



# European Flexible Polyurethane Foam Market

REPORT FY 2024

24

August 2025

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## METHODOLOGY & ACKNOWLEDGMENTS

The information contained in this report is based upon:

- **Production data supplied by EUROPUR members** producing flexible polyurethane slabstock foam and aggregated in compliance with competition law.
- **Interviews with over 60 industry experts** from over 42 industry organisations.
- **Data from public sources** including ACEA, EUROSTAT / EU Market Access database, company annual reports and trade press reports.
- **Data from consultants and agencies** used with their kind permission including CSIL Milano, Resource Wise (formerly Tecnon Orbichem), ICIS, Argus Media, IAL and Global Data (formerly LMC Automotive).

EUROPUR and Belvedere and Partner Ltd (B&P Ltd) thank the many industry experts that participated in the research including representatives from foam manufacturers and associations: *Aramis, AIPEF, Carpenter, Egida+, Flex 2000, Form Sünger, Healthcare Europe, Ikano Industry, Interplasp, Kabelwerk Eupen, Kayfoam, Lusocolchao, Multy Foam, Neveon, Olmo, Orsa Foam, Organika, Pelma, Plama-Pur, Recticel, TempurPedic, Torres Espic, V-Correct, Ventius, The Vita Group, Vitafoam Malta, Safas and Yataş*.

Several raw material and machinery companies also provided comments: *Covestro, Evonik, Hennecke, Huntsman, Laader Berg, Möller Chemie, Milliken, MOL, PCC Rokita, and Tosoh*.

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More detailed reports on raw materials markets, the mattresses and furniture markets or the automotive market can be purchased from the companies [Tecnon Orbichem](#) [ResourceWise], [ICIS](#), [Argus Media](#), [CSIL Milano](#), [IAL Consultants](#) and [LMC Automotive](#) [GlobalData].

## EXECUTIVE SUMMARY

Overall, **the year 2024 showed stagnation when compared with 2023** for the European flexible polyurethane foam industry. The total production of flexible polyurethane slabstock foam (both ether and ester) across the European continent — including Eurasia and Türkiye — reached **1.37 million tonnes**, marking a **0.1% decrease** compared to 2023. However, this year again there are significant regional disparities. While the European Economic Area (EEA) experienced notable declines in production (of 2.66% when compared to 2023), the largest declines were recorded in UK & Ireland (13.7%), Balkans, Greece and Cyprus (11.05%) and Hungary, Croatia, Czechia and Slovenia (9.10%).

**The primary growth outlier is Eurasia** — a region encompassing Russia, Ukraine, Belarus, Kazakhstan, and Uzbekistan — with a substantial production **increase of 17.86%**, driven primarily by government incentives within the Russian economy. Excluding this growth, the overall market would have shown a decline. Romania and Bulgaria (+2.62%), and Scandinavia and the Baltics (+1.32%) showed moderate increases of production.

**Türkiye showed contraction of 5.03%** - for the first time in a decade. This was driven by a decline in finished product exports as well as a difficult domestic market. Türkiye and Poland were in 2024 joint largest slabstock foam producing countries by volume.

In 2024, the flexible polyurethane foam industry faced fewer disruptions than in 2023, but rising costs and weak demand remained major challenges. Energy and labour expenses continued to climb, while overall demand for end products declined. The automotive sector also stagnated and demand for electric vehicles also remained weak.

**The e-commerce sector**, particularly in "bed-in-a-box" mattresses, **saw continued demand stagnation** in 2024.

**For mattresses, the European industry is increasingly affected by international trade disputes.** European manufacturers have continued to lose access to the US market – formerly the EU's main export market - due to anti-dumping procedures against several European countries. Additionally, there were continued reports of Europe **experiencing increasing imports of finished goods from Asia**, especially China, in particular for cellular plastic mattresses.

**The low demand that defined 2024 carried over into the first two quarters of 2025, with no indication of a significant recovery.** The automotive sector also continues to struggle with volumes and profitability. A survey conducted during our conference in Alicante, in June 2025, predicted further low single-digit decline for the full year of 2025.

**Table 1: DATA SUMMARY OF FLEXIBLE POLYURETHANE FOAM PRODUCTION FOR 2024\***

<b>TOTAL PU FLEXIBLE FOAM PRODUCTION</b>	<b>1,592,507 tonnes</b>
Total PU Slabstock Foam Production	<b>1,370,216 tonnes</b>
Total POLYETHER Slabstock Foam Production	1,320,198 tonnes
Total POLYESTER Slabstock Foam Production	50,018 tonnes
Total PU Moulded Foam Production	<b>222,291 tonnes</b>
Total Number of Continuous Foaming Plants	181
Estimated Full-Time Employees in PU Foam Production	25,892 FTE
Estimated PU Foam Industry Turnover	5.1 billion EUR

\*In EU27, UK, NO, CH, TR and the rest of Europe

## CONTENTS

METHODOLOGY & ACKNOWLEDGMENTS.....	1
DISCLAIMER & COPYRIGHT.....	1
EXECUTIVE SUMMARY.....	2
CONTENTS (to be updated) .....	3
1. INTRODUCTION AND CONTEXT .....	4
2. PRODUCTION, TRADE AND CONSUMPTION OF FLEXIBLE SLABSTOCK BY END-USE .....	6
2.1. Upholstered Furniture.....	6
2.2. Mattresses .....	11
2.3. The Automotive Industry .....	22
3. FLEXIBLE PU SLABSTOCK FOAM PRODUCTION DATA.....	25
3.1. Foam Production by Region.....	27
3.2. Foam Production by Type .....	31
3.3. Foam Trade Data – Imports & Exports .....	32
3.4. Changes in the Foam Industry .....	34
4. RAW MATERIAL SUPPLY AND DEMAND .....	37
4.1. TDI (Toluene Diisocyanate).....	38
4.2. MDI (Methylene Diisocyanate).....	41
4.3. Polyols.....	44
5. SUMMARY & CONCLUSIONS .....	50
6. VIEW INTO 2025 & 2026.....	52
7. LIST OF FIGURES.....	54

## 1. INTRODUCTION AND CONTEXT

Overall, **production of polyether slabstock foam decreased by 0.1% across wider Europe**. Within the European Economic Area (EEA) and the United Kingdom (UK), however, production decreased by 2.66%. The major “outlier” was Eurasia with an increase of 17.86% over the same period. This performance was in line with initial prediction at our conference in Istanbul, in June 2024.

**In total, around 1.59 million tonnes of flexible foams** (both moulded and slabstock) **were produced in 2024**. Of this, 1.37 million tonnes were slabstock foams, which includes 1.32 million tonnes of polyether slabstock foam and 50,018 tonnes of polyester foams. Members reported that challenges persisted throughout 2024, affecting both supply and demand, with demand being the main issue.

In general, 2024 was a more stable year compared to the pandemic years, with improvements in raw material supply chains, though demand remained very weak and stagnant. The industry continued to face rising costs, including energy and labour. Raw material pricing gradually fell during the end of 2024 and continued into 2025. The automotive sector also stagnated as demand for electric vehicles continued to be weak.

**General market trends which were observed and reported by members for 2024 included:**

- Producing to a price point became even more important, this caused strong pressure to rationalise product ranges, reduce trim and operate larger production runs to reduce costs.
- Margins came again under pressure and continue to be in 2025.
- “Design to cost” became a stronger force, as designers and OEMs reacted to the forthcoming End of life (EoL) pressures.
- The wider use of springs and hybrid models in the mattress industry were reported.
- Imports from Asia Pacific both in raw materials and finished goods played a larger role in the EUROPUR market area.
- Continued work to improve the sustainability of the products produced by members of the association.
- The “threat and uncertainty” caused by US tariff’s hampers industry confidence

### Main Downstream Markets: A Year in Review

According to CSIL, **the upholstered furniture market represented approximately 18% of global furniture consumption in 2024**. Total sales were estimated at \$75 billion, up from \$73 billion in 2023.

The year saw a notable decline in demand — particularly in the latter half — due to reduced consumer spending power, especially in Europe. CSIL reports a stagnation of mattress consumption in the top 50 markets when comparing 2023 (\$31.2bn) with 2024 (\$30.8bn). When accounting for price increases this represents a decline in the number of mattresses consumed. Over the past decade, the market has experienced modest growth, averaging around 2% annually.

**In 2024, the European automotive market (EU+EFTA+UK) showed a small growth over 2023.** By the end of 2024, LMC Automotive reported that global light vehicle production decreased from 91.02 million units in 2023 to 90.36 million units, in 2024, reflecting an around 1% decrease.

Data from LMC Automotive revealed production in major markets for 2024. In China, production rose from 29.2 million units in 2023 to 30.33 million units in 2024, marking an 3.6% increase. North America saw production decrease from 15.59 million units in 2023 to 15.35 million units in 2024, reflecting a decline of 1.5%. In Japan, production also fell from 8.6 million units in 2023 to 7.80 million units in 2024, a decrease of 8.8%.

**In 2024, raw material supply began to stabilise**, although occasional “spikes” still occurred due to disruptions in the now longer supply chain. In 2025 the raw material price hit a 5 year low as demand became the major industry issue. The market for the three major raw materials — TDI, MDI, and polyether polyol — remains global, with changes in one region affecting others.

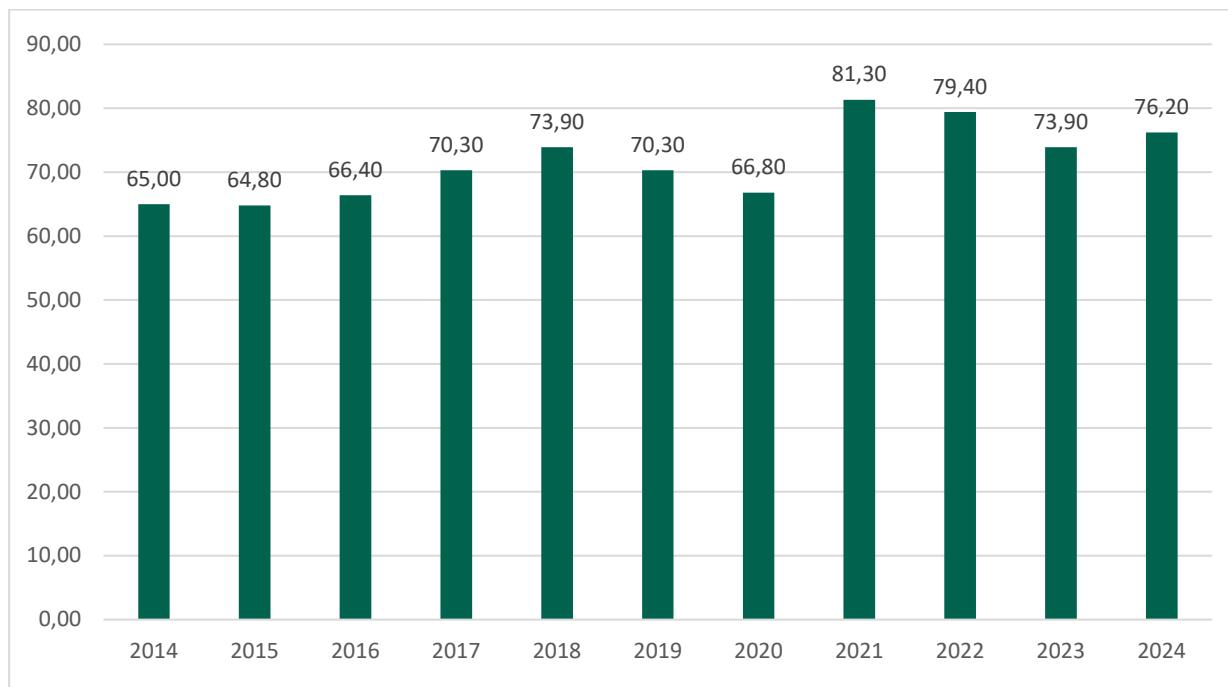
The wider European region now hosts 181 continuous foaming plants, with an estimated number of full-time employees (FTE's) 25,892 with an estimated turnover of €5.1 billion. Whereas, from the total of 174 continuous foaming plants, 117 were in the EEA & UK with 57 in Eurasia and Türkiye. The average production per plant has fallen from 8,151t in 2019 to 7,587t in 2024.

## 2. PRODUCTION, TRADE AND CONSUMPTION OF FLEXIBLE SLABSTOCK BY END-USE

### 2.1. Upholstered Furniture

According to CSIL, Future Market Report Data and Belvedere and Partner Ltd analysis, **the global upholstered furniture market accounted for approximately 18% of the total global furniture consumption in 2024**, maintaining the same share as in 2023. The estimated total sales for this upholstered furniture global market in 2024 were around \$76.20 billion. This represents an approximately 3% increase from the previous year's figures.

**Chart 1: GLOBAL CONSUMPTION OF UPHOLSTERED FURNITURE. 2014-2024. Currency USD billion**



Source: CSIL, Future Market Report and B&P Ltd

In 2024, Asia Pacific remained the leading market for upholstered furniture, accounting for approximately 37% of global consumption. North America followed with 30%, Europe with 25%, and other regions making up the remaining 8%.

The U.S. market grew by around 5% in 2024, driven largely by a high level of imports, which increased by 10%. China, the second-largest market, expanded by only 1% despite government incentives to stimulate demand. India recorded the strongest growth at approximately 6%, supported by a rising middle class and a young, urbanized, digitally engaged consumer base.

The global upholstery market is characterized by approximately **35% of production being traded internationally**. However, the future trajectory remains uncertain due to the latest rounds of U.S. trade tariffs.

The top producing countries for upholstered furniture include China (USD 35 billion), Vietnam (USD 5 billion), Poland (USD 4 billion), India (USD 3.5 billion), and Italy (USD 3.5 billion).

**Table 2: UPHOLSTERED FURNITURE CONSUMPTION IN LARGE MARKETS, 2025, FORECAST 2026**

Country	Forecast 2025	Forecasts 2026
Australia	1%	2%
Canada	-1%	1%
China	2%	2%
France	-1%	1%
Germany	-1%	1%
India	5%	5%
Italy	-1%	1%
Netherlands	0%	1%
United Kingdom	-1%	1%
United States	1%	1%

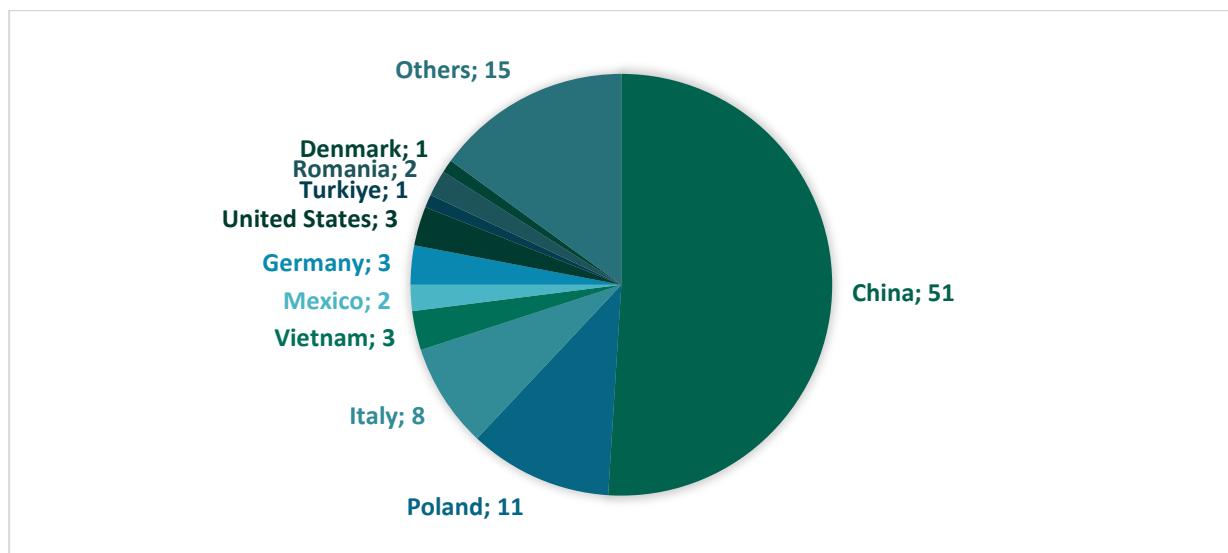
Sources: CSIL, IAL, Economist, B&P Ltd.

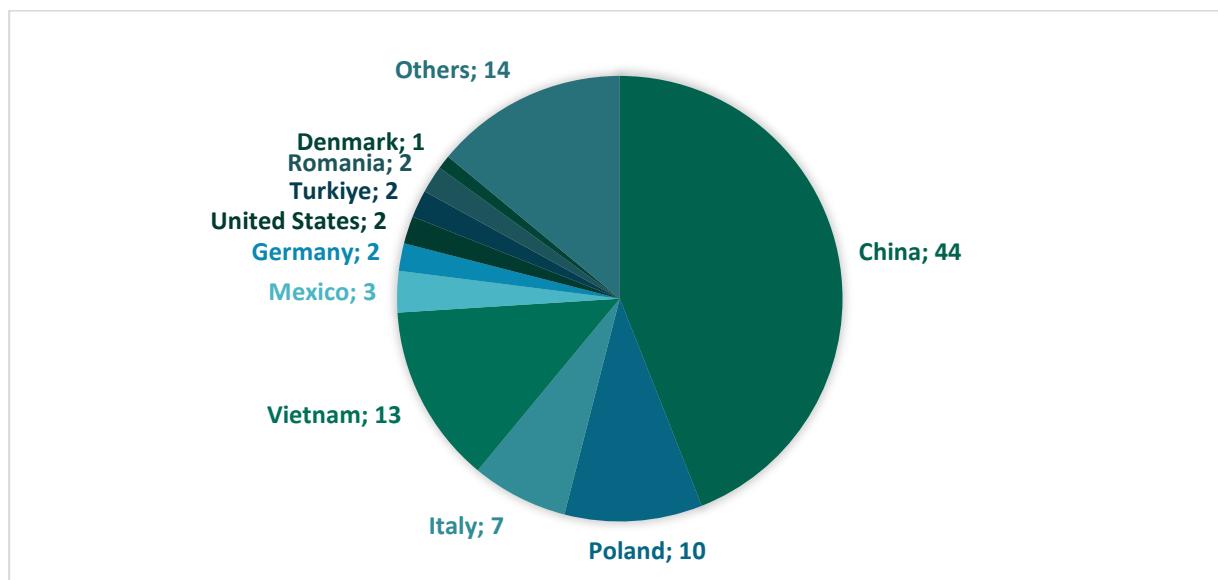
**According to multiple sources**, including CSIL, IAL, The Economist, and B&P Ltd, **the global upholstered furniture market is projected to stabilize, with growth of approximately 1% in 2025 and 1.6% in 2026**.

