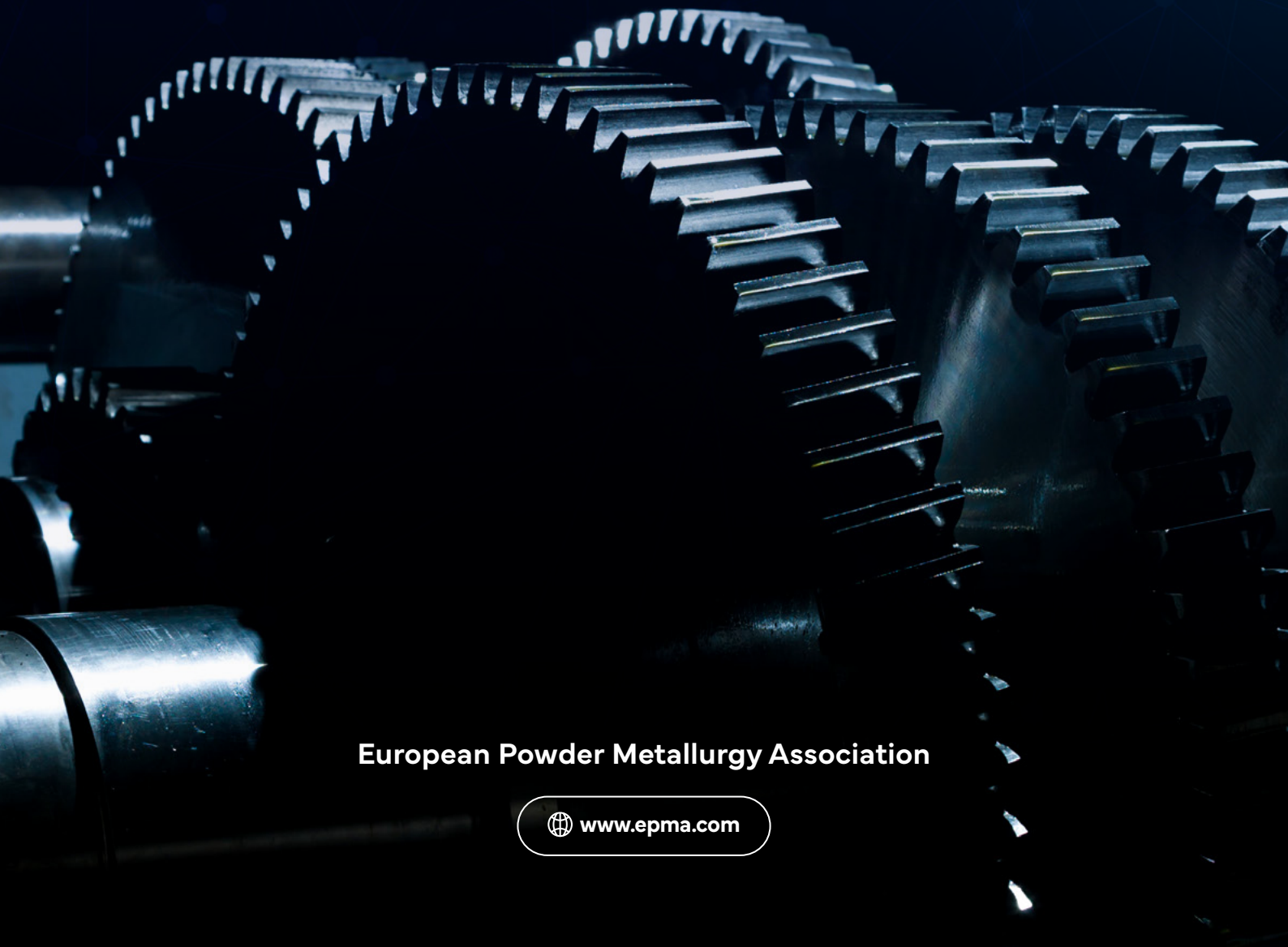
KEY FIGURES

OVERVIEW OF STATUS & TRENDS IN PM INDUSTRY 2026



European Powder Metallurgy Association

www.epma.com



TABLE OF CONTENT

1 / PM STATISTICS

EU Metal Powder Production (2025) 4

European Powders for PM Parts Share by Technology

PM Parts Tonnage By Sector

Value Of Parts Production (2025) 6

Press & Sinter 7

Hard Materials 7

Metal Injection Moulding 8

Additive Manufacturing 9

HIP 9

2 / ECONOMICS

GDP (Constant Prices, Percent Change) 10

Commodities 11

Crude Steel

APT Tungsten

Ferro Chromium

Cobalt

Nickel

3 / INDUSTRIES

Automotive 18

The Market for Combustion Engines

European Passenger Car Registrations for Alternatively Powered Vehicles

Aerospace 21

Global Passenger Traffic

Commercial Aircraft Deliveries

Medical 22

Global Medical Device Sales - Forecast

Revenue Shares by Region (2025)

European Medical Industry Revenues by Country in 2025

Energy 24

World Total Energy Supply by Region

World Total Energy Supply by Source

World Energy Consumption by Source (2025)

World Total Energy Consumption by Region (2025)

4 / EPMA ACTIVITIES

Congress 26

Seminars 26

Summer School 26

Club Projects 26

Statistics, Trend surveys, Benchmarking 26

European Projects 27

1/ PM STATISTICS

EU METAL POWDER PRODUCTION (2025)

- Overall metal powder production decreased by 4.2% to **202 kt** in 2025 compared to 2024
- Metal powder for PM parts decreased by 5.3% to **162 kt** in 2025 compared to 2024

All Uses (Total)	- 4.2%
Iron & Steel Powders	- 6.1%
Non-Ferrous Powders	+ 5.3%

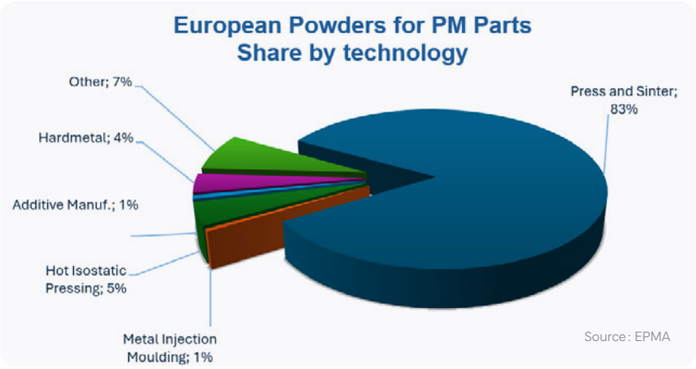
PM Uses (Total)	- 5.3%
Iron & Steel Powders For PM	- 6.6%
Non-Ferrous Powders For PM	+ 4.0%

European Powders for PM Parts Share by Technology

The powder production in Europe was assessed through the annual Powder Statistics survey. Total production of iron & steel and non-ferrous powders sold in the EU for all applications decreased by more than 4% in 2025 to approximately 202 kt, continuing the trend observed in recent years. Powders sold for PM parts production declined by over 5% to around 162 kt, reflecting a 6.6% decrease in iron and steel powders, partly offset by a 4% increase in non-ferrous powders.

Press & sinter remained the dominant end-use technology, accounting for around 83% of total PM powder consumption. HIP continued to represent the second-largest application, while Additive Manufacturing further increased both its volume and market share. The hardmetals sector is likely underrepresented due to limited participation in the survey and the exclusion of hard-phase materials such as carbides.

The 2025 results carry a higher degree of uncertainty than usual, owing to the phased withdrawal of Rio Tinto from the European powder market during the year. As a result, certain values were estimated and may be adjusted following the evaluation of the 2026 data.

