeters and the like)	Electricity meters
Household dishwashing machines	Dishwashing machines
Refrigerated show-cases and counters incorporating a refrigerating unit or evaporator (excluding for frozen food storage)	Refrigerated show-cases and counters, excluding for frozen food storage
Lathes for removing metal	Lathes
Non-numerically and numerically controlled milling machines and tool-milling machines for working metal (including plano-milling machines) (excluding boring-milling machines)	Milling machines
Passenger cars, equipped with a high- or medium-pressure compression-ignition internal combustion piston engine, with a cylinder capacity not exceeding 1500 cm ³ , excluding vehicles for the transport of more than 10 persons, snowmobiles, golf vehicles and the like	Passenger cars with a diesel engine of cylinder capacity less than or equal to 1500 cm ³
Passenger cars, equipped with a high- or medium-pressure compression-ignition internal combustion piston engine, with a cylinder capacity exceeding 1500 cm ³ but not more than 2500 cm ³ , excluding vehicles for transporting more than 10 people, snowmobiles, golf vehicles and similar	Passenger cars with a diesel engine of cylinder capacity more than 1500 cm ³ but not more than 2500 cm ³
Motor vehicles for the transport of ≥ 10 persons	Motor vehicles for the transport of 10 or more persons
Motor vehicles for the transport of ≥ 10 persons, with compression-ignition internal combustion piston engines of a cylinder capacity ≤ 2500 cm ³	Buses with diesel engine of a cylinder capacity ≤ 2500 cm ³
Motor vehicles for the transport of ≥ 10 persons, with compression-ignition internal combustion piston engines of a cylinder capacity > 2500 cm ³	Buses with diesel engine of a cylinder capacity > 2500 cm ³
Motor vehicles for the transport of ≥ 10 persons, with spark-ignition internal combustion piston engines of a cylinder capacity > 2800 cm ³	Buses with spark-ignition engine of a cylinder capacity > 2800 cm ³
Motor vehicles for the transport of ≥ 10 persons, with hybrid power system (with both spark-ignition or compression-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion)	Buses with hybrid propulsion (both electric motor and internal combustion engine)

Complete name	Abbreviation
Motor vehicles for the transport of ≥ 10 persons with battery-powered electric motor	Buses with battery-powered electric motor
Motor vehicles for the transport of ≥ 10 persons with electric motor powered by traction network	Busses with electric motor powered by traction network (trolleybuses)
Motor vehicles for the transport of goods with only compression-ignition internal combustion piston engine (diesel or semi-diesel)	Trucks and lorries with Diesel engine
Motor vehicles for the transport of goods with only spark-ignition internal combustion piston engine; other goods vehicles, new	Trucks and lorries with spark-ignition engine
Containers specially designed and equipped for carriage by one or more modes of transport (including containers for transporting fluids)	Containers for carriage, including containers for transporting fluids
Insulated ignition wiring sets and other wiring sets of a kind used in vehicles, aircraft or ships	Wiring sets of a kind used in vehicles, aircraft or ships
Self-propelled railway or tramway coaches, vans and trucks, except maintenance or service vehicles	Self-propelled railway or tramway carriages
Children's bicycles - bicycles with a saddle height from the ground of more than 435 mm and less than 635 mm	Children's bicycles
Wooden furniture and furniture made of wood-based materials, of a kind used in kitchens, for fitted	Wooden kitchen furniture for fitted kitchen
Mattresses of cellular plastics (including with a metal frame) (excluding water-mattresses, pneumatic mattresses)	Mattresses of cellular plastics
Wooden bedroom furniture (excluding builders' fittings for cupboards to be built into walls, mattress supports, lamps and lighting fittings, floor standing mirrors, seats)	Wooden furniture for bedroom
Wooden furniture for the dining-room and living-room (excluding floor standing mirrors, seats)	Wooden furniture for the dining-room and living-room
Candles, tapers and the like (including night lights fitted with a float) (excluding anti-asthmatic candles, wax matches or vestas, sulphur-treated bands, wicks and candles)	Candles

List of measurement units

hl	hectolitre
hl 100%	hectolitre of pure (100%) alcohol
hm ³	cubic hectometre
m ²	square metre
dam ³	thousand cubic metre
mld	billion (1000 mln)
mln	million
PLN	zloty
1000 t	thousand tonnes
1000 t palum	thousand tonnes of coal equivalent
tonne H ₂ SO ₄	tonne of sulphuric acid
tonne HCl	tonne of hydrogen chloride
tonne HNO ₃	tonne of nitric acid
tonne NaOH	tonne of sodium dioxide (caustic soda)
tonne NH ₃	tonne of ammonia
tonne P ₂ O ₅	tonne of phosphorus pentoxide
PJ	petajoule