CSIL estimates that roughly 71% of global upholstered furniture consumption is concentrated in ten major markets: the United States, China, Germany, the United Kingdom, India, France, Canada, Australia, Italy, and the Netherlands.

**Global production remains highly concentrated** as well, **with six countries** — China, the United States, Poland, Vietnam, Italy, and India — **accounting for around 70% of total output**. This concentration highlights Europe's enduring strength within the global industry.

CSIL also reports a notable shift in production distribution between 2015 and 2024. While the market value has grown from USD 39 billion in 2015 to USD 85 billion in 2024, Vietnam's share has expanded significantly to 13% in 2024. This growth is largely driven by Chinese manufacturers establishing production facilities in Vietnam.

**Chart 2: PERCENTAGE OF GLOBAL UPHOLSTERED FURNITURE EXPORT IN 2015**

**Chart 3: PERCENTAGE OF GLOBAL UPHOLSTERED FURNITURE EXPORT IN 2024**

Source: CSIL, used with kind permission

The **top 100 global manufacturers** account for approximately 31% of total global production. Over the past two years, the industry has undergone notable consolidation, particularly in China, where manufacturers have increasingly invested in lower-cost Asian markets such as Vietnam and, more recently, India, to strengthen their competitive position.

In parallel, several manufacturers have **established production facilities closer to major consumer markets**, including Europe and the United States. These investments are primarily aimed at enhancing supply chain resilience, mitigating exposure to U.S.-imposed tariffs, and leveraging lower local labor costs.

A continuing trend within the industry is the development of “Design Centres” and the hosting of exhibitions, particularly in Italy and within the high-end furniture segment. However, a number of planned projects remain on hold as investors evaluate geopolitical developments and reassess the near-term economic outlook.

### **European Upholstery Furniture Industry Outlook**

**Europe**, including Central and Eastern European countries outside the EU, **is estimated to produce 19% of the world's upholstered furniture**. The United States accounts for approximately 15% — a slight decline compared with previous years.

According to the **European Furniture Industry Confederation** (EFIC), the EU furniture sector employed over 900,000 people across 115,500 enterprises in 2024, generating products worth approximately EUR 114 billion. Despite competitive pressures from low-cost producers, the industry continues to benefit from a strong reputation for high quality and innovative design, with Italy remaining a global benchmark.

In 2024, the sector experienced further advances in digitalisation, the Internet of Things (IoT), Industry 4.0, and end-of-life considerations. These developments are driving increased investment in recycling processes and sustainable production models.

**E-commerce now represents approximately 11% of European furniture sales**, according to CSIL, with the UK and Germany leading at penetration rates of around 13% and 10%, respectively. This share is expected to expand as companies seek to streamline operations and reduce cost bases.

From a strategic perspective, manufacturers and retailers are increasingly working in partnership to enhance the customer experience and address supply chain challenges more effectively.

**Table 3: WORLD PRODUCTION AND TRADE OF UPHOLSTERED FURNITURE, (USD MILLION), 2024**

		Production	Exports	Imports	Population (in million)	Apparent Consumption	Total GNP	Per Capita GNP
<b>EU (27), UK, Norway, Switzerland and Iceland</b>		<b>18.017</b>	<b>11.620</b>	<b>12.980</b>	<b>531</b>	<b>19377</b>	<b>22.840</b>	<b>42.989</b>
<i>of which</i>	France	530	267	1753	68	2016	3.085	45.180
	Germany	1.955	777	2683	83	3861	4.564	54.800
	Italy	3.417	2.465	379	59	1331	2.237	37.920
	Poland	3.990	3.788	376	37	579	730	19.900
	UK	2.069	165	1812	68	3716	3.260	47.700
<b>Central-East Europe outside the EU and Russia</b>		<b>2.556</b>	<b>1.137</b>	<b>419</b>	<b>277</b>	<b>1838</b>	<b>3.358</b>	<b>12.135</b>
<i>of which</i>	Türkiye	1.456	665	79	85	870	1001	11.730
<b>Asia and Pacific</b>		<b>46.338</b>	<b>21.616</b>	<b>3.752</b>	<b>3.717</b>	<b>28.391</b>	<b>36.267</b>	<b>9.756</b>
<i>of which</i>	China	34.967	16.070	252	1.411	19.148	18.883	13.390
	India	3.484	94	307	1.438	3.697	3.649	2.540
	Japan	127	17	884	125	994	1899	39.350
<b>Middle East and Africa</b>		<b>793</b>	<b>69</b>	<b>1500</b>	<b>369</b>	<b>2216</b>	<b>3992</b>	<b>10.823</b>
<b>North America</b>		<b>14.862</b>	<b>2.084</b>	<b>10.427</b>	<b>505</b>	<b>23204</b>	<b>30.666</b>	<b>60.755</b>
<i>of which</i>	United States	13.063	723	8860	335	21201	26.945	80.450
	Canada	649	410	1246	40	1485	2167	54.040
	Mexico	1.149	951	320	130	518	1.554	11.980
<b>South America</b>		<b>1.074</b>	<b>86</b>	<b>175</b>	<b>329</b>	<b>1163</b>	<b>3.213</b>	<b>9.777</b>
<b>WORLD TOTAL (70 countries)</b>		<b>83.640</b>	<b>36.612</b>	<b>29.252</b>	<b>5.728</b>	<b>76.189</b>	<b>100.336</b>	<b>17.518</b>

Source: CSIL, used with kind permission

The figures above represent the absolute turnover for the production and export of upholstered furniture, along with corresponding import levels and apparent consumption.

The following table presents production data for the primary upholstered furniture manufacturers within the **EUROPUR** region (Wider Europe). The data indicates that production values have declined in the majority of countries, with the notable exceptions of **Greece** and **Ireland**, where levels have remained stable.

**Table 4: UPHOLSTERED FURNITURE PRODUCTION IN THE EU16+NO+CH+UK, 2019-2024 (\$ million)**

EU Country	2019	2020	2021	2022	2023	2024	2024/2023 (% Change)
Austria	155	132	152	145	145	142	-2,07%
Belgium	293	275	328	318	299	282	-5,69%
Denmark	434	461	561	557	555	546	-1,62%
Finland	116	114	130	129	121	116	-4,13%
France	543	518	617	571	577	530	-8,15%
Germany	1,992	1,990	2,527	2,151	2,120	1,955	-7,78%
Greece	18	15	17	17	22	22	0,00%
Ireland	70	65	68	63	68	68	0,00%
Italy	2,584	2,693	3,502	3,555	3,541	3,417	-3,50%
Netherlands	567	666	691	657	594	587	-1,18%
Norway	174	163	215	196	159	155	-2,52%
Poland	3,717	3,656	4,535	4,101	4,112	3,990	-2,97%
Portugal	262	235	307	317	347	343	-1,15%
Spain	665	617	768	756	807	832	3,10%
Sweden	461	451	532	507	456	447	-1,97%
Switzerland	110	93	112	106	110	108	-1,82%
United Kingdom	1,925	1,683	2,166	2,122	2,089	2,069	-0,96%
<b>Total (\$ million)</b>	<b>14,086</b>	<b>13,827</b>	<b>16,990</b>	<b>16,268</b>	<b>14,033</b>	<b>13,540</b>	<b>-3,51%</b>

**Table 5: UPHOLSTERED FURNITURE PRODUCTION IN THE REST OF EUROPE, 2019-2024 (\$ million)**

European Country	2019	2020	2021	2022	2023	2024	2024/2023 (%Change)
Bosnia Herzegovina	215	220	266	268	252	208	-17,46%
Bulgaria	56	56	82	83	79	76	-3,80%
Croatia	110	103	122	111	104	104	0,00%
Czech Republic	335	332	404	393	371	367	-1,08%
Estonia	543	518	617	151	127	116	-8,66%
Hungary	254	238	271	263	251	247	-1,59%
Iceland	7	5	5	5	4	5	25,00%
Kazakhstan	7	6	8	8	9	9	0,00%
Latvia	18	19	28	33	30	24	-20,00%
Lithuania	443	461	591	523	511	496	-2,94%
Malta	14	14	14	12	11	12	9,09%
Romania	694	647	819	798	745	707	-5,10%
Russia	522	463	591	508	533	600	12,57%
Serbia	84	78	92	105	130	133	2,31%
Slovakia	199	189	218	207	185	180	-2,70%
Slovenia	73	66	79	76	73	65	-10,96%
Türkiye	909	903	1,172	1,255	1,372	1,456	6,12%
Ukraine	174	174	223	150	143	160	11,89%
<b>Total (\$ million)</b>	<b>4,657</b>	<b>4,492</b>	<b>5,602</b>	<b>4,949</b>	<b>4,930</b>	<b>4,965</b>	<b>0,71%</b>

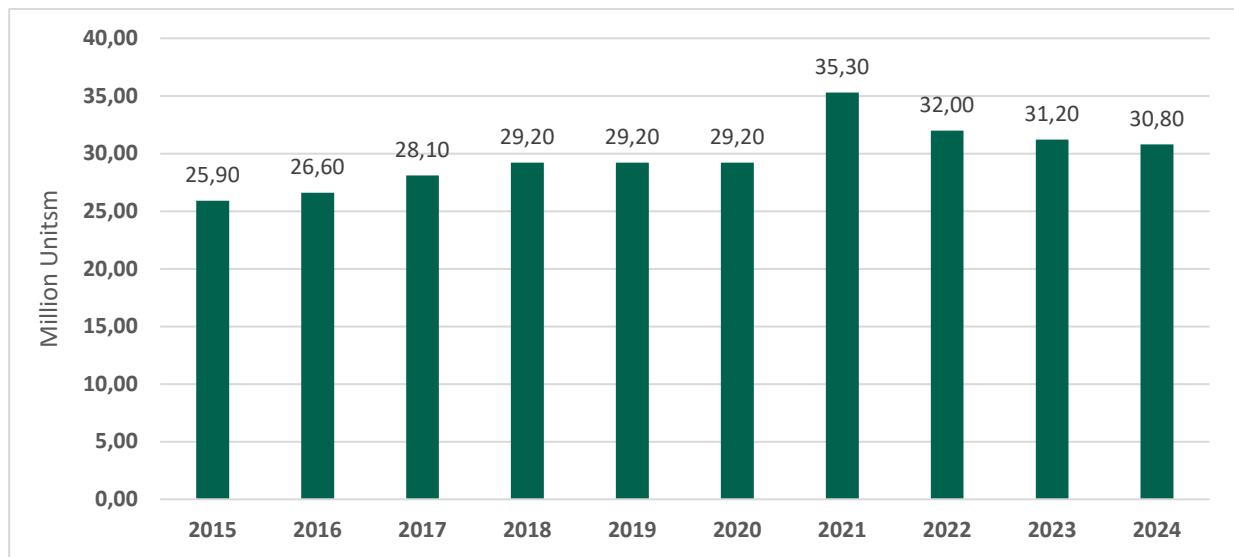
Source: CSIL World Upholstered Furniture Report 2024, including adjustments for previous years, used with kind permission

As illustrated in the Table 5 above, **overall production in the rest of Europe recorded a slight increase in value**; however, this aggregate growth conceals significant variations at the individual country level. Furthermore, it should be noted that the data in the above charts is presented in million USD for comparability, whereas figures prior to 2022 were reported in euros. This adjustment has been made to ensure greater consistency in cross-year analysis.

## 2.2. Mattresses

According to data from CSIL, **the global mattress market reached a value of approximately USD 31 billion** in the year 2024.

**Chart 4: MATTRESS CONSUMPTION IN THE TOP 50 MAJOR MARKETS, \$ billion**



Source: CSIL, used with kind permission

Over the past decade, the global mattress market has experienced slow growth, with trends notably distorted during the pandemic years.

In 2024, Asia-Pacific remained the largest market, accounting for 38% of global consumption, followed by North America at 35%. North America's gain came at the expense of Europe, whose share declined to 18% in 2024 from 20% in 2023, whereas other regions represented the remaining 9%.

The United States and China continue to be the two largest individual markets, jointly accounting for 60% of global consumption in 2024. The gap between the two markets is narrowing, with China expected to surpass the United States within the next three to five years. In 2024, U.S. market consumption contracted by 8.5%, reflecting weakness in the housing sector. Goldman Sachs reported that housing contract signings in the U.S. were at their lowest level since 2012, with new home sales falling 6.6% year-on-year from 2023 to 2024. China, by contrast, posted a modest 0.56% growth compared to 2023 — a marked improvement from the double-digit decline recorded in 2022. On the other hand, India emerged as one of the fastest-growing markets, expanding by 11.8%, driven by rising income levels and urbanization.

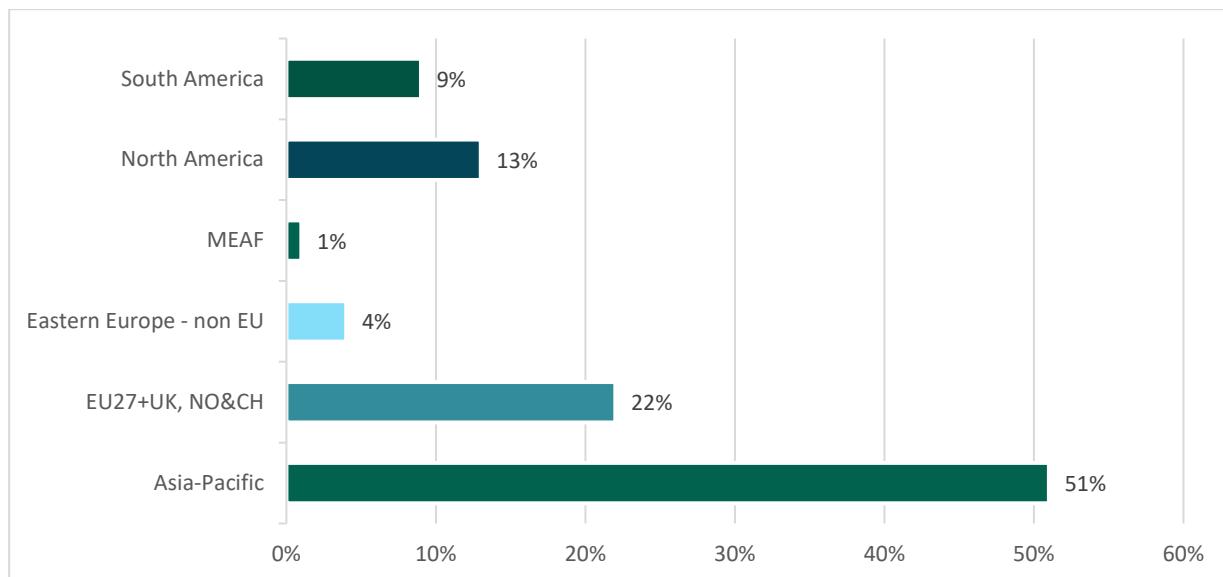
Elsewhere, Mexico saw production fall by 32% year-on-year, largely due to a collapse in exports, while Türkiye registered 3% growth, primarily supported by exports to the EU and UK.

According to CSIL, the share of e-commerce in the mattress market increased significantly, reaching 25% in 2024 compared to 16% in 2019, prior to the pandemic.

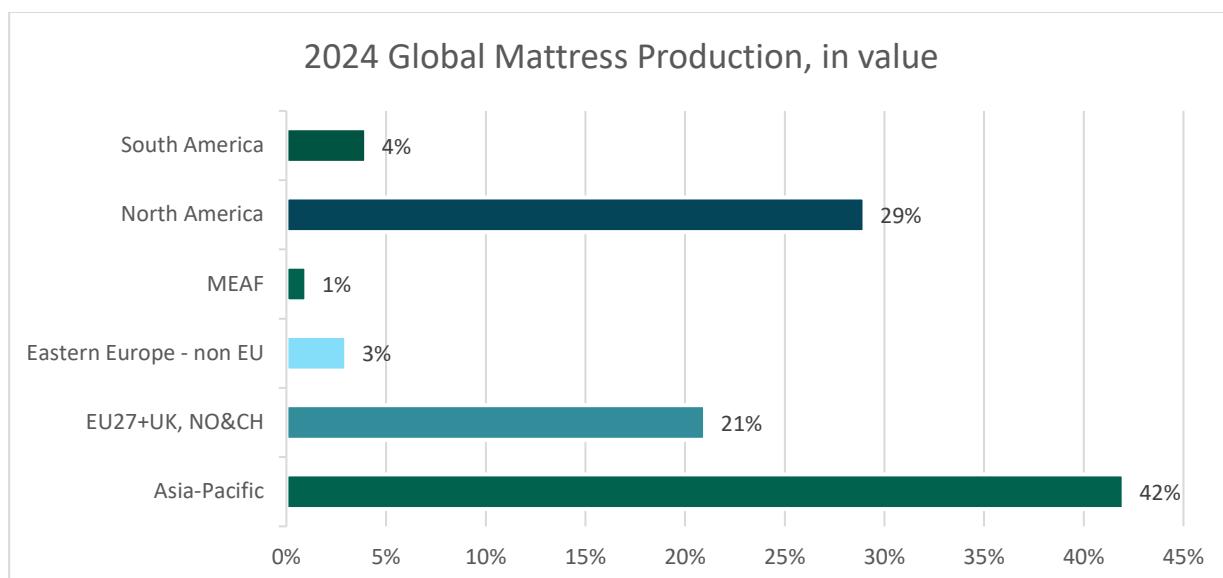
Globally, **approximately 220 million mattresses are produced annually**. The regional distribution of production is as follows: 51% in Asia-Pacific, 13% in North America, and **22% in Europe**. Growth in the Asia-Pacific region is primarily driven by increased production in countries such as India, Indonesia, Vietnam, and Thailand, alongside Chinese manufacturers relocating production to these lower-cost markets.