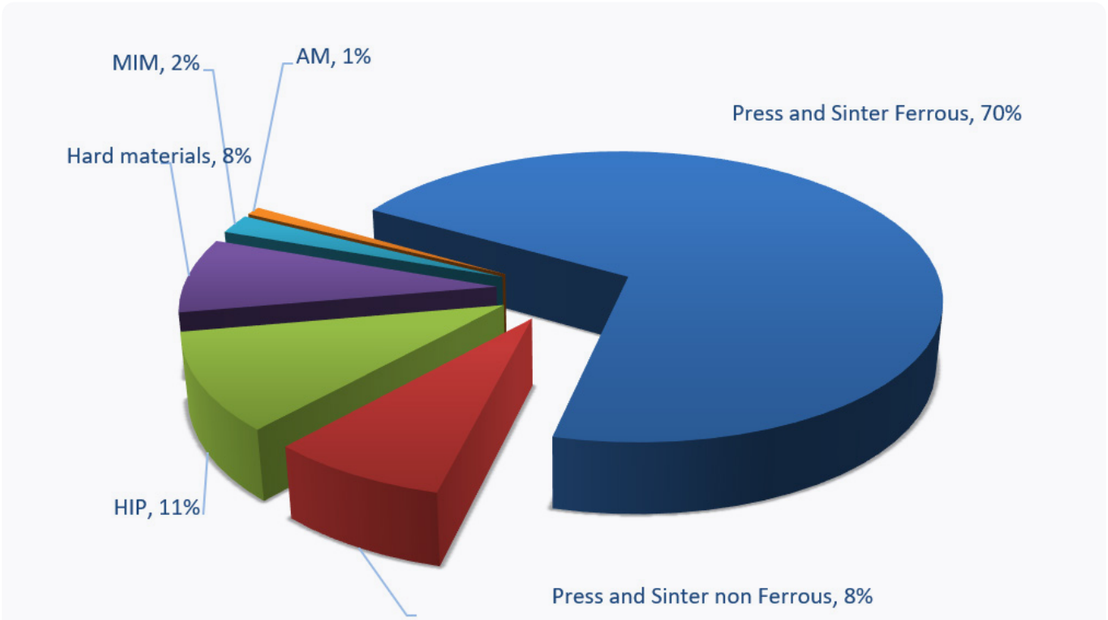


PM Parts Tonnage by Sector

The chart below shows the distribution of tonnages declared by part producers in the various surveys conducted by the EPMA, complemented where necessary by estimates. Ferrous press & sinter continues to dominate the ranking and remains by far the largest PM technology, with its share becoming even more significant when combined with non-ferrous press & sinter production.

Additive Manufacturing continued its growth trajectory, driven primarily by increasing in-house production at larger companies and end users rather than by dedicated AM service providers. HIP and magnetic materials also recorded further growth in tonnage. MIM reversed the declining trend observed over the previous two years and returned to modest growth, while the hard materials sector experienced a reduction in volumes, particularly in the diamond tools segment.

Despite these developments, the overall distribution of tonnage shares between the different PM technologies remained broadly unchanged compared with the previous year.



	P&S Ferr	P&S Nonferr	HIP	HM	MIM	AM
Share	70%	8%	10%	8%	2%	1%
YoY, %	-5.0%	+0.4%	+5.1%	-6.0%	+0.8%	+7.0%

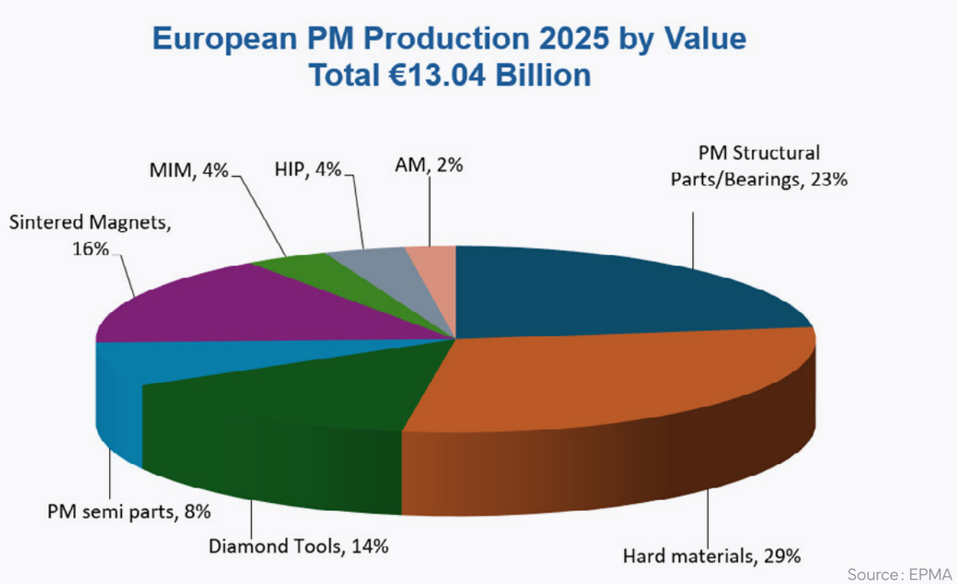
VALUE OF PARTS PRODUCTION (2025)

Turnover in euro terms showed a limited decline of around 0.8% in 2025, remaining just above €13 billion. PM structural parts recorded a further decrease of slightly less than 2%, continuing the trend observed in recent years.

Hard materials, and particularly diamond tools, experienced subdued market conditions. Although significant increases in the cost of tungsten, as well as cobalt and diamond powders, supported higher nominal values, these cost increases could not be fully transferred to customers through prices. Nevertheless, hard materials continued to account for approximately 45% of total turnover due to their inherently higher value compared with other PM products.

Additive Manufacturing maintained its growth trend, albeit at a more moderate pace than in previous years, while MIM stabilised after two consecutive years of decline. HIP continued to expand and magnetic materials further benefited from their strategic role in electrification applications.

Overall, the distribution of turnover among the different PM sectors remained broadly stable, with growth in AM, HIP and magnets partly offsetting weaker performance in structural parts and hard materials applications.



Source: EPMA

	PM Structural Parts/ Bearings	Hard Materials	Diamond Tools	PM Semi Parts	Sintered Magnets	MIM	HIP	AM
Share	23%	29%	14%	8%	16%	4%	4%	2%
YoY, %	-1.7%	-2.5%	-10.0%	+4.0%	+8.5%	+0.8%	+7.5%	+6.9%

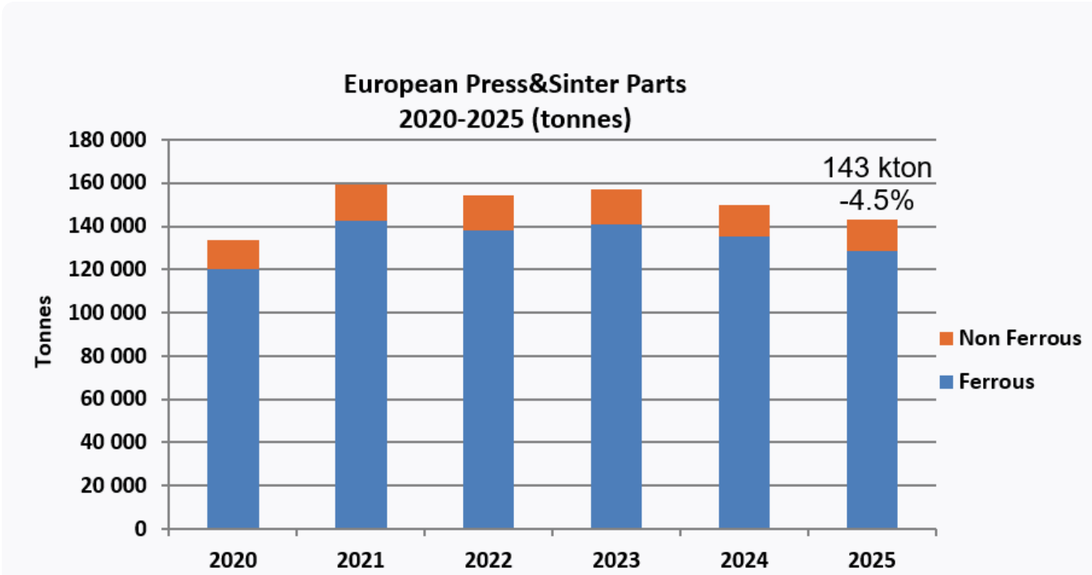
Source: EPMA

PRESS & SINTER

The Press & Sinter sector, which is predominantly oriented towards automotive applications, comprises both ferrous and non-ferrous parts, the latter being mainly copper based. The tonnage of parts produced in 2025 decreased by approximately 4.5% compared with 2024, reaching 143 kt, a decline very similar to that recorded in the previous year.