The charts below illustrate mattress production by region, both in terms of unit volume and value, expressed as percentages.

**Chart 5: GLOBAL MATTRESS PRODUCTION, 2024, number of units**



**Chart 6: GLOBAL MATTRESS PRODUCTION, 2024 in value.**



Source: CSIL, used with kind permission

According to *CSIL* and *Frost & Sullivan*, the drivers for future global growth remain intact with an increased focus on innovation and increased awareness of consumers of the health benefits of better sleep both in traditional and emerging markets. There is also increased demand of roll-packed and compressed mattresses in both online and traditional sales channels. The “global contract” segment is again beginning to expand again as the leisure sector begins to grow again.

As specified by *CSIL* and *Mintel*, the Chinese mattress industry remained flat in 2024 despite government incentive to boost consumption by stimulating the housing sector and consumables markets.

**In wider Europe, production volumes remained depressed in 2024 due to weak demand**, which has continued into 2025. However, certain countries began to experience the impact of U.S. anti-dumping regulations, which affected their production volumes.

Analysis of data from CSIL for 20 EU countries suggests that there was a **marginal change in the types of mattresses produced** between 2023 and 2024. Innerspring mattresses, again accounted for 50% of production, **foam mattresses 41%**, latex 4% and other types the remaining 5%. Due to the use of official statistics, it is not possible to identify the market share of hybrid mattress, which will be counted in one of the four aforementioned categories.

According to data from the *World Economic Outlook* and *The Economist*, mattress production is expected to again stagnate in 2025 but **resume growth in 2026 of around 1.6%**. This will be driven by higher growth in Asia-Pacific and slower growth in Europe and North America.

On the other hand, foam manufacturers have again consistently reported continued challenges in their operations during 2024. Foremost among these challenges was low demand and increasing costs despite the raw material cost being at a five-year low.

As previously mentioned in the *EUROPUR Market Report FY 2023*, the rapid growth in e-commerce during the pandemic has raised the profile of “bed in a box” mattresses and corresponding viscoelastic foam sales. 2024 again showed a consolidation of this trend but also the emergence of producers adopting a “multichannel” sales approach. This caused e-retailers to adapt their market strategies, going towards the use of “off-line” showrooms, temporary “pop-up” stores and establishing partnerships with retailers with an increasing trend to “direct to customer” relationship.

**The top 100 manufactures of mattresses accounted for 65% of the global production** (*CSIL*). From the leading 100 companies 44 are based in Asia-Pacific, 22 in Europe and 21 in North America. While there is also a trend towards mattress manufacturers integrating manufacturing and retailing activities, leading this trend are companies in Europe and the US.

The “bed in a box” market has demonstrated a continual evolution, marked by dynamic shifts in supply chain strategies, e.g. direct Asian imports to Europe. Producers within this sector have modified their supply chains, fostering increased collaboration with industry suppliers, who have expanded their roles to provide finished products directly to the market. This evolution is particularly evident in the departure from the initial model of exclusively online sales of 100% polyurethane mattresses.

In contemporary iterations of the “bed in a box” concept, mattresses have evolved to incorporate various elements. These include the incorporation of micro coils and mini-micro coils, the implementation of zippered covers, as well as the adoption of innovative fabrics. Here hybrid mattresses have become dominant over the past few years.

Innovation in the bed in a box market has also involved the inclusion of technology with sleep sensors, auto adjusting firmness as well as climate regulation.

The move to on-line sales platforms occurred throughout the global mattress industry, with *ISPA (International Sleep Products Association of America)* reporting that in the US on-line sales accounted for 57% of all mattress sales in 2024.

The high-end mattress sector continues to demand high quality foams and customers were reported to be very loyal to brands, but even here some foam has been substituted with natural materials and springs for numerous reasons. This is especially prevalent with exports from Europe to both China, India and the United States.

Demand in export markets for European manufactured mattresses has declined mainly driven by declines in exports to the United States. Although, it was reported that, where the products carry the **CertiPUR** label mattresses have shown greater market resilience. There is also continued interest in using a small, rebonded foam content in low end mattresses in the quest to manage costs.

The US anti-dumping tariffs' show continued impact in 2024 on specific countries e.g. Kosovo, Serbia and Spain and this decline has continued into 2025. More information is given below.

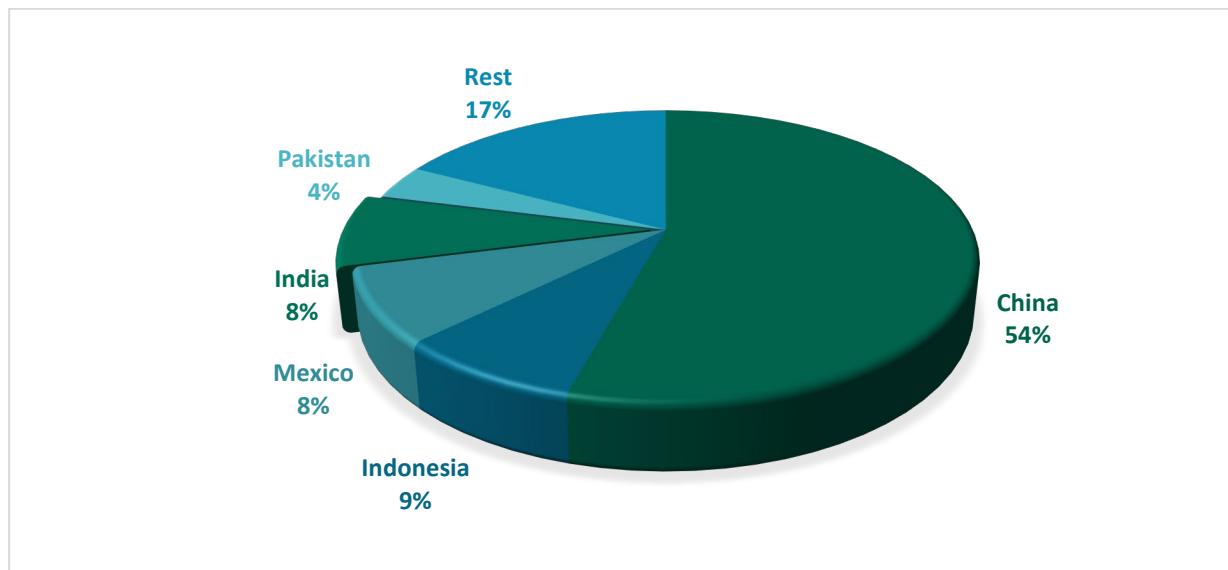
**The United States mattress imports fell by 36% to USD 859 million** when compared with 2023. Interestingly, there were large decreases in exports for Indonesia, Spain, Taiwan, Poland, India and Bulgaria driven in most cases by US anti-dumping tariffs. The source of imported mattresses using the HS Code 940421 is shown below.

**Table 6: USA IMPORTS OF MATTRESSES OF CELLULAR PLASTICS, 2023 vs 2024 (USD million) (HS Code 940421)**

Countries	2021	2022	2023	2024	% Change 2023 vs 2024
Bulgaria	6	5	2	2	-7,14%
Canada	48	40	25	27	6,01%
India	22	25	9	8	-10,87%
Indonesia	356	399	328	328	0,04%
Italy	22	18	9	5	-39,53%
Kosovo	93	137	87	16	-81,30%
Mexico	280	366	422	143	-66,09%
Myanmar	8	26	141	148	4,77%
Others	150	102	66	18	-72,89%
Philippines	28	30	30	9	-69,75%
Poland	12	29	10	5	-52,94%
South Korea	2	12	50	76	50,46%
Spain	57	56	24	4	-84,87%
Taiwan	158	148	73	25	-65,62%
Vietnam	46	45	45	46	1,29%
<b>Total</b>	<b>1,288</b>	<b>1,437</b>	<b>1,322</b>	<b>859</b>	<b>-35,02%</b>

\*HS Code 940421

Source: USITC, CSIL, ISPA

**Chart 7: SOURCE OF MATTRESS IMPORTS TO THE USA, 2024, USD million**

\*HS Code 9404 Mattresses, Bedding Goods

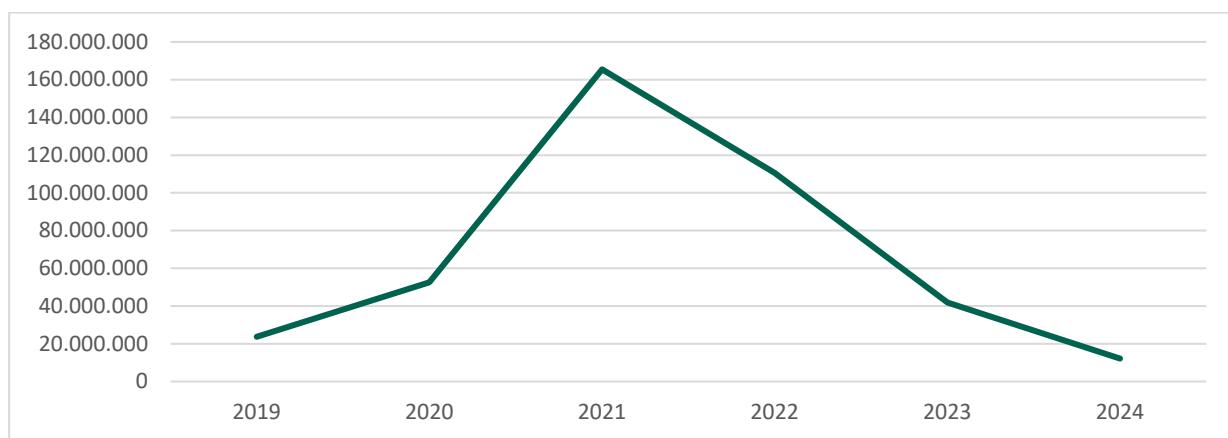
Sources: USITC, CSIL, ISPA

## 2.2.1. Trade Measures on EU Mattress Exports

### Anti-Dumping Case Against EU Mattress Imports

The EU mattress trade has come under growing pressure due to evolving global geopolitical and trade developments, such as the series of anti-dumping and anti-subsidy investigations launched in the United States—targeting imports of mattresses from several countries, including EU Member States - which significantly restricted access to the U.S. market.

The financial impact of these developments is already evident. **Between 2022 and 2024, the value of EU mattress exports to the U.S. under CN codes 940421 and 940429 (covering spring and cellular plastic/rubber mattresses) declined by approximately €90 million.** Beyond this direct revenue loss, the situation is expected to contribute to increased competitive pressure within the internal EU market, along with potential disruptions in supply chains for both raw materials and mattress components—especially as mattress imports from third countries into the EU continue to rise steadily.

**Chart 8: EXPORTS OF MATTRESSES FROM THE EU TO THE USA (2019 – 2024), IN VALUE**

HS codes 940421 &amp; 940421

Source: EUROSTAT

**2.2.2. Imports and Exports Statistics**

An essential parameter in global trade discussions surrounding the flexible polyurethane (PU) foam industry is the **local production and consumption**. As mattress sector serves as a recurring and high-volume application for PU foam, mattress output serves as a bellwether for broader industry health and market trends.

Over the past several years, the EU mattress market has undergone notable fluctuations. After reaching a production peak of approximately 51 million units in 2021, following a total of 49.5 million units in 2017, the market has since experienced a marked decline. Production dropped to 44.9 million units in 2022, continued downward to 39 million in 2023, and further fell slightly to 38.8 million units in 2024, as detailed in the table below.

**Table 7: MATTRESS PRODUCTION IN THE EU PER UNITS, BY MATTRESS CATEGORY, 2021-2024.**

Item	Description	2021	2022	2023	2024
<b>Mattresses of cellular plastics</b>	(including with a metal frame) (excluding water-mattresses, pneumatic mattresses)	18,000,000	14,000,000	12,000,000	12,403,234
<b>Mattresses of cellular rubber</b>	(including with a metal frame) (excluding water-mattresses, pneumatic mattresses)	6,400,000	6,027,186	4,500,000	4,500,000
<b>Mattresses with spring interiors</b>	(excluding of cellular rubber or plastics)	19,180,000	16,253,165	15,515,651	15,555,518
<b>Other Mattresses</b>	(excluding with spring interiors, of cellular rubber or plastics)	7,666,534	8,400,000	7,000,000	6,417,790
<b>Grand Total of Production</b>		<b>51,246,534</b>	<b>44,680,351</b>	<b>39,015,651</b>	<b>38,876,542</b>

Source: EUROSTAT

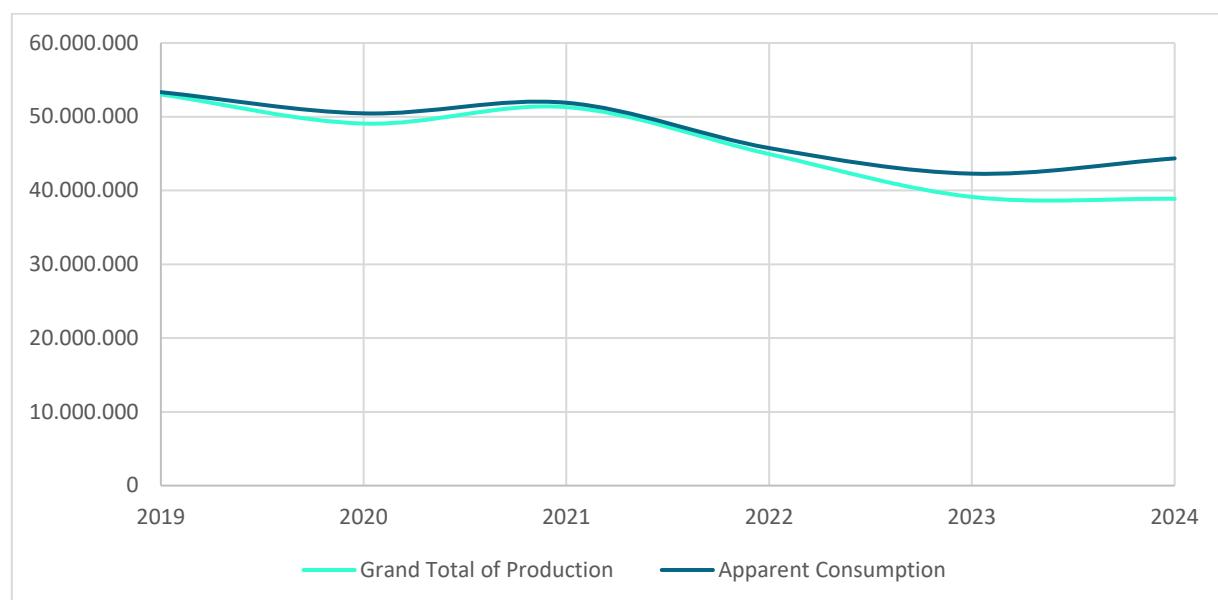
Note: Data from EUROSTAT is rounded up in the official database

In parallel with production trends, apparent consumption of mattresses in the EU has followed a similar trajectory of fluctuation, highlighting both demand-side volatility and structural challenges in the market.

**Consumption peaked in 2019 at over 53.3 million units.** However, the onset of covid and economic and supply chain disruptions led to a gradual decline: 50.5 million units in 2020, a modest rebound to 51.9 million units in 2021, followed by a steep drop to 45.7 million units in 2022. The downward trend in the apparent consumption continued into 2023, reaching 42.3 million units, before seeing a slight recovery to **44.4 million units in 2024** while, simultaneously, a historically low output of production was recorded at 38 million units.

Despite these challenges, **intra-EU trade remains remarkably strong, with approximately 90% of mattress trade value occurring within the region**, highlighting the interconnectedness in mattress manufacturing and distribution among EU Member States.

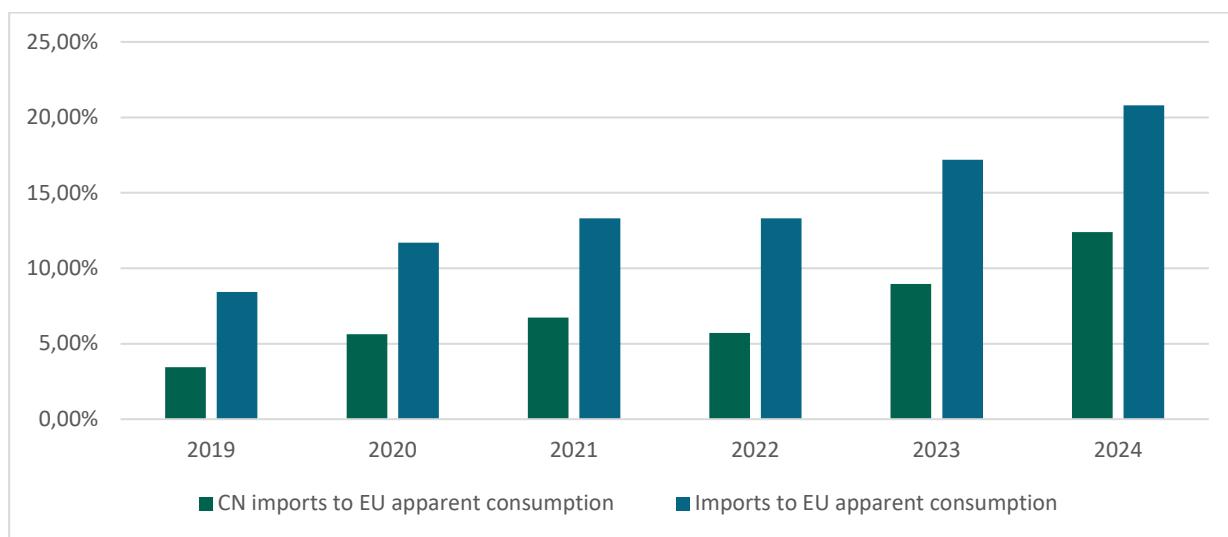
**Chart 9: PRODUCTION AND APPARENT CONSUMPTION OF MATTRESSES IN THE EU, 2019 – 2024, in units**



Source: EUROSTAT, EUROPUR calculations

While the EU mattress market continues to demonstrate strong internal trade in value terms, a growing reliance on imports as a share of apparent consumption reveals a shifting market dynamic. **In 2019, imports accounted for 8.4% of total consumption**, already a notable share, but this figure has steadily increased year over year. By 2020, import dependency rose to 11.7%, followed by 13.3% in both 2021 and 2022 (stagnation due to the decrease of Chinese imports). However, this stabilisation was short-lived as 2023 recorded a sharp increase to 17.2%, and **by 2024, the import share had reached a peak of 20%**.

It highlights how, despite the strength of intra-EU trade, the region is increasingly turning to third-country suppliers to meet its consumption needs—raising potential concerns around competitiveness, supply chain resilience, and long-term industry's picture.

**Chart 10: MATTRESSES IMPORTS TO THE EU APPARENT CONSUMPTION, 2019-2024, % of units**

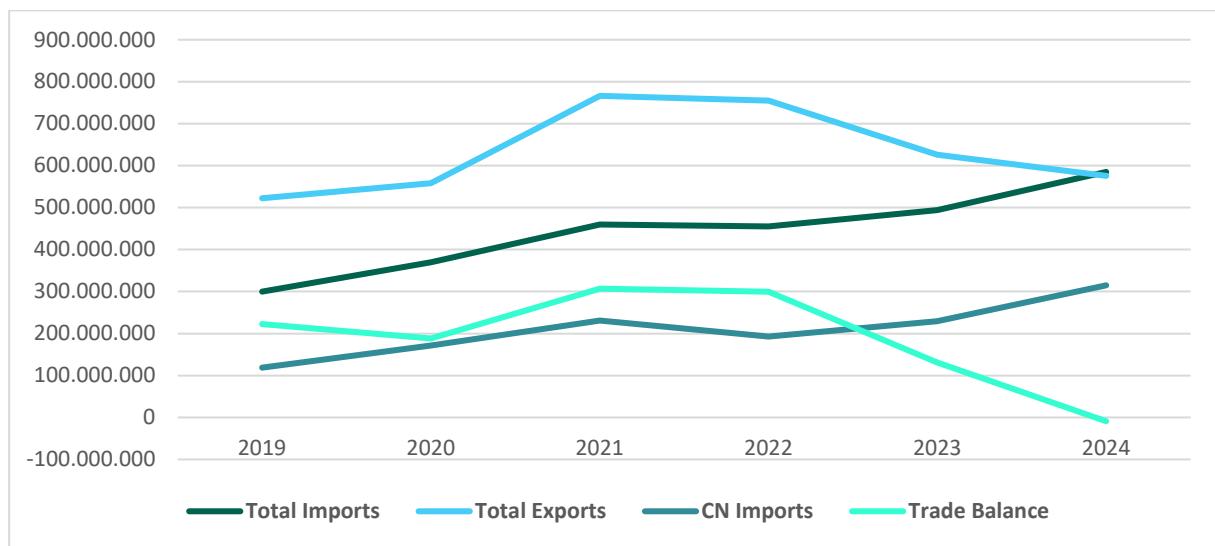
Source: EUROSTAT, EUROPUR calculations

**The import dependency becomes even more pronounced when analysing mattress types individually.** Cellular plastic mattresses, which primarily include PU foam-based products, stand out for their higher exposure to imports. Over the past six years, the share of apparent consumption covered by imports in this segment has tripled, co-existing with the sharp erosion of domestic production.

The EU mattress market has undergone measurable changes in recent years, particularly in terms of international trade. According to *Eurostat* data, **the value of mattress exports from the EU declined from €625 million in 2023 to €576 million in 2024**, a reduction of €50 million, or approximately -7.8%. This decrease includes a notable drop in exports to the United States, as referenced earlier. Despite this decline, total export values remain above historical averages.

In contrast, **EU mattress imports increased significantly during the same period**, rising from €494 million to €585 million, which corresponds to a growth of €90 million or +18.4%. Over the past five years, import values have approximately doubled, reflecting a clear shift in sourcing patterns. A large part of **this growth is attributed to imports from China**, which rose from €118 million in 2019 to €314 million in 2024. **Chinese products now represent 53% of the total mattress import value into the EU**. As noted in previous reports, the proportion of Chinese imports is typically higher within EU Member States compared to the broader European region.

**Chart 11: IMPORTS AND EXPORTS TO AND FROM THE EU, ALL MATTRESSES (940421 AND 940429, in value (€))**



\*HS codes 940421 and 940429

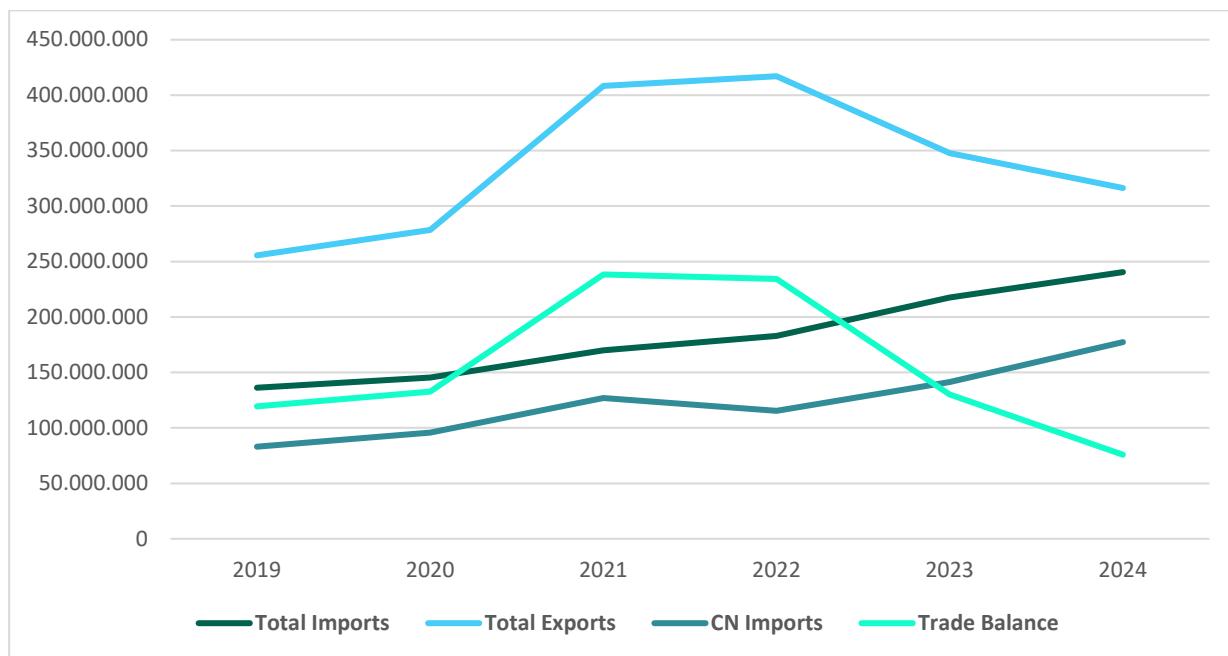
Source: EUROSTAT, EUROPUR calculations

Between 2022 and 2023, the EU's trade surplus in the mattress sector was reduced by half, primarily driven by a combination of declining exports and a marked increase in imports during the 2023 financial year. This shift culminated in 2024, when—for the first time in at least a decade—the EU mattress sector recorded a trade deficit in value. This development complements the trade deficit in weight, which first emerged in 2023 and continued into 2024, amounting to approximately 60,000 tonnes.

Trade data for cellular rubber and plastics mattresses (HS code 940421) show a continued decline in EU exports the last two years, falling from €417 million in 2022 to €316 million in 2024. This reduction is largely attributed to lower demand from key export markets, including South Korea, the United States, the United Kingdom, and Norway. While the EU still maintains a trade surplus in this specific category, the surplus has narrowed considerably in recent years.

At the same time, imports in this segment have doubled over the past five years, with notable growth from China, Serbia, Turkey, Switzerland, Kosovo, and the UK. In particular, Chinese imports increased by €36 million between 2023 and 2024, representing 73% of total imports in this category. This dynamic highlights a key paradox; although the cellular mattress segment remains the only one with a trade surplus, it also exhibits the highest import exposure, underscoring both its importance and vulnerability within the broader EU mattress market.

**Chart 12: IMPORTS AND EXPORTS OF CELLULAR RUBBER AND PLASTIC MATTRESSES, TO AND FROM THE EU, 2019 – 2024, in value (€)**



\*HS Code HS 940421

Source: EUROSTAT, EUROPUR calculations

The latest trade statistics confirm a notable increase in mattress imports from China, accompanied by significant volumes from Serbia, Türkiye, Kosovo, and Switzerland. This growing import presence is particularly evident in the foam mattress segment, where China has established a strong position, primarily serving the lower-end segment of the market. This stands in contrast to EU mattress exports, which are typically positioned in the higher-end market segment.

This differentiation is further reflected in average price per kilogram data. The import price of foam mattresses from China has shown fluctuations in recent years but has now returned to a historical low of €4.47/kg. In contrast, export prices from the EU have increased, driven in part by rising foam input costs, but also by a shift toward more value-added, premium products.

**Table 8: TRADE STATISTICS – MATTRESS IMPORTS TO THE EU/MS FROM NON-EU COUNTRIES, 2022 VS 2024**

Partners	Import value to the EU/MS (€)		% Rate change	Import Qty to the EU/MS		% Rate change	Avg. €/kg
	2022	2024	22 v 24	2022	2024	22 v 24	2024
<b>China</b>	115.329.870	177.625.076	<b>54%</b>	22.805.501	39.727.816	<b>74%</b>	4,47
<b>Serbia</b>	14.902.026	17.066.952	<b>15%</b>	2.798.366	3.128.950	<b>12%</b>	5,45
<b>Turkey</b>	23.952.340	14.930.587	<b>-38%</b>	3.563.272	2.982.022	<b>-16%</b>	5,01
<b>Switzerland</b>	9.969.281	8.954.737	<b>-10%</b>	494.814	406.060	<b>-18%</b>	22,05
<b>Kosovo</b>	1.183.906	6.513.081	<b>450%</b>	215.639	1.766.903	<b>719%</b>	3,69
<b>United Kingdom</b>	6.031.984	5.450.195	<b>-10%</b>	370.160	289.187	<b>-22%</b>	18,85
<b>Vietnam</b>	704.241	2.524.624	<b>258%</b>	101.482	675.871	<b>566%</b>	3,74
<b>Sri Lanka</b>	942.409	1.343.192	<b>43%</b>	152.695	259.429	<b>70%</b>	5,18

Bosnia and Herzegovina	842.034	1.192.035	42%	118.897	200.379	69%	5,95
United States	2.672.195	1.171.062	-56%	204.463	129.942	-36%	9,01

\*HS code 940421

Source: EUROSTAT, EUROPUR calculations

**Table 9: AVERAGE PRICE PER KG OF CELLULAR PLASTIC OR RUBBER MATTRESSES FROM CHINA, 2019 – 2024.**

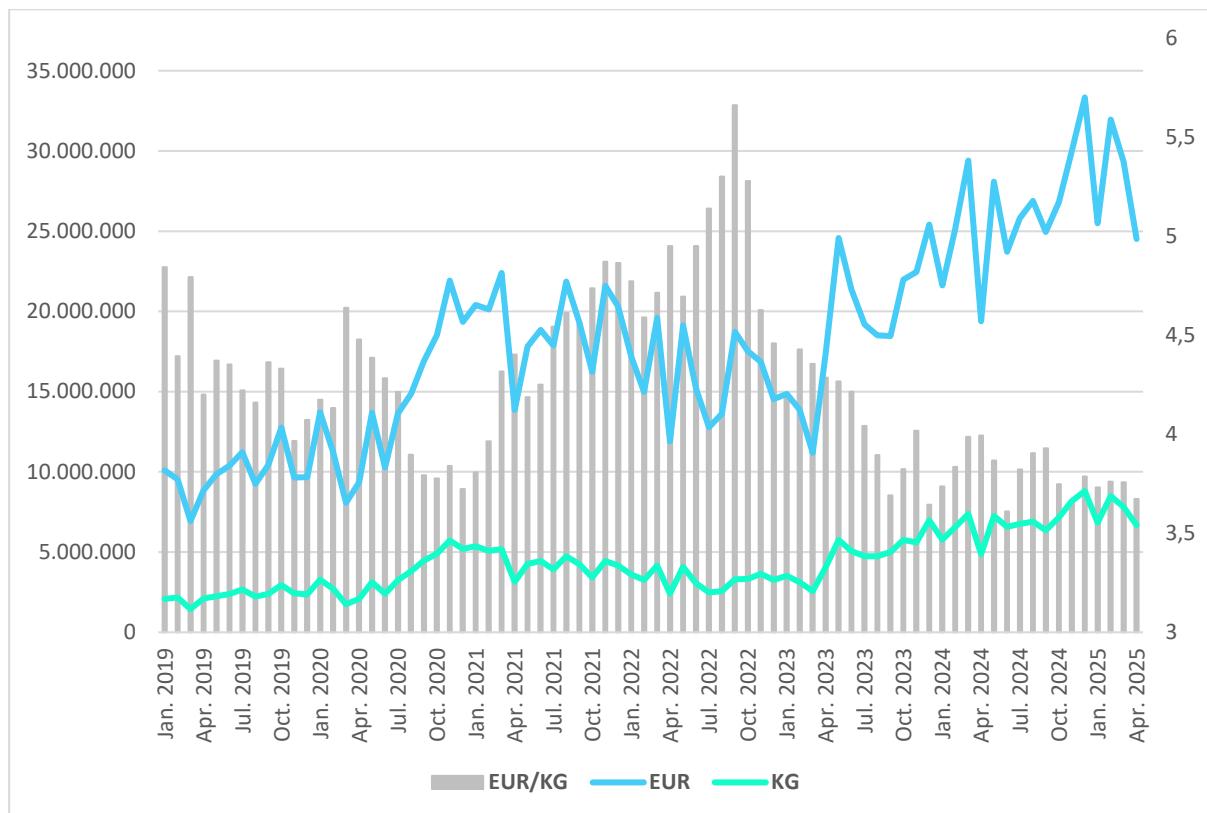
	2019	2020	2021	2022	2023	2024
Average €/kg	4,73	4,43	4,73	5,06	4,59	4,47

\*HS code 940421

Source: EUROSTAT, EUROPUR calculations

The monthly trend chart below on mattress imports from China provides a clearer view of recent developments in both pricing and volumes. Over the past several years, the average price per kilogram of Chinese mattresses has shown cyclical movements—with a gradual decrease until 2020, followed by an uptick in 2021 and 2022, and a renewed downward trend from 2023 onwards. **As of the latest available data, the average import price across all mattress types from China stands at approximately €3.80/kg.** Preliminary figures for 2025 suggest a small decline in average price, coupled with a significant increase in import volumes, indicating a continued pattern of competitive pressure on EU manufacturers, particularly in the low- to mid-range segments of the market.

**Table 10: MONTHLY CHANGES OF MATTRESS IMPORTS FROM CHINA (2019-2025)**



Source: EUROSTAT, EUROPUR calculations

The European mattress market is undergoing a structural shift marked by a growing reliance on imports, particularly from China. For the first time in over a decade, the sector has recorded a trade deficit in both value and quantity, reflecting a broader realignment in global supply dynamics. The increasing presence of low-cost Chinese products is contributing to market saturation, especially in price-sensitive segments.

This development is occurring in the context of global price volatility and is closely linked to a decline in domestic EU manufacturing output, along with a reduction in market share for local producers in several key product categories. At the same time, the EU has experienced a notable contraction in export opportunities, including a significant loss of access to the U.S. market. Together, these trends point to mounting challenges for European manufacturers in maintaining competitiveness and sustaining their position in the global mattress trade.

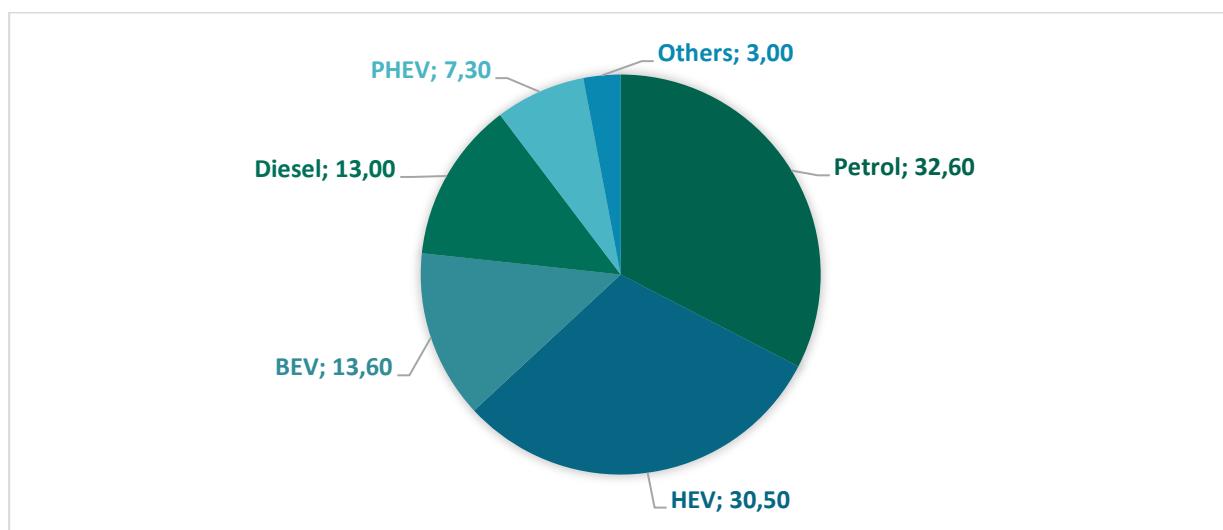
### 2.3. The Automotive Industry

In 2024, the European automotive market (EU+EFTA+UK) showed a small growth over 2023. By the end of 2024, LMC Automotive reported that global light vehicle production decreased from 91.02 million units in 2023 to 90.36 million units, in 2024, reflecting a 1% decrease.