Ferrous structural parts continued to account for the vast majority of production and were responsible for most of the overall decrease in volume. In contrast, non-ferrous parts recorded a modest increase, partially offsetting the decline in the ferrous segment.

Despite the challenging market environment, Press & Sinter remains by far the largest PM technology in Europe.

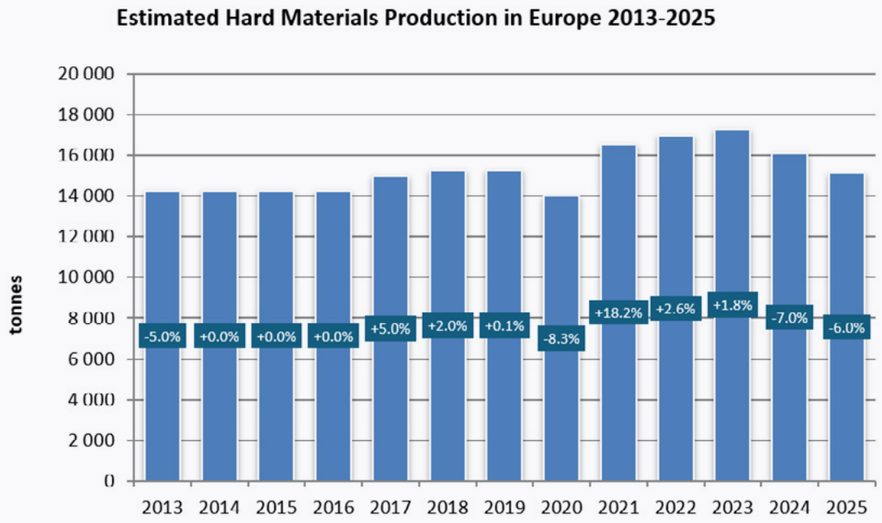


Source: EPMA

HARD MATERIALS

The Hard Materials sector showed another contraction in 2025. Hard Metal Carbide tools proved more resilient than diamond tools, but both segments recorded lower volumes. The increase in tungsten prices, together with higher cobalt and industrial diamond costs, helped mitigate the decline in value, although these increases could not be fully transferred to customers.

Raw material supply remains a major concern, driving efforts to diversify sources and improve recycling efficiency. In this context, projects such as RESQTOOL can contribute to reducing dependence on virgin materials and strengthening the resilience of the supply chain.

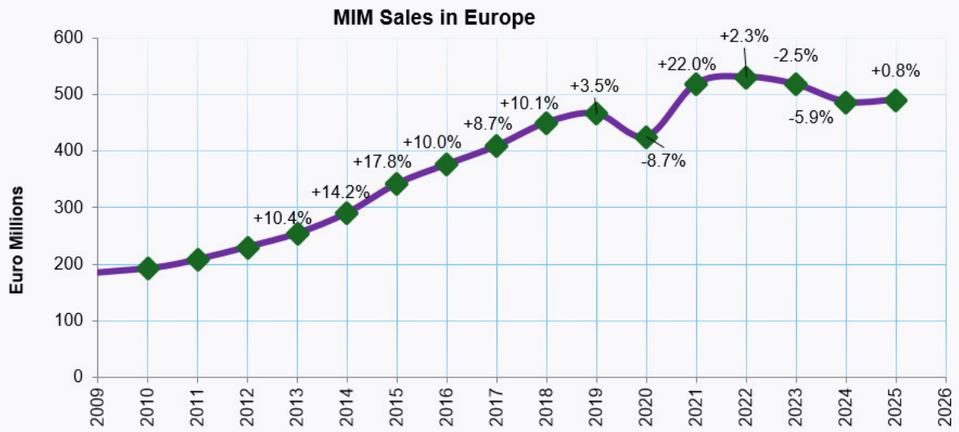


Source: EPMA

METAL INJECTION MOULDING

In 2025 the MIM sector showed a modest rebound, a significant result after two consecutive years of decline that had led to a combined reduction of almost 10%. Despite a challenging economic environment and strong international competition, the technology maintained a European market value close to €500 million.

However, part of this market continues to be supplied by non-European manufacturers, reflecting the increasingly global nature of the MIM industry.

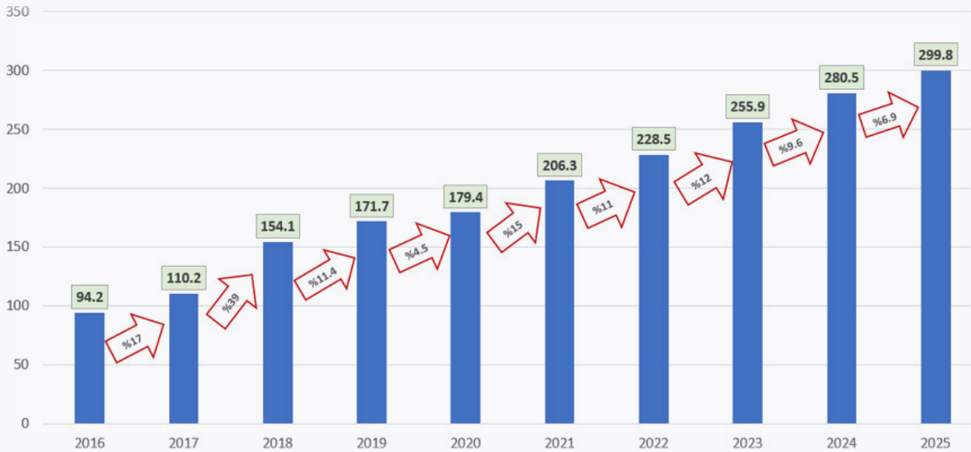


Source: EPMA

ADDITIVE MANUFACTURING

According to the EuroAM survey, metal AM part production continued to grow in 2025, although at a more moderate pace than in the previous year. Growth is estimated at around 7%, compared with nearly 10% in 2024, bringing the European market value to approximately €300 million.

Further feedback from the industry will be required to validate these figures and to better assess developments across parts production, materials consumption and equipment sales.

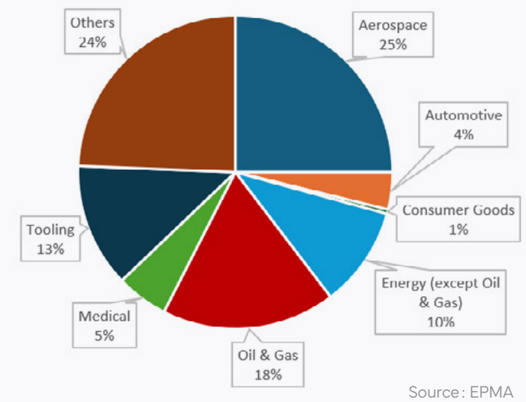


Source: EPMA

HIP

The HIP sector shows an estimated increase in value by about 5.1% in 2025, continuing its positive growth trend as industry confidence in technology remains strong. The EUROHIP trend survey confirms that HIP is used across a wide range of sectors and that the outlook for the coming years remains positive.