Data from LMC Automotive revealed production in major markets for 2024. In China, production rose from 29.2 million units in 2023 to 30.33 million units in 2024, marking a 3.6% increase. North America saw production decrease from 15.59 million units in 2023 to 15.35 million units in 2024, reflecting a decline of 1.5%. Whereas in Japan, production also fell from 8.6 million units in 2023 to 7.80 million units in 2024, a decrease of 8.8%.

According to data published by *LMC & Forbes*, **sales in Europe (EU/EFTA) fell by 1.6% in 2024 compared to 2023, with all major markets showing decreases**. Russia and Ukraine, which saw substantial increases in 2023, experienced declines in 2024, with growth rates of 31.3% and 20.3%, respectively. Türkiye also saw a decline, producing 1.35 million units in 2024, down from 1.42 million in 2023, representing a 1.23% decrease.

**Chart 13: 2024 NEW EU CAR REGISTRATIONS BY POWER SOURCE, in %**



Source: ACEA (European Automotive Manufacturers Association)

The chart above illustrates the increase in battery-containing vehicles and the reduction in the share of diesel vehicles in 2023.

**Table 11: AUTOMOTIVE SALES IN THE LEADING EU COUNTRIES, 2023, 2024 & Forecast 2025 (in million)**

Market	2023	2024	% Change	2025F
EU/EFTA	14,723	14,975	-1,71	15,049
United Kingdom	2,252	2,315	-2,80	2,344
Russia	1,059	1,543	-45,70	1,480
Türkiye	1,231	1,216	1,22	1,062
Total	19,265	20,049	-4,07	19,935

Source: LMC & Forbes

As reported by LMC Automotive and Forbes, sales of vehicles have been volatile with the major market EU/ETTA showing a small decrease on 2023 with larger decreases observed in the UK and a substantial decrease in Russia.

**Table 12: PASSENGER VEHICLE PRODUCTION 2022-2024 AND FORECASTS TO 2029 ('000 vehicles)**

Country	2023	2024	% Change 2023/2024	2025F	2026F	2027F	2028F	2029F
Austria	103	74	-28%	59	55	95	96	95
BE & NED	408	216	-47%	183	234	247	245	227
France	1,519	1,369	-10%	1,534	1,631	1,638	1,612	1,623
Germany	4,234	4,253	0%	4,382	4,248	4,160	3,902	4,107
Italy	851	573	-33%	508	736	791	876	906
Spain & Portugal	2,713	2,675	-1%	2,543	2,675	2,836	3,040	3,033
UK	1,004	881	-12%	847	898	1,014	1,058	1,007
Czech Republic	1,397	1,458	4%	1,290	1,275	1,263	1,224	1,223
Hungary	511	455	-11%	460	644	755	803	846
Poland	558	582	4%	583	629	645	685	704
Slovakia	1,050	995	-5%	1,083	1,106	1,184	1,160	1,122
Other Europe*	438	496	13%	554	621	581	600	617
<b>Total Europe</b>	<b>14,786</b>	<b>14,027</b>	<b>-5%</b>	<b>14,026</b>	<b>14,752</b>	<b>15,209</b>	<b>15,301</b>	<b>15,510</b>
Russia	642	946	47%	1,005	1,009	1,002	920	932
Türkiye	1,424	1,347	-5%	1,437	1,512	1,629	1,662	1,639
<b>Grand Total</b>	<b>16,852</b>	<b>16,320</b>	<b>-3%</b>	<b>16,468</b>	<b>17,273</b>	<b>17,840</b>	<b>17,883</b>	<b>18,081</b>

\*Others Europe includes Belarus, Bulgaria, Finland, Serbia, Slovenia, Sweden & Ukraine

Source: LMC Automotive, used with kind permission

The table above outlines production volumes across major European automotive manufacturing countries, indicating notable declines in most markets. In certain cases, reductions are linked to plant

closures or the relocation of production activities. Overall, the EU automotive sector has entered a contractionary phase.

At the same time, the industry is contending with rising competitive pressures from imports, most prominently within the electric vehicle (EV) segment.

**Table 13: EU NEW CAR IMPORTS, MAIN COUNTRIES OF ORIGIN, trade in value (in € million)**

Country	2023	2024	Change 2023/2024
China	12,812	12,725	-0.68%
United Kingdom	10,265	11,007	7.23%
Japan	10,201	12,305	20.63%
South Korea	9,923	9,105	-8.24%
United States	7,798	8,421	7.99%

Source: EUROSTAT

**Table 14: EU NEW CAR IMPORTS, MAIN COUNTRIES OF ORIGIN, trade in volume (in units)**

Country	2023	2024	Change 2023/2024
China	676,848	687,751	1.6%
Turkiye	514,854	492,254	-4.4%
Japan	447,964	612,458	36.7%
South Korea	430,427	405,002	-5.9%
Morocco	382,558	332,452	-13.1%

Source: EUROSTAT

While year-on-year imports have exhibited volatility, China now leads EU car imports despite the introduction of tariffs on Chinese-made electric vehicles in mid-2024. Over the longer term, Japan remains a steady and significant supplier. Meanwhile, Turkiye and the United States continue to be consistent sources of vehicles, albeit at lower volumes.

In 2024, approximately 4 million vehicles were imported into the EU, representing a slight decline in volume but an increase in overall value. This trend indicates a shift towards higher-value vehicles and generally rising prices.

### 3. FLEXIBLE PU SLABSTOCK FOAM PRODUCTION DATA

*The data presented here has been aggregated in accordance with CEFIC guidelines for handling confidential statistics in compliance with competition law. This includes ensuring that at least three companies are represented per geographical area and that no single company accounts for more than 70% of the reported data in any given area. Whenever possible, data has been reported from regions with at least five companies, with no single company exceeding 70% of the reported data. All information provided by EUROPUR members is treated as strictly confidential, and comments are reported anonymously.*

With significant growth in EUROPUR membership, the **total polyether foam production by members now represents approximately 90% of all slabstock PU foam production** across the 27 EU Member States, as well as the UK, Norway, Switzerland, Albania, Belarus, Bosnia and Herzegovina, Kazakhstan, Kosovo, Serbia, North Macedonia, Ukraine, Russia, and Türkiye. This extensive data from members provides a robust basis for accurately representing trends in foam production.

In compliance with CEFIC guidelines and antitrust regulations, polyether foam production is presented by region. Data for polyester foam production cannot be broken down by country due to the limited number of producers.

The production data presented here was collected from EUROPUR members through a questionnaire they completed. For non-members, data was gathered from foam producers via questionnaires, personal interviews, and telephone interviews. Additionally, data was sourced and benchmarked from a variety of secondary sources.

<b>TOTAL PU FLEXIBLE FOAM PRODUCTION</b>	<b>1,592,507 tonnes</b>
Total PU Slabstock Foam Production	<b>1,370,216 tonnes</b>
Total POLYETHER Slabstock Foam Production	1,320,198 tonnes
Total POLYESTER Slabstock Foam Production	50,018 tonnes
Total PU Moulded Foam Production	<b>222,291 tonnes</b>
Total Number of Continuous Foaming Plants	181
Estimated Full Time Employees in PU Foam Production	25,892 FTE
Estimated PU Foam Industry Turnover	5.1 billion EUR

Source: EUROPUR, B&P

In 2024, a total of 1,320,198 tonnes of polyether foam was produced, reflecting a 0.1% decrease compared to 2023. Polyester foam production totalled 50,018 tonnes, marking an increase of 2.57% from the previous year. The growth in polyether slabstock foam was primarily driven by increases in Eurasia (including Russia, Ukraine, Belarus, Kazakhstan, and Uzbekistan) and Türkiye. **Excluding Eurasia and Türkiye, compared to 2023, market receded again by 2.66%**. When including both Eurasia and Türkiye, the total production was flat at -0.1% when compared to 2023.

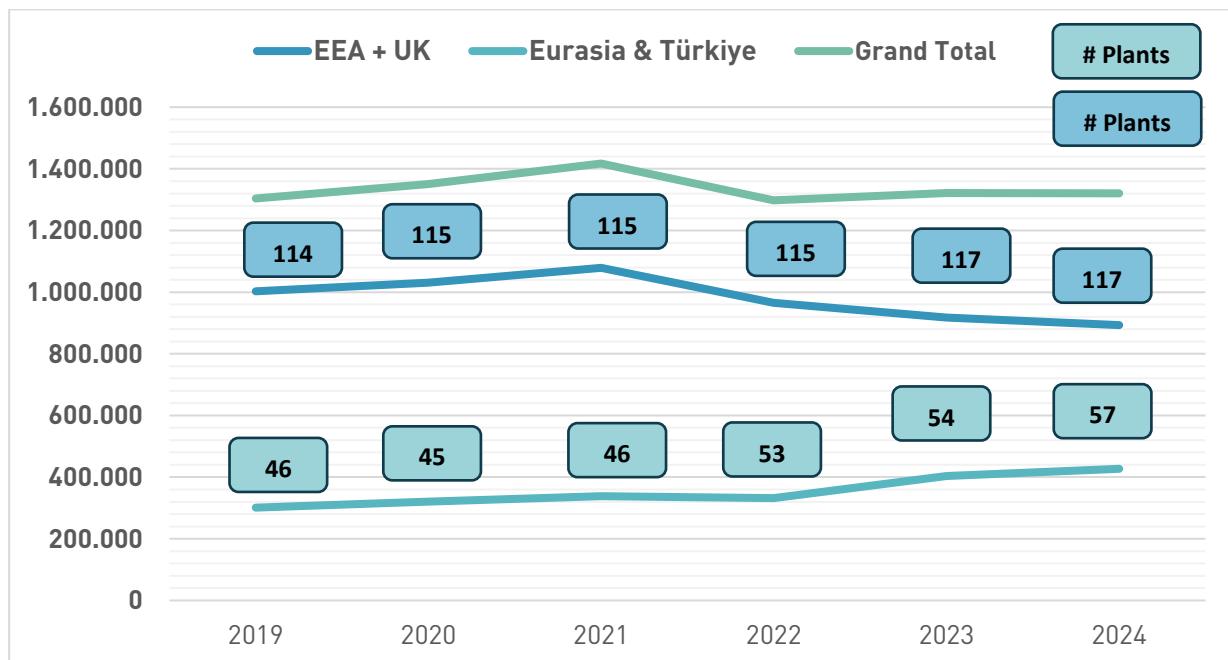
Overall, 2024 presented a “stagnant” picture. While results were slightly better than anticipated at the 2023 conference in Istanbul, demand remained “very sluggish”, with little sign of an increase.

In 2024, supply chains eased from the most challenging periods. The year was again marked by volatility in costs coupled with logistical challenges. The major issue was the slow-moving demand for end products, a trend that has extended into 2025 and persists. This situation is largely driven by geopolitical challenges and a lack of overall demand. Starting mid 2024 raw material prices started to increase and

has remained an issue into 2025 with the ability of foamers to pass on these increases becoming even more difficult due to the persistently subdued market for finished goods. Hence, "cost" remains the predominant issue facing the flexible foam industry.

Based on interviews and feedback from third parties, the focus on cost reduction amid lower demand has occasionally led to compromises in product quality, with a tendency towards using lower-density foams. These significant cost increases are compounded by expenses related to maintaining and investing in End-of-Life (EoL) solutions, sustainability initiatives, and circular economy activities.

**Chart 14: POLYETHER SLABSTOCK PRODUCTION EUROPE (in tonnes), 2019 – 2024**



Year	2019	2020	2021	2022	2023	2024
<b>Plants (n)</b>	<b>160</b>	<b>160</b>	<b>161</b>	<b>168</b>	<b>171</b>	<b>174</b>
<b>Average Production /plant (t)</b>	<b>8,151</b>	<b>8,443</b>	<b>8,803</b>	<b>7,725</b>	<b>7,728</b>	<b>7,587</b>

Source: EUROPUR, B&P

The chart provided illustrates that, despite the prevailing uncertainty, production levels in 2024 were comparable to those in 2019. Although it is still noticeable that the "trend east" has not stopped. The total number of plants increasing to 174 in 2024, also thanks to the increasing intelligence on the market rendering EUROPUR capable of reporting more accurately. 117 in EEA & UK and 57 in Eurasia and Türkiye. More of concern is the rising number of plants with lowering average production volumes driven by lack of end market demand.

### 3.1. Foam Production by Region

The chart below, which has been a standard feature in this report for many years, depicts PU slabstock (polyether and polyester) production. However, its relevance is diminishing, and the figures should be considered only as a rough estimate.

The country groups can be divided into 5 subcategories:

- **Eurasia** – containing either difficult or closed markets
- **Türkiye** – seems to always be growing above the average
- **Eastern & Southeastern Europe** – flat to single digit negative
- **France, Benelux, Germany, Scandinavia, Italy & Iberia** – single digit negative
- **UK and Ireland** – single digit positive

Large companies who have plants in multiple countries have also shifted production to maximise unit costs of production which has also played a small role in the country statistics.

**Table 15: PU SLABSTOCK POLYETHER PRODUCTION EUROPE (t), 2020-2024, BY REGION**

Region	2020	2021	2022	2023	2024	% AAGR (2023/2024)
Austria, Germany, Switzerland	133,748	141,921	119,006	108,410	<b>103,434</b>	-5%
Balkans, Greece, and Cyprus	47,625	44,383	40,576	40,492	<b>36,017</b>	-11.05%
Benelux & France	119,262	113,233	100,858	87,858	<b>84,813</b>	-3.47%
Hungary, Croatia, Czechia, and Slovenia	54,032	54,847	44,713	43,648	<b>39,676</b>	-9.1%
Iberia	126,499	138,818	129,511	125,162	<b>126,123</b>	0.77%
Italy and Malta	105,900	116,696	113,668	105,916	<b>106,361</b>	0.42%
Poland	217,739	228,037	204,019	206,042	<b>203,380</b>	-1.29%
Romania and Bulgaria	72,679	83,492	70,186	66,646	<b>68,389</b>	2.62%
Scandinavia & Baltics	78,981	82,181	76,777	64,793	<b>65,648</b>	1.32%
UK and Ireland	74,041	75,298	66,614	68,549	<b>59,314</b>	-13.47%
<b>EEA + UK</b>	<b>1,030,506</b>	<b>1,078,906</b>	<b>965,929</b>	<b>917,515</b>	<b>893,155</b>	-2.66%
<b>Eurasia*</b>	140,813	156,281	133,922	189,364	<b>223,177</b>	17.86%
<b>Türkiye</b>	179,485	182,064	198,027	214,673	<b>203,866</b>	-5.03%
<b>Grand Total</b>	<b>1,350,804</b>	<b>1,417,251</b>	<b>1,297,878</b>	<b>1,321,552</b>	<b>1,320,198</b>	-0.1%

Note: Data accuracy has increased over the years. Any discrepancy with reports of previous years is due to improvement in knowledge.

Source: EUROPUR, B&P

## Country Group Comments



**Austria, Germany & Switzerland (DACH)** – total foam production in the region fell again by 5.00% after an 8.90% fall in 2023.

The region continues to see significant volumes of mattress imports from its Eastern European neighbours and increasingly from China, albeit mainly “Bed in a Box” and focussed on a few European OEM’s. The production of high-quality furniture establishes the region as a leading global exporter. In the lower-priced segment of the market, full foam mattresses remain dominant, although hybrid mattresses have gained market share as producers work to meet OEM demanded price points. LMC reported a 1% reduction in the production of light vehicles when compared with 2023.



**Benelux and France** – the markets have been combined for reporting purposes to ensure compliance with the CEFIC Guidelines. The area experienced again pressure from competitively priced foams and products imported from Eastern Europe and China. Total foam production declined again by 3.47% in 2024, following a 13.00% decrease in 2023. This sharp decline stabilised towards the end of 2024 and has continued at a low level into 2025 with little sign of a recovery.

LMC reported a 14% reduction in automotive production when compared with 2023.



**UK & Ireland** – showed a significant decline in 2024 vs 2023 of 13.47%. LMC reported that Automotive production fell by 14%, when compared with 2023, through sluggish demand and plant closures. The “Bed in a Box” market remains highly competitive with the UK remaining to be the largest market in Europe for this product type.



**Scandinavia, Lithuania and Estonia** – In 2024, a 1.32% increase in production volumes was reported. Production in Denmark, which is heavily focused on mattress exports, remained relatively stable, as global demand for high-end mattresses showed resilience. Historically, the ratio between spring, foam, and latex mattresses has remained fairly constant, with polyurethane continuing to hold a dominant position.



**Poland** – Poland regained its No 1 position jointly with Türkiye as the largest foaming country; it demonstrated some resilience in 2024 with only a 1.29% decrease in production volumes. However, this trend was not uniform across the industry. Some producers reported lower production volumes compared to 2023, while others remained stable. This discrepancy was largely influenced by the end markets served by the foam producers' customers.



**Iberia** – the region was largely flat in production. Exports to the United States and Mexico, as well as to neighbouring European countries, stagnated due to the impact of additional trade tariffs imposed by the USA. This declined further as 2024 progressed to a very low level by the year end which has continued into 2025. There were also reports of end customers opting for lower-density foam to mitigate the rising costs of full foam mattresses, contributing to the increased popularity of hybrid and spring mattresses. The National Association of Furniture Manufacturers and Exporters (ANIEME) reported stagnation in furniture exports for 2024.

LMC reported an 1.1% decrease in Iberian production in the automotive industry compared to 2023, as supply chain improved although demand remained weak.



**Italy & Malta** – the market remained “flat” in 2024 vs 2023 showing a small increase of 0.42%. Despite the downturn, manufacturers of high-end furniture reported “reasonable sales,” particularly in export markets like China and the United States, where the “Made in Italy” brand continues to be a strong selling point. The trend towards full foam mattresses, which had gained momentum since 2020, has slowed, with an increase in the production and sales of spring and hybrid mattresses. In the lower-priced segment of the mattress market, foams with a density of  $25\text{kg/m}^3$  are commonly used.



**Greece, Balkans and Cyprus** – in 2024, foam production in the Greece, Balkans, and Cyprus region declined by 11.05%. Toll manufacturing of foam for other producers virtually collapsed, primarily due to improved supply chains in other regions as well as more available production. However, the region faced significant challenges, particularly due to the imposition of anti-dumping tariffs by the United States, which forced some producers to redistribute their production to other locations.

The rising cost of production was identified as a major challenge in the region, even as supply chain issues from previous years began to ease. This cost pressure led to an increased demand for low-density foams, particularly in the mattress industry. The growth of hybrid and spring mattresses, along with the rising imports of finished goods from China, further complicated the market landscape, posing additional concerns for local producers.



**Romania & Bulgaria** – foam production in the region experienced a 2.62% increase, largely driven by increased demand in export markets. The Romanian Furniture Manufacturers Association (APMR) highlighted that the majority of domestic furniture production is export-oriented, with approximately 78% of output sold abroad. Additionally, exports of mattresses from Bulgaria to the United States also declined during the year, reflecting broader challenges in international trade for the region.



Foamers in **Hungary, the Slovak and Czech Republics, Croatia and Slovenia** reported a 9.10% decrease in total production in 2024. Despite this decline, Hungary continued to export over 55% of the mattresses and upholstery it manufactured. Hungarian foamers also benefited from toll manufacturing arrangements in neighbouring Balkan countries, albeit at a reduced level when compared to the past years.



**Russia, Kazakhstan, Ukraine, Belarus and Uzbekistan (Eurasia)** – This now isolated market experienced a significant 17.86% increase in foam production during 2024. This follows a 41.40% increase in 2023. Most foamers reported that production units were at maximum production in 2024, although 2025 shows a slowing in demand as government incentives are reduced or withdrawn. New plants have opened in the region mainly in Kazakhstan, and Uzbekistan.

The market has become increasingly self-contained due to the impact of the war in Ukraine, which has largely halted exports to Europe and disrupted the import of raw materials from Europe. To compensate, most of the region has turned to China for the supply of raw materials, especially TDI, with previous supply chain issues now largely resolved. Despite the ongoing war and sanctions on Russia, Kazakhstan's furniture manufacturing sector has continued to develop dynamically, though at a somewhat reduced pace.



**Türkiye** – declined for the first time in more than a decade, showing a 5.03% decline in 2024 compared to 2023. This now puts Türkiye in joint 1<sup>st</sup> place with Poland as the largest foam producing country.

Türkiye now operates 29 continuous foam production lines across 25 companies, producing a total of 203,866 tonnes of slabstock foam. Whereas, production facilities range from 100 t to 25,000 t of slabstock per year.

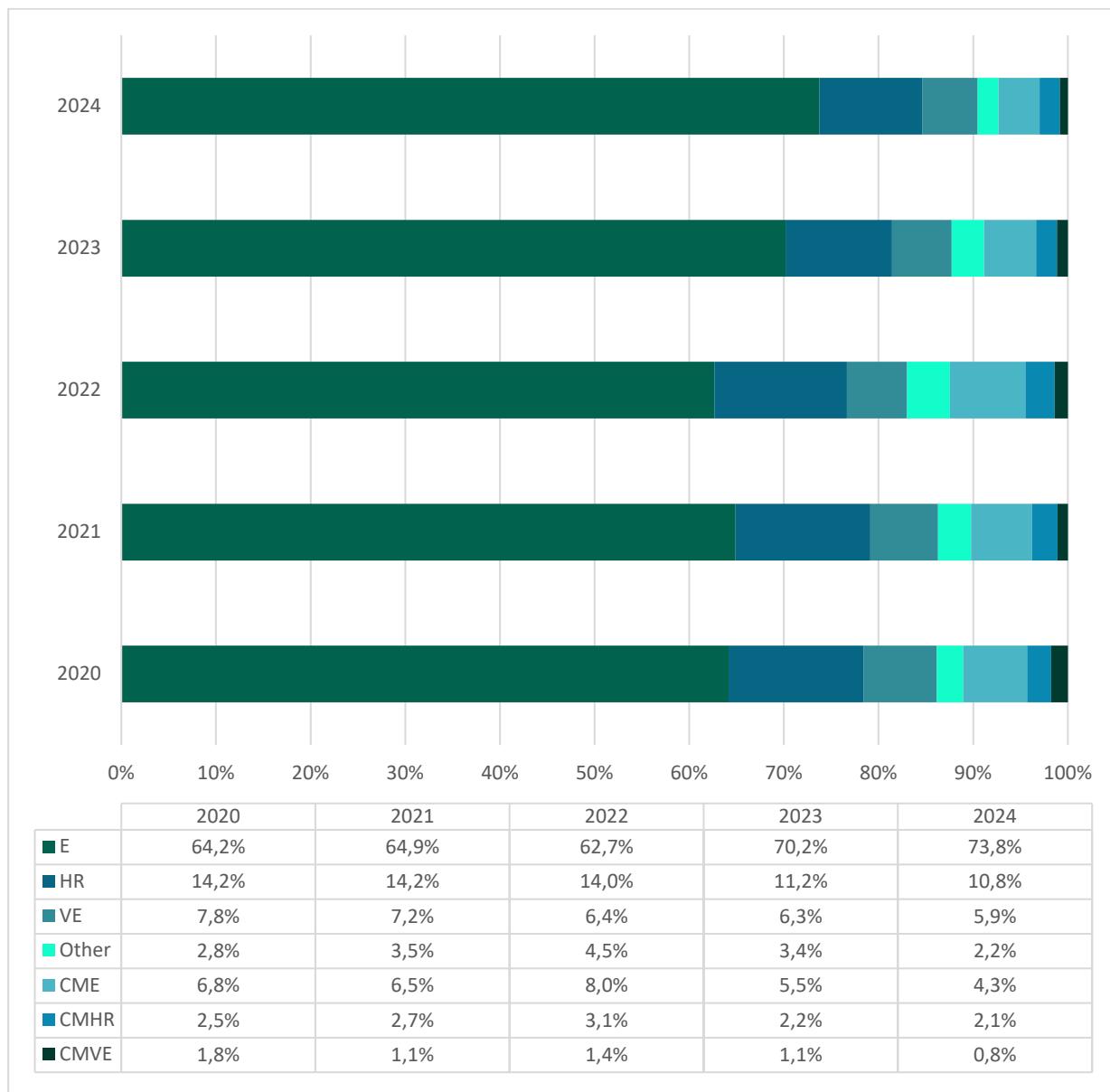
EUROPUR members are responsible for approximately 75% of the local production.

- The main end-use markets for flexible slabstock are upholstered furniture, mattresses, footwear, clothing and the automotive industry. There was also significant demand for trim foam for pillows, cushions, furniture, and toys, as well as high-density rebonded foams and lightweight packaging materials.
- Exports to the EU saw a slight increase, while exports to the Middle East and Northern Africa stagnated. However, exports to the United States plummeted by over 90% due to anti-dumping tariffs.
- Outlook for 2025 – Growth is expected to be lower, primarily due to local economic challenges, including a credit squeeze, inflation, lower export demand and logistical issues.

### 3.2. Foam Production by Type

The chart below delineates polyether slabstock production by type, specifically for EUROPUR members. It was noticeable that the percentage of standard foam increased from 70.2% in 2023 to 73.8% in 2024. Further analysis showed a pattern that clearly relates to the large growth in the market Eurasia where more standard foam is produced, when compared to other types coupled with the negative growth seen in the traditional European markets.

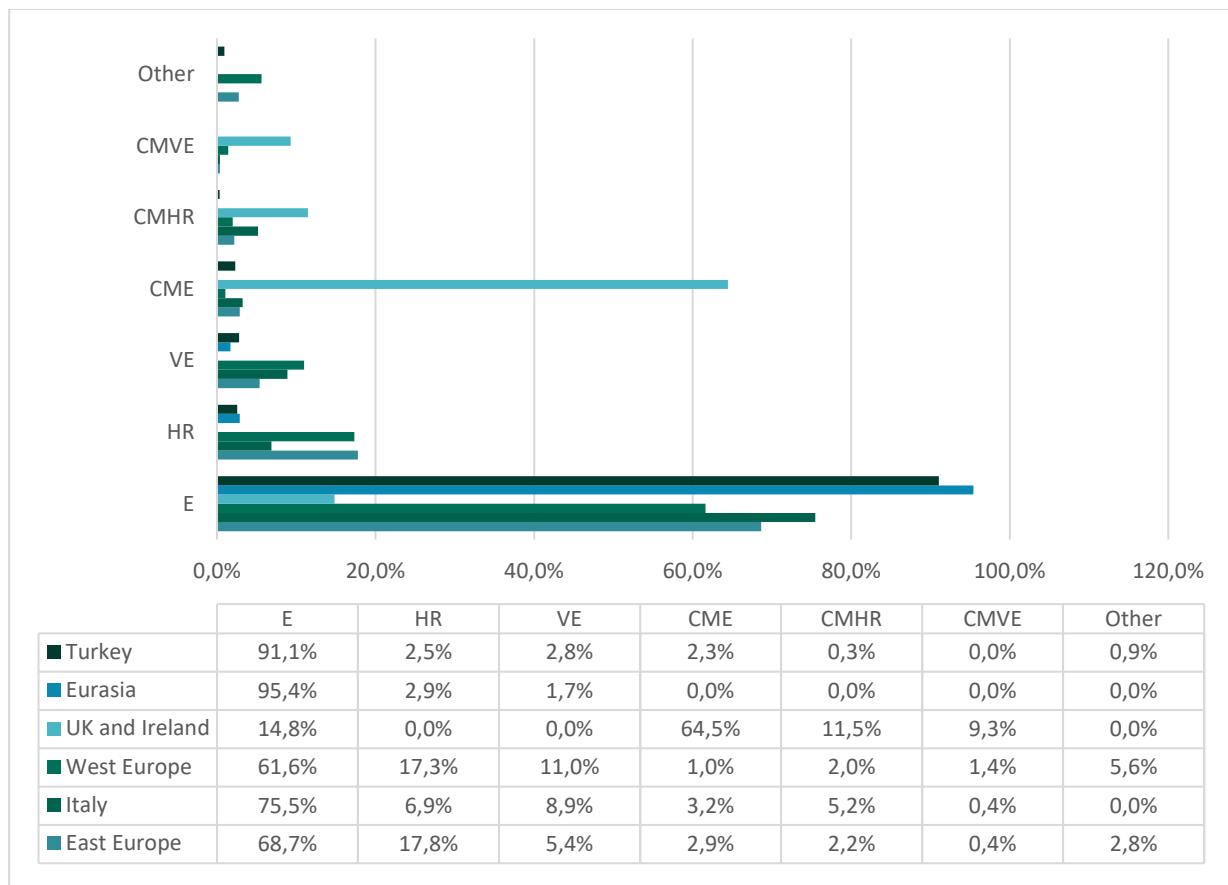
**Chart 15: POLYETHER PRODUCTION BY TYPE (%), 2020-2024 (EUROPUR MEMBERS ONLY)**



Source: EUROPUR

The following chart provides a comprehensive breakdown of foam types across European regions, underscoring the significance of the growth seen in Eurasia. This highlights the pivotal role played by these regions within the broader European context.

**Chart 16: POLYETHER PRODUCTION BY TYPE (%) AND REGION, 2020-2024 (EUROPUR MEMBERS ONLY)**



Source: EUROPUR

### 3.3. Foam Trade Data – Imports & Exports

The origin of imports of flexible foam into the EU-27 between 2019 and 2024 shows significant shifts in trade flows, with both traditional suppliers and emerging sources playing a role. Staying limited though compared to the size of the EU domestic market.

The United Kingdom consistently remains the leading exporter, supplying close to 9,400 tonnes in 2024, though this reflects a slight decline of 1.2% compared to 2023. Serbia, which experienced rapid growth in earlier years, shows a marked contraction with imports falling by over 10% year-on-year, indicating volatility in its export performance. In contrast, Turkey continues on a steady upward trajectory, reaching 2,431 tonnes in 2024, an increase of just over 10% from the previous year, strengthening its position as a supplier to the EU market.

Other origins reveal contrasting dynamics. China's exports to the EU dropped sharply in 2024 by nearly 32%, reversing gains seen in 2022–2023. Similarly, imports from the United States and Switzerland fell by 14% and 17% respectively, pointing to a broader downward adjustment among non-EU suppliers. On the other hand, smaller exporters such as North Macedonia and Albania showed strong growth of nearly 20% and 22% respectively, albeit from a relatively low base.

Overall, total imports decreased by 6.3% in volume terms in 2024 compared to 2023, and the corresponding value in euro terms dropped by 7.2%.

**Table 16: ORIGIN OF IMPORTS OF FLEXIBLE FOAM INTO THE EU 28, 2019-2024 (tonnes, EUR thousand)**

Leading Importers	2018	2019	2020	2021	2022	2023	2024	% Change 2023/2024
<b>United Kingdom</b>	7,550	9,725	7,721	8,666	9,773	9,510	9,399	<b>-1,17%</b>
<b>Serbia</b>	2,634	2,973	6,095	11,363	6,162	3,646	3,273	<b>-10,23%</b>
<b>Turkey</b>	1,495	1,467	1,642	1,718	1,691	2,206	2,431	<b>10,20%</b>
<b>China</b>	1,592	1,867	1,731	1,813	2,008	2,423	1,651	<b>-31,86%</b>
<b>United States</b>	1,204	1,511	1,383	1,871	1,672	1,662	1,424	<b>-14,32%</b>
<b>Switzerland</b>	,683	,767	,923	,1250	1,572	1,611	1,332	<b>-17,32%</b>
<b>North Macedonia</b>	,688	,767	,845	1,273	1,172	1,049	1,254	<b>19,54%</b>
<b>Albania</b>	,025	,096	,372	1,066	,874	,725	,887	<b>22,34%</b>
<b>Bosnia and Herzegovina</b>	,118	,437	,535	,644	,438	,434	,275	<b>-36,64%</b>
<b>Ukraine</b>	1,506	1,292	7,36	,179	,059	,169	,206	<b>21,89%</b>
<b>Total (t)</b>	<b>20,212</b>	<b>23,223</b>	<b>25,016</b>	<b>39,311</b>	<b>28,036</b>	<b>24,228</b>	<b>22,696</b>	<b>-6,32%</b>
<b>Total (€ thousand)</b>	<b>97,679</b>	<b>107,578</b>	<b>107,285</b>	<b>172,637</b>	<b>156,842</b>	<b>137,366</b>	<b>127,366</b>	<b>-7,28%</b>

Source: EU Market Access Database HS 39211310

**Table 17: TOP 10 DESTINATIONS OF EXPORTS OF FLEXIBLE FOAM OF EU ORIGIN TO NON-EU COUNTRIES, 2018-2023 (EUR thousand)**

Country	2018	2019	2020	2021	2022	2023	2024	% Change 2023/2024
<b>United States</b>	31,690	28,730	27,780	42,850	40,370	40,440	39,050	<b>-3,4%</b>
<b>Mexico</b>	11,970	10,890	10,500	17,520	19,510	38,400	34,080	<b>-11,2%</b>
<b>United Kingdom</b>	44,990	40,950	37,580	50,490	44,020	39,240	31,300	<b>-20,2%</b>
<b>China</b>	26,310	22,070	23,890	27,110	28,250	34,390	26,180	<b>-23,9%</b>
<b>Turkey</b>	11,720	12,820	14,520	16,800	23,960	26,560	22,240	<b>-16,3%</b>
<b>Serbia</b>	11,120	12,710	15,800	21,910	23,270	25,220	22,020	<b>-12,7%</b>

Country	2018	2019	2020	2021	2022	2023	2024	% Change 2023/2024
<b>Morocco</b>	9,740	10,520	9,050	10,470	14,220	17,760	18,450	<b>3,9%</b>
<b>Ukraine</b>	9,250	14,660	19,350	21,350	18,810	21,980	16,640	<b>-24,3%</b>
<b>Switzerland</b>	16,140	15,220	14,560	21,090	19,740	17,680	16,520	<b>-6,6%</b>
<b>Tunisia</b>	2,320	4,490	3,860	5,880	6,840	7,910	9,790	<b>23,7%</b>
<b>Total non-EU</b>	<b>252,039</b>	<b>254,586</b>	<b>258,879</b>	<b>249,821</b>	<b>324,669</b>	<b>349,523</b>	<b>312,724</b>	<b>-10,5%</b>

Source: EU Market Access Database HS 39211310

The table above illustrates changes in EU export destinations by value (thousand €), whereas the ranking is based on 2024 export values.

The chart below presents the same Top 10 export destinations, this time measured by tonnage; reflecting short-term fluctuations and uncertainty. Given this volatility, it remains challenging to draw definitive conclusions at this stage regarding the trends to follow on non-EU export destinations.

**Table 18: Top 10 DESTINATIONS OF EXPORTS OF FLEXIBLE FOAM OF EU ORIGIN TO NON-EU COUNTRIES, 2018-2024 (tonnes)**

Country	2018	2019	2020	2021	2022	2023	2024	% Change 2023/2024
<b>United Kingdom</b>	14,325	13,570	10,301	21,488	25,268	21,950	20,409	<b>-7,02%</b>
<b>United States</b>	10,926	5,222	4,514	8,256	6,204	5,676	6,818	<b>20,12%</b>
<b>Serbia</b>	3,435	3,888	4,478	4,938	4,866	5,183	5,167	<b>-0,31%</b>
<b>Ukraine</b>	2,924	4,441	5,528	4,718	3,944	4,704	4,130	<b>-12,21%</b>
<b>Morocco</b>	1,702	1,975	1,744	2,064	2,544	2,719	3,711	<b>36,50%</b>
<b>Mexico</b>	2,232	1,455	1,573	2,652	2,596	3,447	3,364	<b>-2,40%</b>
<b>Saudi Arabia</b>	5,944	8,146	6,155	4,031	1,920	4,437	3,309	<b>-25,42%</b>
<b>Turkey</b>	3,314	2,441	2,620	2,701	3,672	3,551	2,906	<b>-18,16%</b>
<b>South Africa</b>	2,670	2,705	2,215	2,541	2,844	1,936	2,520	<b>30,11%</b>
<b>United Arab Emirates</b>	2,384	2,372	1,413	1,336	1,596	1,233	2,427	<b>96,89%</b>
<b>Total non-EU</b>	<b>77,436</b>	<b>75,054</b>	<b>72,266</b>	<b>98,913</b>	<b>76,556</b>	<b>75,570</b>	<b>74,844</b>	<b>-0,96%</b>

Source: EU Market Access Database HS 39211310

### 3.4. Changes in the Foam Industry

Between June 2024 and July 2025, the flexible polyurethane foam industry and its supply chain has undergone restructuring, marked by corporate transformations, strategic closures, joint ventures, and heightened circular economy efforts with multiple collaborative initiatives to have emerged to advance mattress and automotive plastics recycling. At the same time, the influence of China has become increasingly central. As the dominant producer of isocyanates and polyether polyols, China's raw

material market significantly shapes global pricing and supply dynamics. Its growing share in the EU mattress import market underscores both its competitiveness and the pressure felt by European producers. Amid these shifts, industrial players are being forced to adapt commercially and operationally to a complex global supply landscape.