Growth is expected to come from several industries, including consumer goods, while Medical, Automotive and Aerospace continue to represent some of the largest markets for HIP applications.



Source: EPMA

2 / ECONOMICS

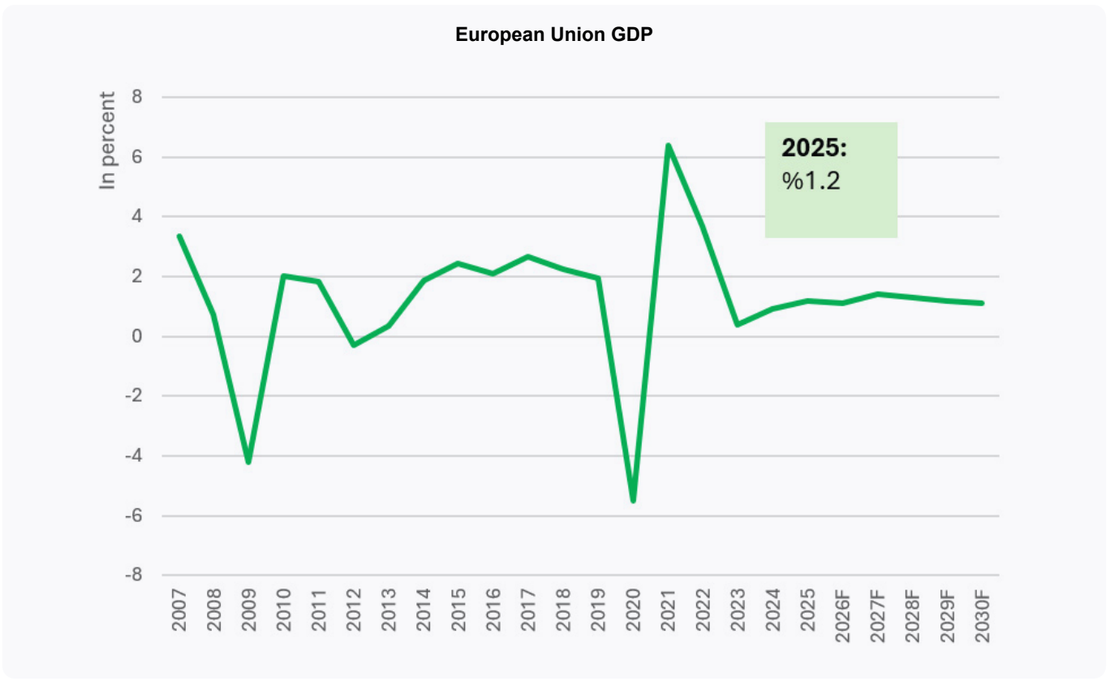
GDP (CONSTANT PRICES, PERCENT CHANGE)

Global GDP growth remained broadly stable in 2025, although the European economy continued to be affected by geopolitical tensions, weak industrial demand and competitiveness concerns. China maintained higher growth rates than the world average, despite its continuing slowdown trend.

Global growth is expected to remain around 3% in the coming years. Inflation has declined substantially from the levels seen in 2022-2024, but remains above pre-pandemic values, while uncertainty linked to energy markets and geopolitical developments continues to affect the outlook.







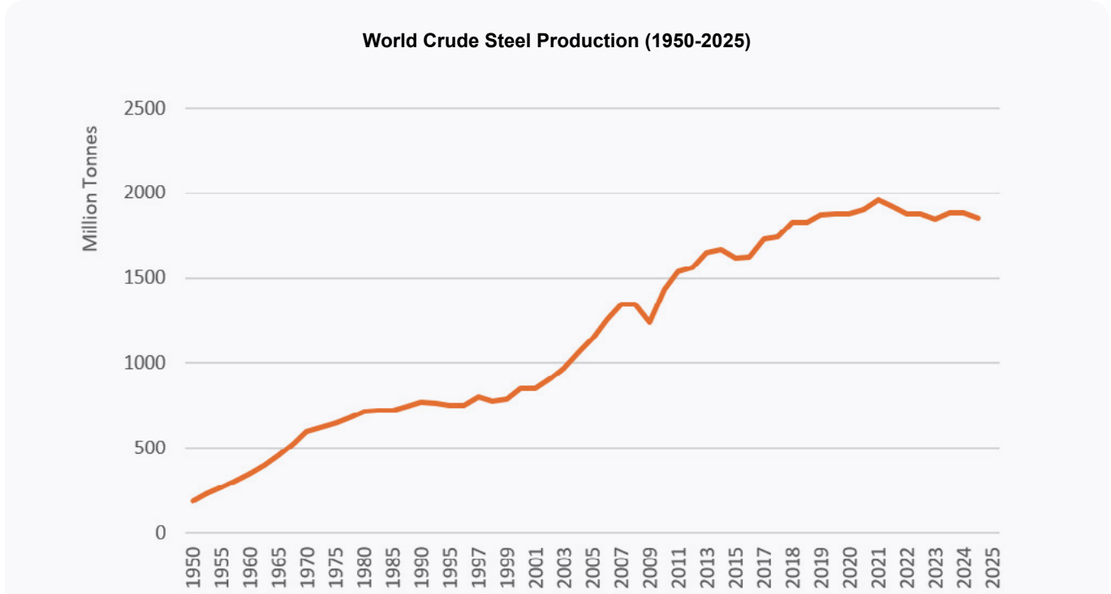
Source : imf.org

COMMODITIES

Crude Steel

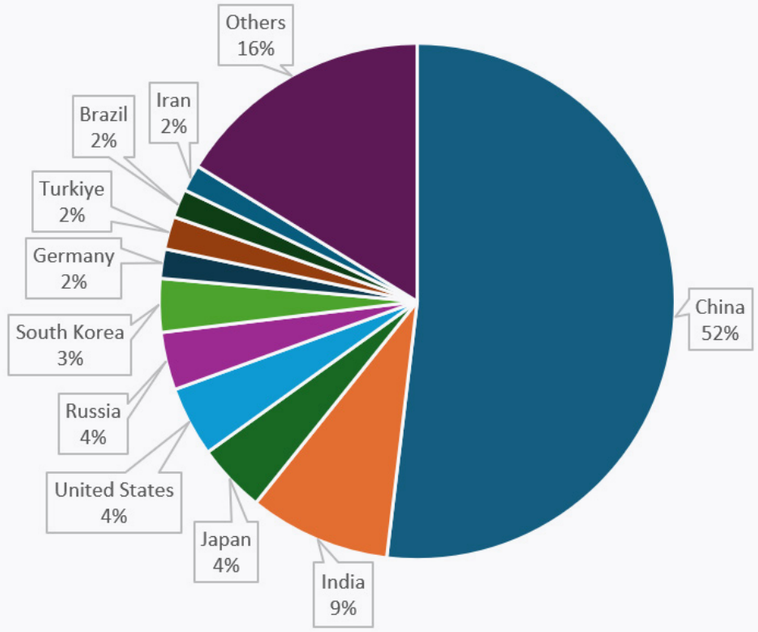
Total world crude steel production reached 1,849 Mt in 2025, showing a decline of about 2% compared with 2024.

- China remained the largest producer, accounting for 51.9% of global output, followed by India with 8.9%.
- China's steel demand continued to be affected by the prolonged weakness of the real estate sector, although infrastructure and manufacturing activities provided partial support.
- In 2025, Chinese steel demand is estimated to have declined by around 1%, reflecting the ongoing challenges in the construction market.



Source : worldsteel.org

World Crude Steel Production in 2024



Source: worldsteel.org



*APT Tungsten**

The sharp increase in APT prices was driven by:

- Supply shock in China: China introduced export controls, quotas and licensing requirements for tungsten products, significantly tightening global supply.
- Environmental compliance: Stricter environmental regulations continued to force some smaller producers to reduce output or cease operations, further constraining supply.
- Rising demand: Strong demand from the automotive, aerospace, defence, electronics and semiconductor sectors continued to support higher prices.
- Speculative buying: Buyers increased inventory levels in anticipation of further price increases, reducing spot market availability and adding upward pressure on prices.

*APT: Ammonium Paratungstate

World Commodity Metal Prices – APT Tungsten*



Source: EPMA

Ferro Chromium

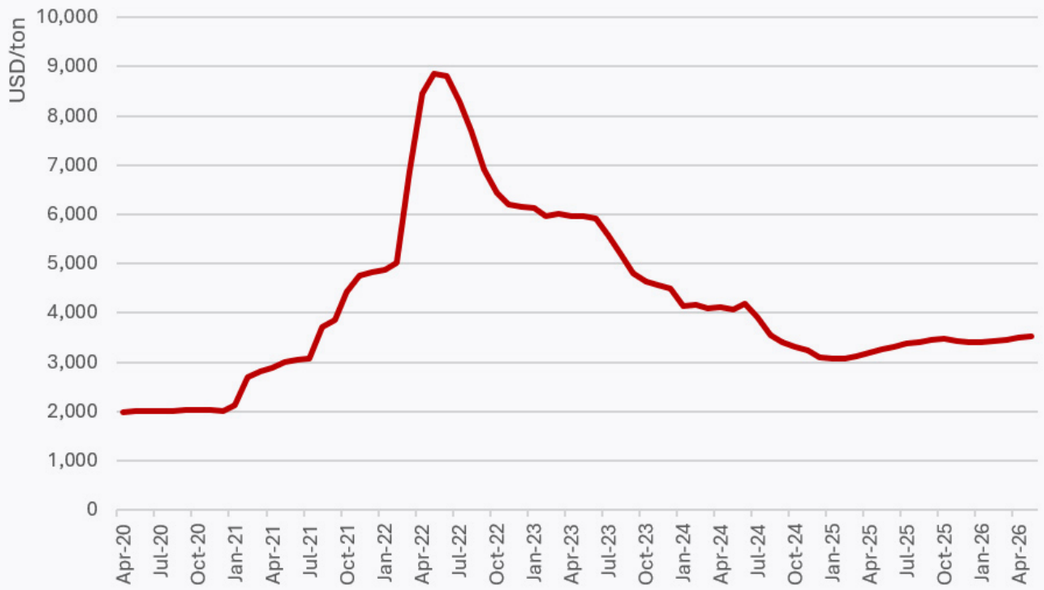
Peak in 2022: Prices surged due to energy crises, supply disruptions, and strong stainless-steel demand.

Decline since 2023:

- Oversupply from expanded production capacity (especially in China)
- Stabilization of energy costs and easing of logistical bottlenecks
- Weakening stainless steel demand in Europe and Asia

Current Trend (2025): Prices remain significantly below the peaks reached in 2022. However, ultra-low-carbon ferrochromium grades have shown signs of recovery, supported by demand from specialised and high-performance applications.

World Commodity Metal Prices – Ferro Chromium



Source: EPMA

Cobalt

- Cobalt prices increased dramatically during 2025, with gains of approximately 100-150% compared with the previous year.
- The main driver of this surge was the export ban introduced by the Democratic Republic of Congo (DRC) in February 2025, followed by the implementation of export quotas.
- Strong demand from the aerospace, superalloy, industrial and battery sectors further supported the price increase.
- For 2026, the market outlook points to a stabilisation at these elevated price levels, although supply availability is expected to remain a key concern.

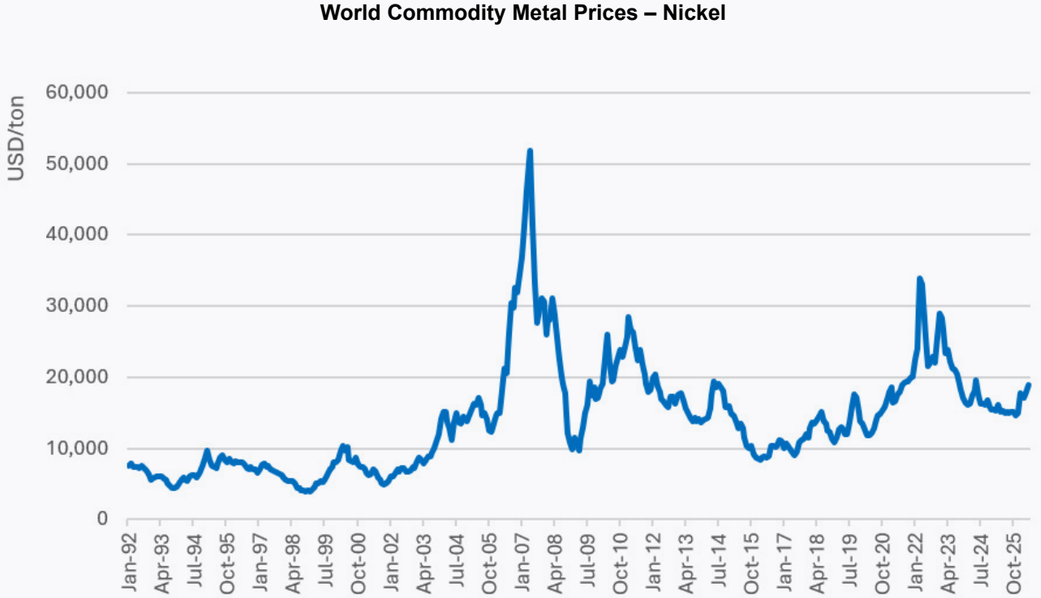
World Commodity Metal Prices – Cobalt



Source: EPMA

Nickel

- Nickel prices experienced a sharp spike in 2022, largely driven by the short squeeze linked to the substantial short position held by Tsingshan Holding, the world's largest nickel producer.
- Since 2023, nickel prices have generally traded within a relatively stable range of USD 15,000-20,000 per tonne, although short-term volatility has remained significant.
- Increasing supply from major producing countries has helped to balance demand growth and limit upward price pressure.
- Current Trend (2025): The market remains largely range-bound, with prices fluctuating in response to changes in stainless steel demand, battery sector developments and supply-side developments.

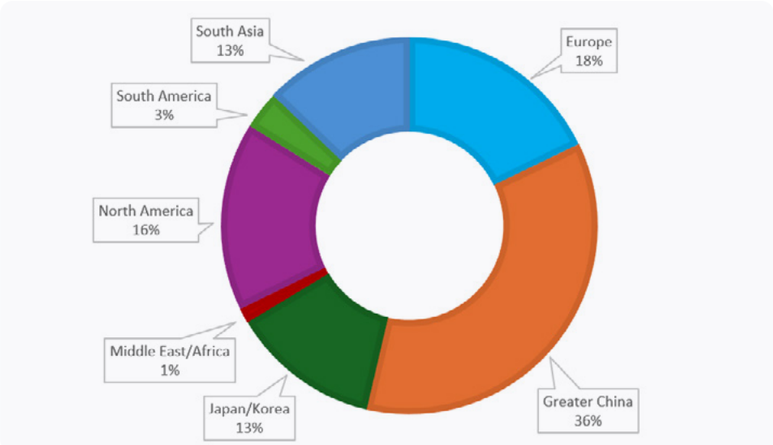


Source : eco3min.fr

AUTOMOTIVE

In 2025, global motor vehicle production increased to about 96.4 million vehicles, up by approximately 3.5% compared with 2024. China further strengthened its position as the world's largest producer, manufacturing 34.5 million vehicles, a growth of around 10% year-on-year. India continued its expansion, reaching 6.5 million vehicles and consolidating its role as a major automotive hub.