## I. Changes in the Flexible Foam Supply Chain (non-exhaustive list)<sup>1</sup>:

- June 2024, the **Ciech Group** of companies changed its name to Qemetica.
- July 2024, **NEVEON and recycling management** company BRANTNER green solutions have announced the setting up of a joint venture to fill the gap in mattress recycling in Austria. The aim is to collect used mattresses in collaboration with collection points and recyclables collection centres, disassemble them and then recycle them mechanically.
- August 2024, **Evonik and Adient** joined a consortium to facilitate recycling of automotive plastics. The RACE partnership (Recycling of Automotive plastic in a Circular Economy, 2024-2027) has brought together a broad coalition of stakeholders to – over the next three years – develop and improve methods to make automotive plastics more circular.
- October 2024, **NEVEON** announced the closure of its German production sites in Ebersbach and Burkhardtssdorf, as well as its administrative site in Wiesbaden, by mid-2026 due to challenging market conditions and declining demand in key industries. Next to that the Supervisory Board sought optimizations to the production network including the withdrawal from the South African market.
- Petroquímica Río Tercero — producing toluene di-isocyanate (TDI)— shut down its plant in Córdoba in 2024 due to a global oversupply.
- October 2024, the German company **EuroComfort** Group – via its Polish subsidiary TB Foam Solutions – has started construction of a new PU foam plant in Maryszewice (Poland) and is expected to start operations in October 2025.
- October 2024, **Lanxess** signed the contract to sell its Urethane Systems Business to UBE Corporation of Japan.
- November 2024, **JLR, Dow and Adient** team up to create circular automotive seat foam.
- December 2024, **ADNOC** takeover offer for Covestro successful. ADNOC International, now XRG, achieves total of 91.3 percent after additional acceptance period. Closing of transaction is subject to regulatory approvals.
- 2025. Leading companies in the mattress sector in Spain have taken the first step by creating Ecocolchon, a non-profit organization for mattress waste management (**EPR scheme**).
- **Dow** is closing its propylene oxide (PO) plant in Freeport, Texas, by the end of 2025, and already stopped production in the 50kt polyol unit in San Lorenzo, Argentina.
- **Covestro & Lyondell** to close Propylene Oxide / Styrene Monomer (POSM) joint venture at the Maasvlakte site, Netherlands, decommissioning during 2025.
- Outside of the foam industry but relevant for the overall context, the rate of **closures among plastic recycling units** in Western Europe accelerated in 2024 compared with previous years. In the Netherlands, seven facilities ceased operations, including Stiphout Plastics, which declared bankruptcy in December 2024. The Repeats Group also suspended most recycling lines at its Zutphen facility in early 2025. In the United Kingdom, Viridor Polymers permanently shut down its Avonmouth plant in late 2024.

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<sup>1</sup> The information on changes in the foam industry has been collected from a variety of publicly accessible sources including, Company Statements, Investor Reports, and relevant magazines.

- In the same vein, several major industry players — including Borealis, Dow, Neste, and Ravago — **cancelled or postponed planned recycling facility projects** during 2024 and into 2025.

## II. The Influence of the Chinese Market

From the evidence presented it is now clear that one market has an influence on aspects of our markets both in raw material and finished goods.

### a. *Increasing Dominance of China in the Mattress Market*

As detailed in the “Mattresses” section, approximately **20% of mattress consumption in the EU is now met through imports**, with **China accounting for around 55% of that volume**. This share has shown a consistent upward trend, highlighting the growing dependence of the EU on Chinese-origin mattresses to meet domestic demand. This development underscores the increasing integration of low-cost Chinese supply into the European market, particularly in the foam-based product segments.

At the same time, certain suppliers are capitalizing on cost advantages stemming from lower energy and raw material prices, contributing to a broader reduction in input costs across the value chain. **China's role as the leading global producer of isocyanates and polyether polyols adds further weight** to its influence over international price formation, supply availability, and market balance. As such, future projections of China's economic growth and industrial strategy will have important implications for global supply chains, pricing stability, and the competitiveness of European foam manufacturers.

### b. *China's Role as the Largest Market and Producer*

China's status as the leading market and producer of isocyanates and polyether polyol has substantial implications for the global foam industry. Developments in China's raw material market significantly influence pricing and supply dynamics worldwide. In 2024, continuing into 2025, an oversupply in China led to shifts in production strategies among suppliers. Some opted to idle their plants, while others ramped up exports to other regions. In late 2024 and to date in 2025 supply of polyether polyol in China has led to low pricing and fierce competition amongst suppliers in the home market.

## 4. RAW MATERIAL SUPPLY AND DEMAND

The table below offers an estimated breakdown of raw material demand for the production of both moulded and slabstock foam. This data, sourced from EUROPUR members, categorises polyether foams by type. A standard formula has been applied to these categories to estimate the overall raw material demand.

The estimation of raw material demand for automotive moulded foam is based on LMC automotive production data, with an average consumption of 14 kg of foam per vehicle. This includes various applications such as seat foam, headrests, armrests, and carpet underlay for noise, vibration, and harshness (NVH) reduction. It is assumed that the majority of this foam utilizes MDI technology.

Using production data categorised by foam type, along with standard formulations and the estimated share of TDI and MDI technologies, the following estimates for raw material demand have been derived. These figures pertain to foam production rather than poured foam. The average consumption per vehicle has been adjusted from 15 kg to 14 kg to account for the industry's shift towards lighter materials, particularly in the context of Electric Vehicles. Additionally, updates have been made to some formulations to reflect recent efforts to reduce formulation costs.

**Table 19: ESTIMATED RAW MATERIAL DEMAND, (EU28, NO, CH, RUS, EASTERN EUROPE & TR), 2024**

	Flexible Foam Type	MDI (t)	TDI (t)	Polyols (t)	Additives (t)	Total (t)
Slabstock	Conventional & CME		288,562	566,337	35,647	890,546
	HR & CM HR	31,854	69,800	195,923	10,515	308,092
	VS, CM VSE & Others	24,015	7,404	84,013	7,383	122,815
	Polyester	3,822	13,376	29,141	2,424	48,763
	<b>Total Slabstock 2024</b>	<b>59,691</b>	<b>379,142</b>	<b>875,414</b>	<b>55,969</b>	<b>1,370,216</b>
Moulded	Furniture & Bedding	9,109	3,901	23,288	1,404	37,702
	Automotive	54,132	9,133	113,265	8,059	184,589
	<b>Total Moulded 2024</b>	<b>63,241</b>	<b>13,034</b>	<b>136,553</b>	<b>9,463</b>	<b>222,291</b>
	<b>Others ***</b>					<b>34,635</b>
<b>Total Flexible 2024</b>		<b>122,932</b>	<b>392,176</b>	<b>1,011,967</b>	<b>65,432</b>	<b>1,592,507</b>

Source: A. Austin, Belvedere and Partner & EUROPUR

The following section of the report examines the supply dynamics and pricing trends of TDI, MDI, and polyether polyols from 2016 through July 2025, based on data provided by Tecnon Orbichem, PU Daily, Belvedere and Partner Ltd.

After many years of instability on the supply side 2024 showed a “calmer” situation when compared with previous years. This was mainly caused by the lack of demand in the end markets globally.

The market for the three primary raw materials — TDI, MDI, and polyether polyol — remains interconnected globally, meaning that changes in one region continue to impact others.

In 2024, as in the last two decades the manufacturing plants for the 3 major raw materials has moved east, robust supply chains have become of greater importance when managing raw material flows.

Furthermore, supply is more susceptible to weather events, port, logistics disruptions and geo political tensions. Europe faced ongoing supply challenges, particularly with disruptions in the supply chain affecting imports from Asia. High energy costs continued to exert pressure on the market. Although demand remained weak throughout the year, leading to improved availability, efforts to increase prices, by raw material suppliers were only partially successful.

In contrast, North America experienced a more stable supply environment in 2024, supported by stronger demand and smoother supply chains. However, price adjustments are anticipated in 2025 due to the introduction of import tariffs. North America continues to be a net importer of isocyanates and polyether polyols.

Meanwhile, Asia, particularly China, expanded capacity across all three key raw materials, incorporating technological advancements in production processes alongside new facility openings. Despite government incentives aimed at stimulating growth, local demand in China remains subdued and below forecasted levels.

In 2024, there were approximately 3.42 million tonnes of TDI capacity, 12.14 million tonnes of MDI capacity, and just over 17 million tonnes of polyether polyol capacity. Investments in new facilities over the past few years, coupled with the effects of the pandemic, has led to isocyanate and polyether polyol supply in 2024 to be in a position of some structural global oversupply.

#### **4.1. TDI (Toluene Diisocyanate)**

The TDI global supply of TDI was more balanced in 2024 with fewer disruptions when compared with previous years. The global TDI market is dominated by Asia Pacific with over 60% of the production and consumption. Low demand and reduced imports “was the story” of 2024 which has persisted into the first half of 2025.

Operating rates at most Chinese plants remained low throughout 2024, with several smaller units remaining offline due to low profitability. The traditional production upturn in the fourth quarter, typically aligned with preparations for the Chinese New Year holiday, saw only sluggish growth. Exports from China to the broader Asia-Pacific region began to increase modestly towards the end of 2024 and have continued into 2025, driven in part by ongoing uncertainty surrounding U.S. tariffs.

The general demand situation remained in a marginal oversupply situation during 2024, as local demand remained sluggish, and new capacities slowly came on stream. Disruptions in the supply chain and port capacity eased as demand in the export markets declined. Manufacturers remained cautious in export markets in case they were affected by the ongoing trade disputes between China and the United States in the mattress market. In addition, the strict government controls for the handling and storage of TDI continued to complicate supply chains.

Demand in North America remained stable and there are no expected capacity additions. New mattress tariffs should support more local growth as with the introduction of US tariffs on mattresses produced in Asia.

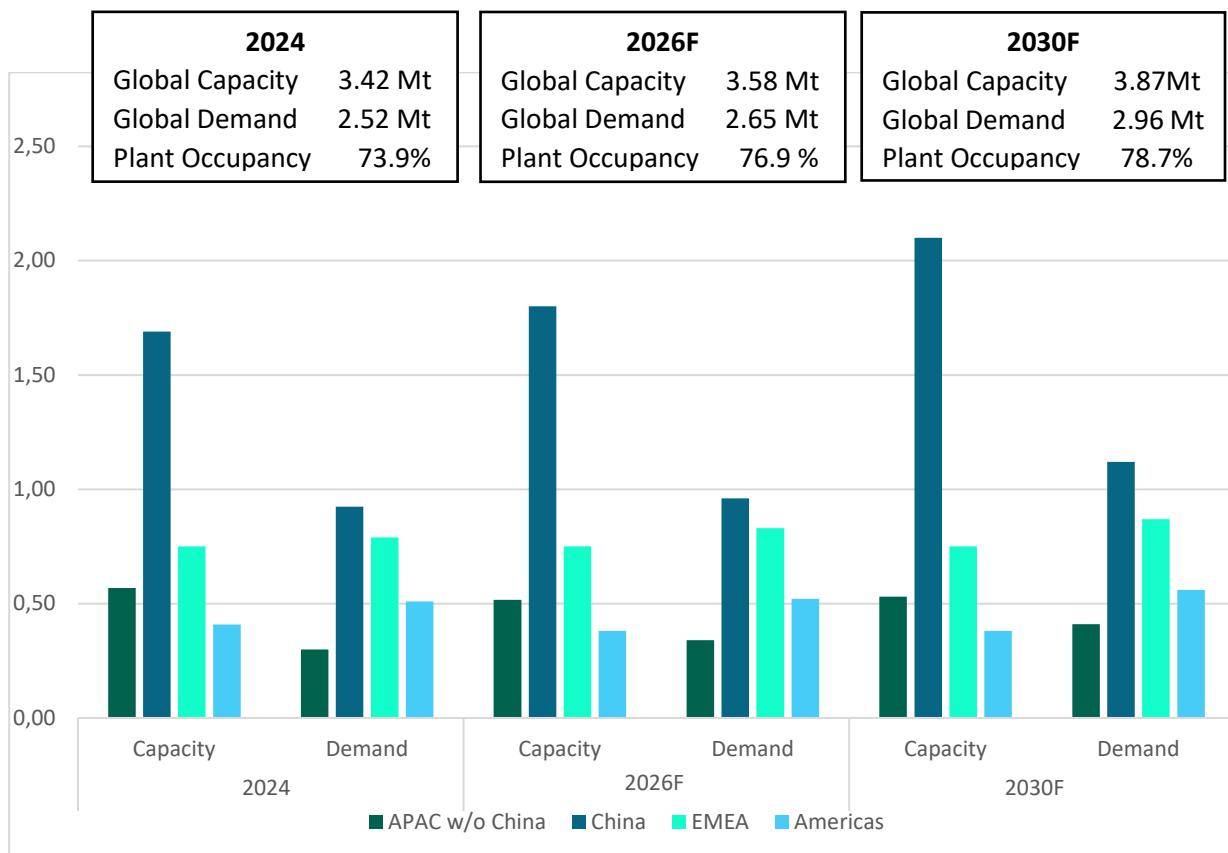
TDI margins in Europe remained near the historic low in 2024 due to falling demand and a high-cost base although production outages in the mid-year have tightened the market, also imports from Asia have slowed as end user demand stagnated.

As the China plant data shows, a new plant at Fujian Southeast Electrochemica (Wanhua) and capacity expansions at Cangzhou Dahua and Hebei began production albeit at reduced rates. China is now a net TDI exporter to North & South America and Africa as well as increasing market share in the rest of Asia. As the global slow down begins to affect TDI producers some Chinese suppliers e.g., Dahua have

announced, in contradiction to previous expansion announcements, idling of their older units to maintain profitability and margins in the short term.

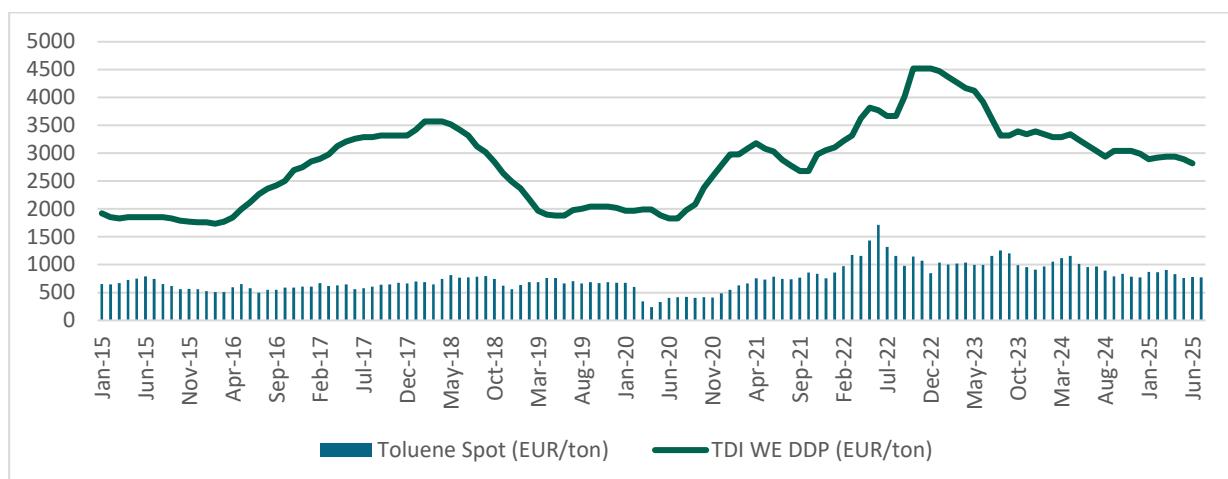
Another minor distortion in the global TDI market comes from the lowering of capacity in 2024 due to smaller plant closures being replaced by larger units e.g. Tosoh in Japan and Petroquimica in Argentina. As more TDI production is now based in Asia Pacific, mainly China, importing regions are vulnerable to supply chain disruptions.

**Chart 17: CHANGES IN GLOBAL TDI NAMEPLATE CAPACITY & DEMAND 2024-2030 (MT)**



Source: B&P Ltd, Company announcements

**Chart 18: TOLUENE AND TDI PRICES IN EUROPE 2015 – June 2025**



Source: Tecnon Orbichem, used with kind permission

The following table provides the nameplate capacities for TDI plants across the world, with announced new nameplate capacities through to 2030. The largest increase is expected in Asia, with stagnation and small debottlenecking projects in both Europe and USA adding small extra capacities.