Production in North America remained broadly stable, with the United States producing 10.2 million vehicles, slightly below 2024 levels. European production showed mixed results, with Germany recording a modest increase while several other European countries faced continuing market challenges.

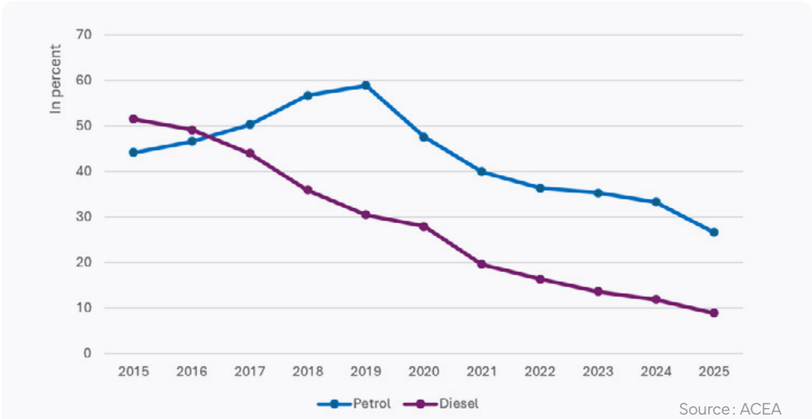


Region	2019	2020	2021	2022	2023	2024	2025
Europe [1]	22,060,000	16,921,000	16,247,148	16,216,888	18,122,449	17,231,668	17,201,525
Greater China [2]	26,149,000	25,225,000	25,552,563	27,020,615	30,160,966	31,556,748	34,530,738
Japan/Korea	13,323,000	11,574,000	10,990,190	11,592,568	13,241,037	12,361,933	12,336,240
Middle East/ Africa	1,998,000	2,017,000	1,989,576	2,086,998	1,171,872	2,255,239	1,229,032
North America	16,902,000	13,375,000	13,517,963	14,798,146	16,166,628	16,107,477	15,573,367
South America	3,421,000	2,314,000	2,729,921	2,958,117	2,970,263	3,079,944	3,160,476
South Asia[3]	8,933,000	6,195,000	8,054,921	10,343,396	11,713,384	9,911,329	12,352,272
Total	**92,786,000**	**77,621,000**	**79,081,382**	**85,016,728**	**93,546,599**	**92,504,338**	**96,383,650**

1. Includes Turkey and CIS countries | 2. Includes Hong Kong and Taiwan | 3. Includes Australia | Source: ACEA, oica.net

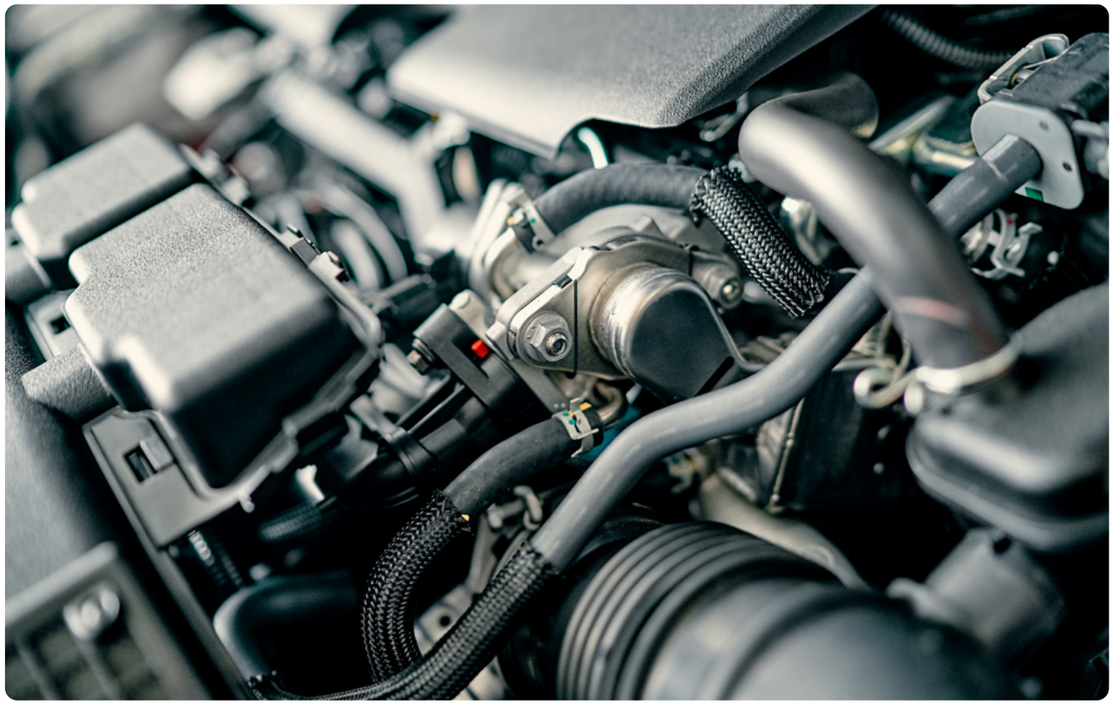
The Market for Combustion Engines

In 2025, the share of petrol cars fell from 33.3% to 26.6%, with registrations declining to 2.88 million units. The diesel market continued its contraction, with registrations down 24.2% and market share decreasing from 11.9% to 8.9%. The combined share of petrol and diesel vehicles dropped to 35.5% as hybrid and electrified vehicles continued to gain ground in the European market.



Source: ACEA

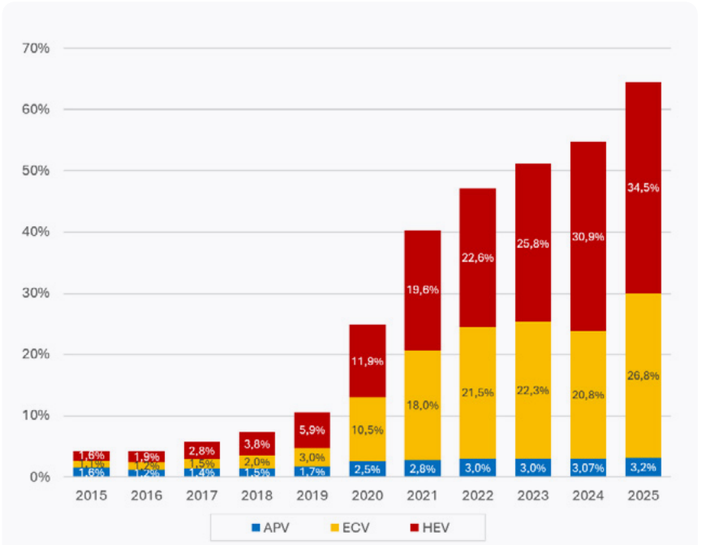
Year	Petrol (as%)	Diesel (as %)
2015	44.2	51.5
2016	46.6	49.2
2017	50.3	44
2018	56.7	35.9
2019	58.9	30.5
2020	47.6	27.9
2021	40	19.6
2022	36.4	16.4
2023	35.3	13.6
2024	33.3	11.9
2025	**26.6**	**8.9**



European Passenger Car Registrations for Alternatively Powered Vehicles

Between the end of 2024 and the end of 2025, the number of alternatively powered passenger cars in the EU continued to increase. Battery-electric vehicles (BEVs) gained further market share, reaching 17.4% of new registrations, up from 13.6% in 2024. Hybrid-electric vehicles remained the most popular powertrain, accounting for 34.5% of new registrations, while plug-in hybrids increased their share to 9.4%.

As a result, alternatively powered vehicles continued to strengthen their position in the European market, while the combined share of petrol and diesel vehicles fell to 35.5%, reflecting the ongoing transition towards electrified mobility.



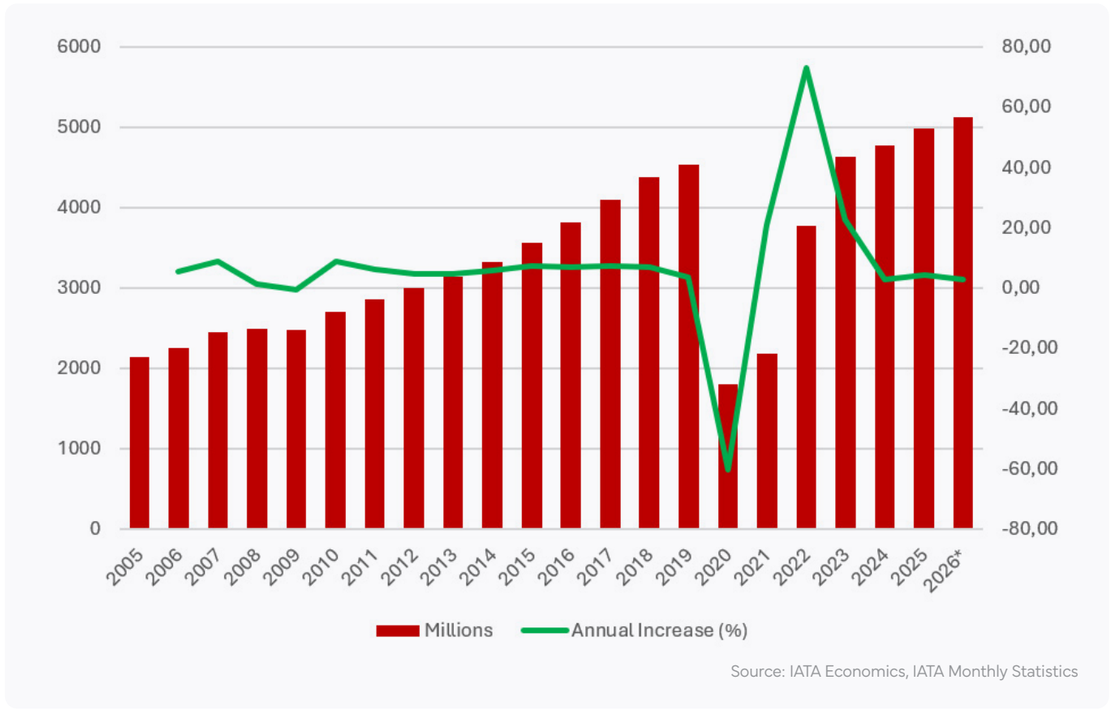
	HEV	ECV	APV
2025	34.5%	26.8%	3.2%
2024	38.7%	15.4%	2.5%
2023	25.8%	22.3%	3.0%
2022	22.6%	21.5%	3.0%
2021	19.6%	18%	2.8%
2020	11.9%	10.5%	2.5%
2019	5.9%	3.0%	1.7%
2018	3.8%	2.0%	1.5%
2017	2.8%	1.5%	1.4%
2016	1.9%	1.2%	1.2%
2015	1.6%	1.1%	1.6%

HEV: Hybrid Electric Vehicles | ECV: Electrically Chargeable Vehicles | APV: Alternatively Powered Vehicles | Source: ACEA



AEROSPACE

Global Passenger Traffic



Source: IATA Economics, IATA Monthly Statistics

Global passenger traffic continued its recovery in 2025, surpassing pre-pandemic levels and reaching a new record high. Growth was supported by strong demand for both leisure and business travel, particularly in Asia-Pacific, where international air traffic continued to recover.

While the pace of growth has moderated compared with the post-Covid rebound years, the long-term outlook for air transport remains positive, supporting demand across the aerospace value chain.



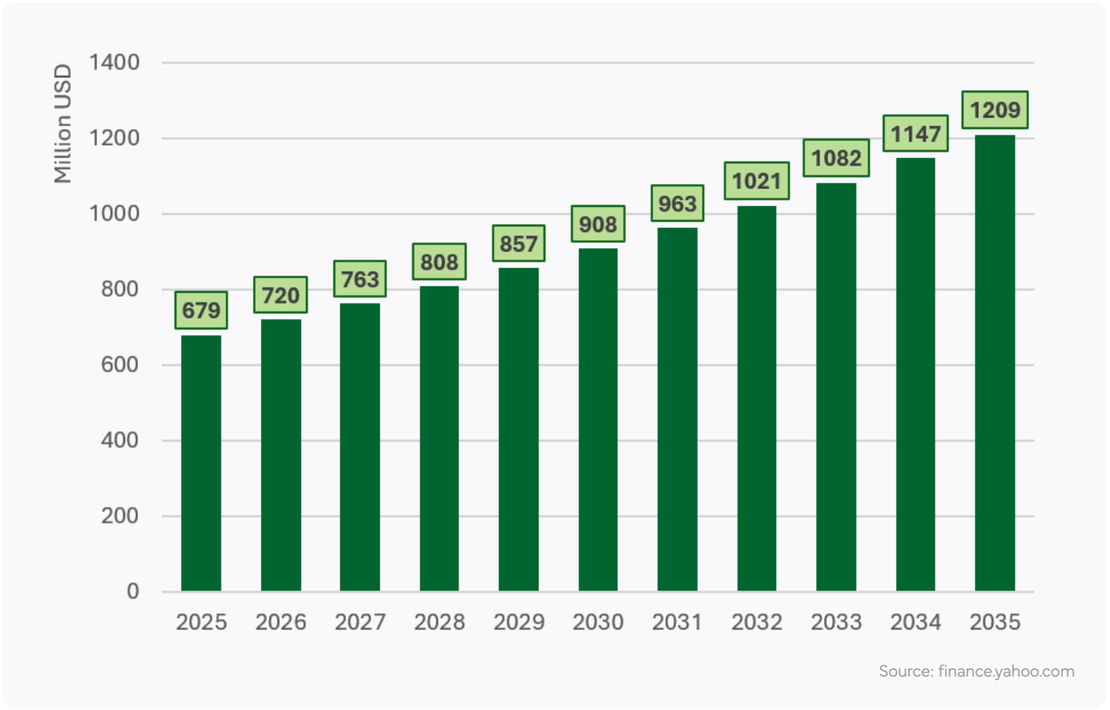
Commercial Aircraft Deliveries



Year	Boeing	Airbus
2025	600	793
2024	350	766
2023	528	735
2022	480	663
2021	340	609
2020	157	566
2019	380	863
2018	806	800
2017	763	718
2016	748	688
2015	762	635
2014	723	629
2013	648	626
2012	601	588
2011	477	534

MEDICAL

Global Medical Device Sales - Forecast

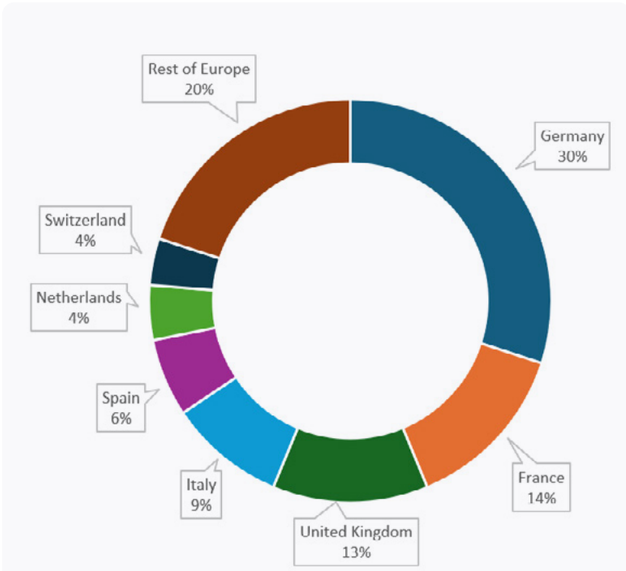


Revenue Shares by Region (2025)

Region	Revenue (USD bn)	Share (%)
North America	245	36.1%
Europe	160	23.6%
Asia-Pacific	150	22.1%
Latin America	78	11.5%
Middle East & Africa	46	6.8%
TOTAL	**679**	**100.0%**

Source : precedenceresearch.com

European Medical Industry Revenues by Country in 2025

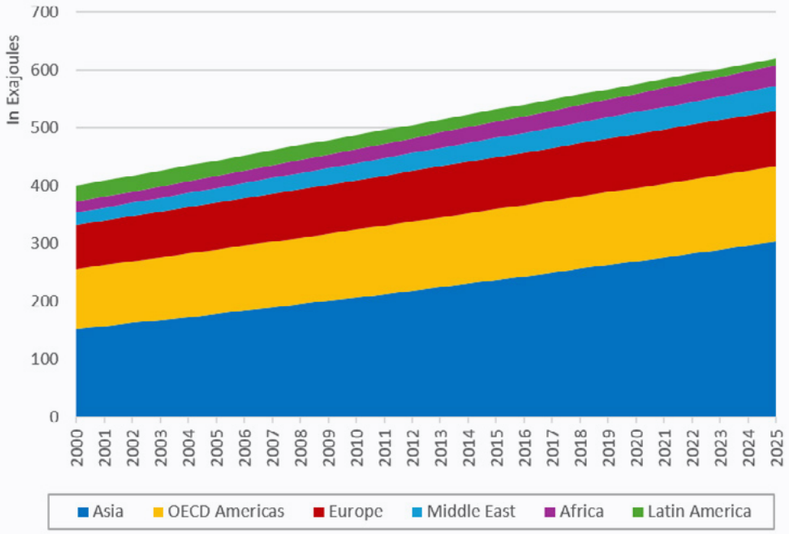


Country	Revenue (USD bn)	Share in Europe (%)
Germany	48	30%
France	22	14%
United Kingdom	20	13%
Italy	15	9%
Spain	10	6%
Netherlands	7	4%
Switzerland	6	4%
Rest of Europe	32	20%

Source : precedenceresearch.com

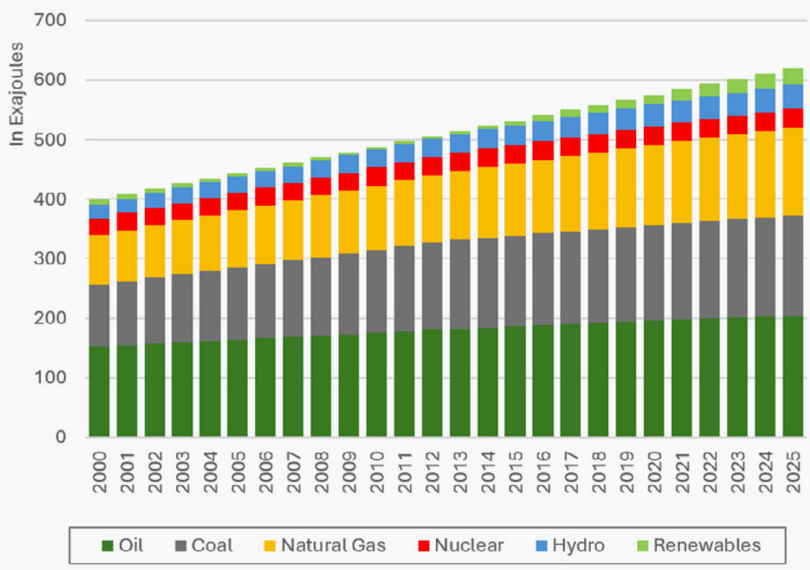
ENERGY

World Total Energy Supply by Region



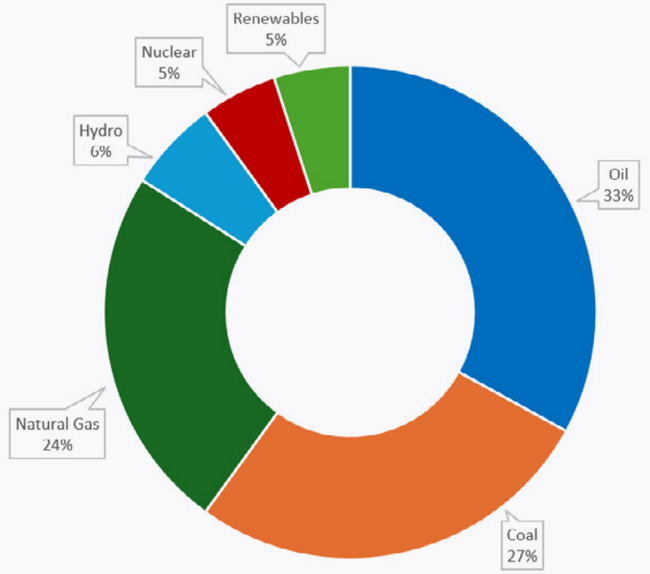
Source: iea.org

World Total Energy Supply by Source



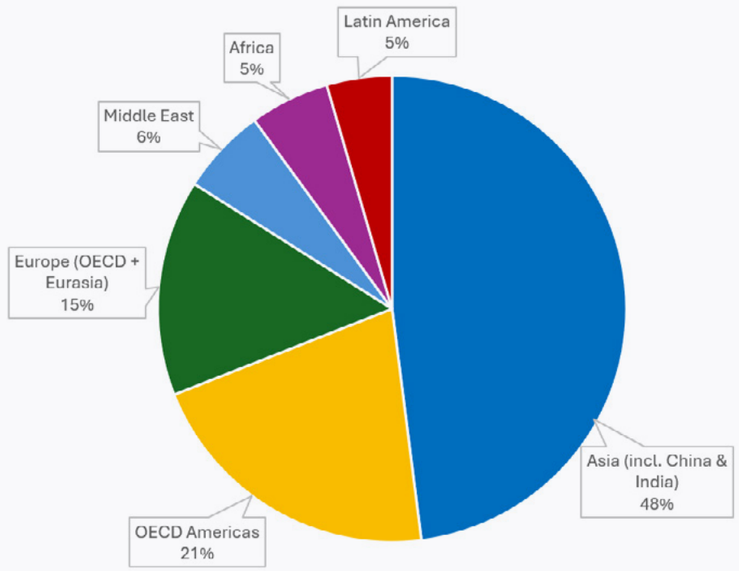
Source: iea.org

World Energy Consumption by Source (2025)



Source: iea.org

World Energy Consumption by Region (2025)



Source: iea.org

4 / EPMA ACTIVITIES

CONGRESS

- **EuroPM 2027** | 10-13 October 2027 | Florence, Italy
- **WorldPM 2028** | 16-19 October 2028 | Vienna, Austria
- **EuroPM 2029** | 16-19 October 2029 | Lille, France



SEMINARS

- *PM & AM for Aerospace: From Powder to Flight-Certified Components*

  11-12 May 2027 | Rome, Italy



SUMMER SCHOOL

- *More than 20 years of schools*
- *More than 1000 trainees*
- ***Next Summer School :*** 4 - 9 July 2027 | Vienna, Austria



CLUB PROJECTS

- *More than 30 CP over 15 years*



STATISTICS, TREND SURVEYS, BENCHMARKING

For More Info, Visit : **www.epma.com**

EUROPEAN PROJECTS

- *Over 25 years of expertise*
- *3-5 years projects*
- *More than 20 years of expertise in Horizon & Erasmus programs*



ResQtool Kick-Off Meeting



Reptis Consortium



PMEXCEL Stand at the Euro PM2027

Co-funded by the European Union

These projects are funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union.
Neither the European Union nor the granting authority can be held responsible for them.



European Powder Metallurgy Association
www.epma.com