**Table 20: GLOBAL NAMEPLATE CAPACITIES FOR TDI PLANTS, 2024-2030 (F) (KTA)**

Crude TDI Nameplate capacity	2024	2025	2026	2027	2028	2029	2030
EMEA	Kta						
BASF, Ludwigshafen (D)	0	0	0	0	0	0	0
Covestro, Dormagen (D)	300	300	300	300	300	300	300
Sadara, Jubail (KSA)	200	200	200	200	200	200	200
Borsodchem, Karincbarika (HUN)	250	250	250	250	250	250	250
<b>Total</b>	<b>750</b>						

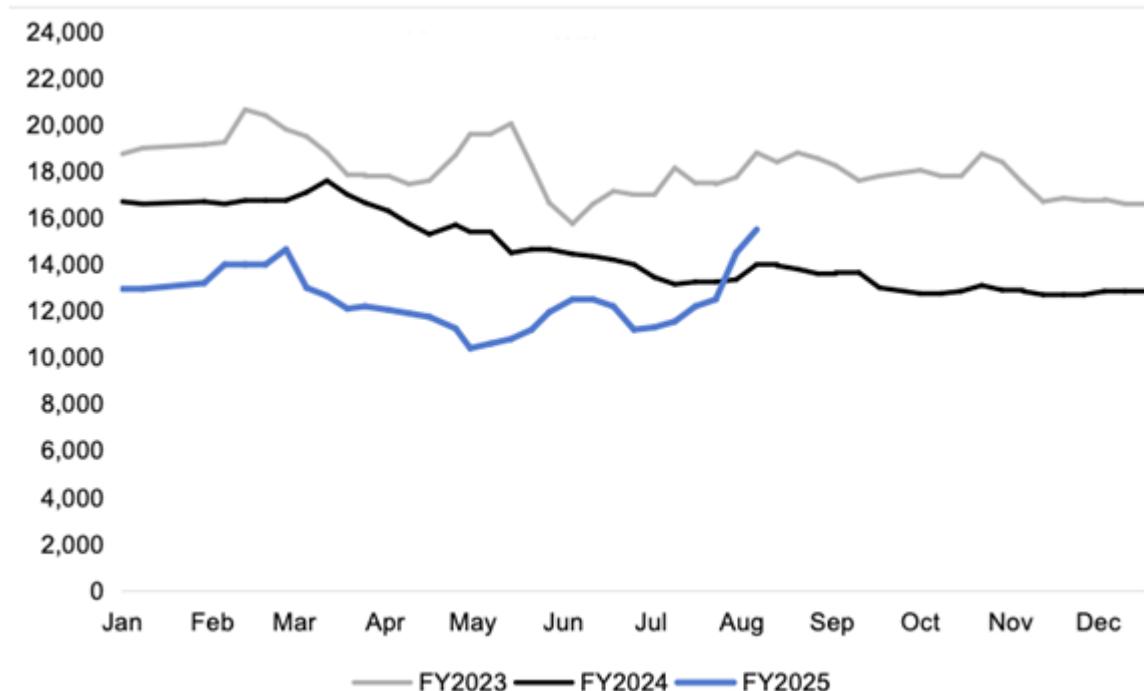
APAC	Kta						
BASF, Shanghai (PRC)	160	160	160	160	160	160	160
Covestro, Shanghai (PRC)	310	310	310	310	310	310	310
Gansu Yinguang, Baiyin (PRC)	120	120	120	120	120	120	120
Cangzhou Dahua, Cangzhou (PRC)	120	120	150	150	150	450	450
(Wanhua) Yantai Juli, (PRC)	150	230	230	230	230	230	230
Huludao Lianshi Chemical (PRC)	50	50	50	50	50	50	50
Wanhua, Yantai (PRC)	300	300	300	300	300	300	300
Bluestar Taiyuan, Shanxi, PRC	30	30	30	30	30	30	30
Wanhua Fujian	250	360	360	360	360	360	360
Xinjiang Juli Co. Ltd	150	150	150	150	150	150	150
Lianshi Chemical	50	50	50	50	50	50	50
<b>Total China</b>	<b>1690</b>	<b>1880</b>	<b>1910</b>	<b>1910</b>	<b>1910</b>	<b>2210</b>	<b>2210</b>
BASF, Yeosu (SK)	160	160	160	160	160	160	160
OCI Chemicals, Kunshan, (SK)	50	50	50	50	50	50	50
Hanwha, Yeochon (SK)	150	150	150	150	150	150	150
Tosoh (NPU), Nanjang (J)	0	0	0	0	0	0	0
Mitsui & SKC Polyurethanes Inc - Omuta (J)	120	50	50	50	50	50	50
Gujurat Namarda (Dehej & Bharach India)	68	68	87	100	100	100	100
Karoon Petrochemical, Mahshahr, (IRI)	20	20	20	20	20	20	20
<b>Total Asia w/o China</b>	<b>568</b>	<b>498</b>	<b>517</b>	<b>530</b>	<b>530</b>	<b>530</b>	<b>530</b>
<b>Total Asia &amp; China</b>	<b>2258</b>	<b>2378</b>	<b>2427</b>	<b>2440</b>	<b>2440</b>	<b>2740</b>	<b>2740</b>

Americas	Kta						
BASF, Geismar (USA)	160	160	160	160	160	160	160
Covestro, Baytown (USA)	220	220	220	220	220	220	220
RioTecero, Cordoba (ARG)	28	0	0	0	0	0	0
<b>Total</b>	<b>408</b>	<b>380</b>	<b>380</b>	<b>380</b>	<b>380</b>	<b>380</b>	<b>380</b>
<b>Global Total</b>	<b>3416</b>	<b>3508</b>	<b>3557</b>	<b>3570</b>	<b>3570</b>	<b>3870</b>	<b>3870</b>

Source: Nameplate capacities have been compiled and updated using only publicly available information from a variety of published sources including: Belvedere & Partner, Investor Reports, PU Magazine, [pudaily.com](http://pudaily.com), [urethaneblog.com](http://urethaneblog.com), Urethanes Technology International, ICIS.com, Market drivers for flexible polyurethane foam and consequences for its main feedstocks Perspective to 2030 – EUROPUR 2021

In summary, by the end of 2024, global TDI nameplate capacity was approximately 3.42 million tonnes, while global demand was around 2.52 million tonnes. New capacity planned for China is expected to increase the global total to around 3.8 million tonnes by 2030. The situation in July 2025, shows how sensitive the market is to change when a “force majeure” and plant maintenance in Europe and maintenance of plants in China cause sudden upward price spike of up to 20%. Price rises currently taking place in TDI’s largest market, China is shown below.

**Chart 19: TDI Price Trend in China, 2023 – 2025 (CNY/tonne)**



Source: PUDaily publication.

## 4.2. MDI (Methylene Diisocyanate)

Globally, **demand for MDI is still projected to grow annually by 5.1%, reaching approximately 12.8 million tonnes per year by 2026**. In Europe, demand is expected to increase at a rate of 2% per year, primarily driven by growth in the construction and insulation markets across all regions.

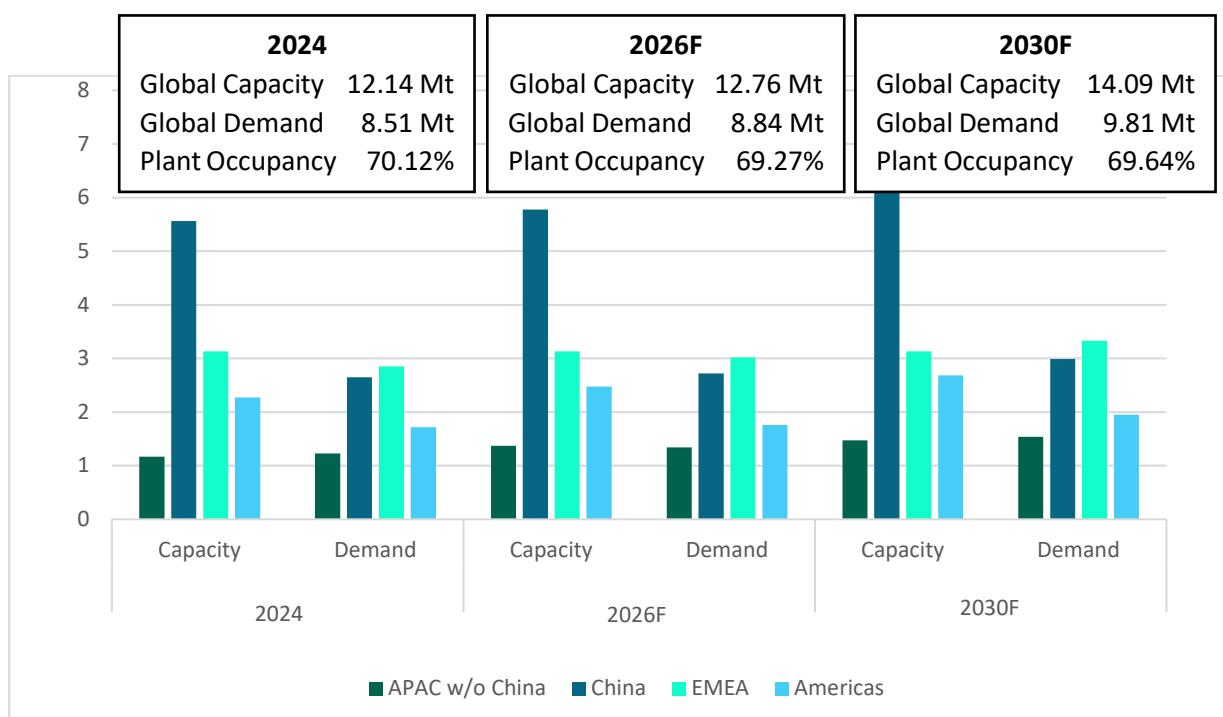
In 2024, Chinese demand, as the largest global market and producer, was weaker than anticipated due to lower-than-expected growth in various industries, particularly in the appliance sector. Supply constraints emerged mid-year due to plant maintenance at Wanhua, the country's largest producer, leading to an average operational level of approximately 65- 70% for plants. Expansion at Wanhua's Fujian site continues, taking MDI capacity eventually to 800 Kta.

In 2024, the US market for polymeric MDI was generally balanced, though demand varied across different market segments. BASF is set to add a 300,000-tonne unit, and Wanhua has begun work on a 400,000-tonne plant, both located in the Gulf of Mexico. However, Covestro has delayed its planned

investment. The lower-than-expected demand forecasts have resulted in further delays in the announcement of new plant start-up dates.

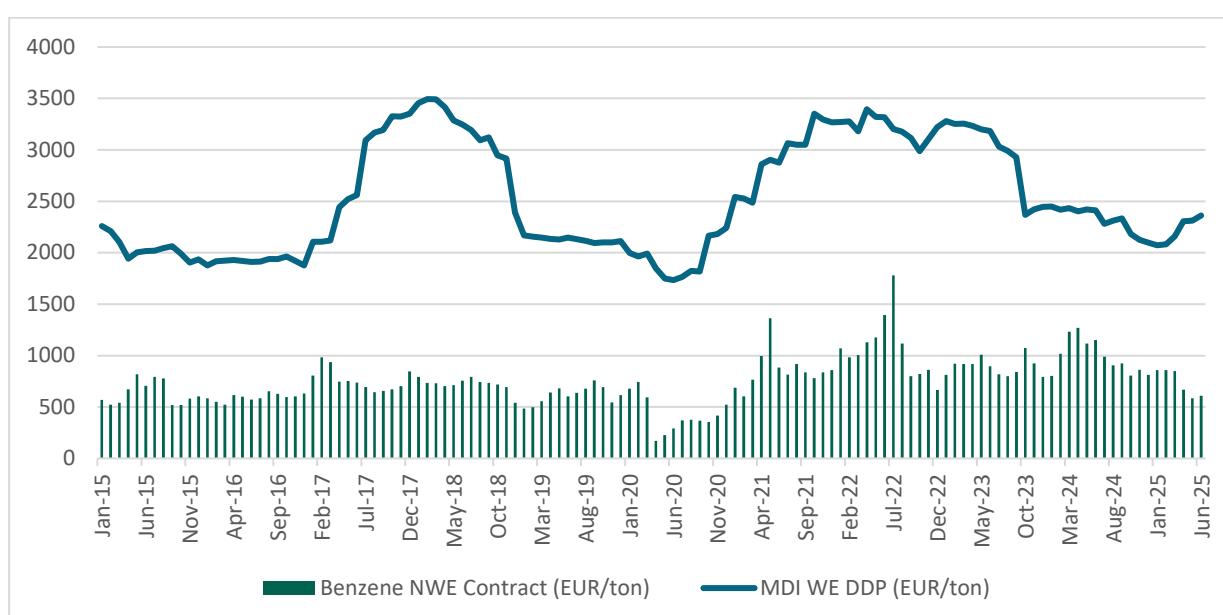
European markets experienced a modest improvement in demand toward the end of 2024; however, the increase was insufficient to support market price growth. Demand remains subdued as we move further into 2025. The market, in 2025, has experienced significant monthly fluctuations in both price and volume, driven largely by Chinese exports of p-MDI as buyers adjust to the ongoing uncertainty surrounding potential U.S. import tariffs.

**Chart 20: CHANGES IN GLOBAL MDI NAMEPLATE CAPACITY & DEMAND 2024-2030F (MT)**



Source: B&P Ltd, Company announcements

**Chart 21: BENZENE AND MDI PRICES IN EUROPE 2015 – June 2025**



Source: Tecnon Orbichem, used with kind permission

Due to declining demand, MDI prices in Europe began to weaken starting in the fourth quarter of 2024 and remained subdued through the second quarter of 2025 (Source: PIE).

**Table 21: GLOBAL NAMEPLATE CAPACITIES FOR MDI PLANTS, 2024-2030 (F) (KTA)**

Crude MDI Nameplate Capacity	2024	2025	2026	2027	2028	2029	2030
EMEA	Kta						
BASF, Antwerp (B)	650	650	650	650	650	650	650
Covestro, Brunsbuettel(D)	400	400	400	400	400	400	400
Covestro, Krefeld (D)	200	200	200	200	200	200	200
Covestro, Tarragona (E)	220	220	220	220	220	220	220
Dow, Stade (D)	335	335	335	335	335	335	335
Dow, Estarreja, (PT)	200	200	200	200	200	200	200
Huntsman, Rotterdam (NL)	470	470	470	470	470	470	470
Wanhua, Karincbarikca (HUN)	260	260	260	260	260	260	260
Sadara, Jubail (KSA)	400	400	400	400	400	400	400
<b>Total</b>	<b>3135</b>						

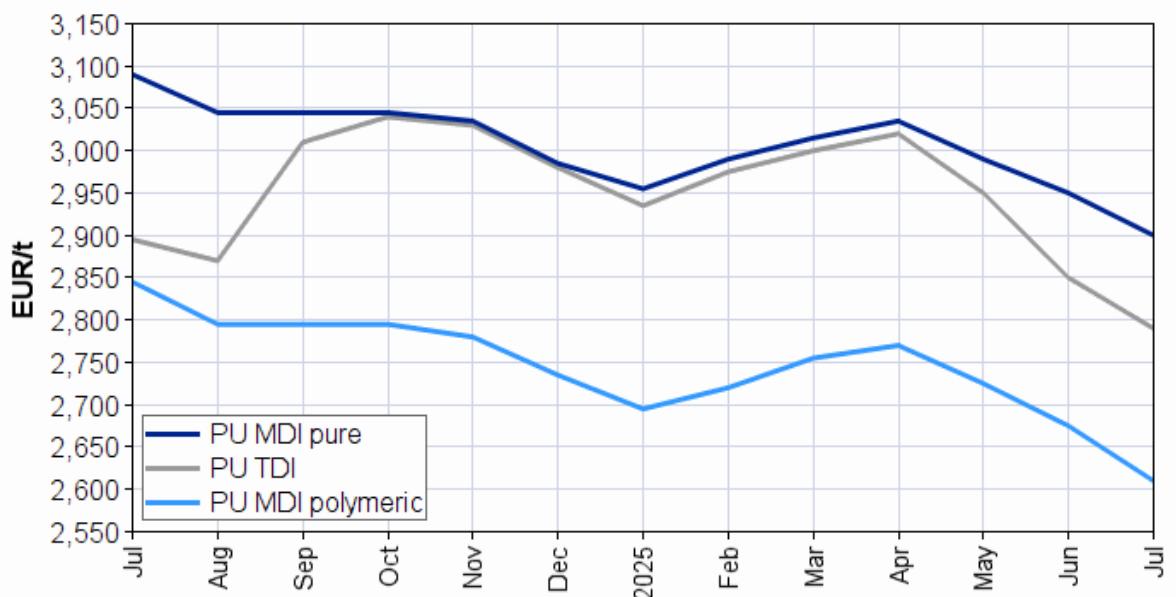
APAC	Kta						
BASF Shanghai	240	240	240	240	240	240	400
BASF Chongqing (PRC)	400	400	470	530	530	530	530
Covestro (PRC)	600	600	600	600	600	600	600
Sinopec / Shanghai Gaoqiao - Caojing	160	160	160	160	160	160	160
Huntsman/Shanghai Chlor-Alkali Chem Co - Caojing	240	240	240	240	240	240	240
Wanhua, Ningbo (PRC)	1500	1500	1500	1500	1500	1800	1800
Wanhua, Yantai, (PRC)	1100	1100	1100	1100	1150	1200	1200
Tosoh, Ruian) (PRC	80	80	80	80	80	80	80
Lianheng Isocyanate co (PRC)	590	590	590	590	590	590	590
WanHua Fujian Polyurethane	250	400	400	400	500	600	800
Juli Henshan	400	400	400	400	400	400	400
<b>China</b>	<b>5560</b>	<b>5710</b>	<b>5780</b>	<b>5840</b>	<b>5990</b>	<b>6440</b>	<b>6800</b>
Covestro (J)	70	70	70	70	70	70	70
BASF (SK)	250	250	250	250	250	250	250
Karoon Petrochemical, Mahshahr,(IRI)	40	40	40	40	40	40	40
Kumho Mitsui (SK)	410	610	610	610	610	610	610
Tosoh Spliter (VN)	0	0	0	50	100	100	100
Tosoh (J)	400	400	400	400	400	400	400
<b>Total Asia w/o China</b>	<b>1170</b>	<b>1370</b>	<b>1370</b>	<b>1420</b>	<b>1470</b>	<b>1470</b>	<b>1470</b>
<b>Total Asia &amp; China</b>	<b>6730</b>	<b>7080</b>	<b>7150</b>	<b>7260</b>	<b>7460</b>	<b>7910</b>	<b>8270</b>

Americas	Kta						
BASF	550	600	600	600	600	600	600
Covestro	330	330	535	740	740	740	740
Huntsman	500	500	500	500	500	500	500
Wanhua	400	400	400	400	400	400	400

Dow (Freeport)	442	442	442	442	442	442	442
<b>Total</b>	<b>2222</b>	<b>2272</b>	<b>2477</b>	<b>2682</b>	<b>2682</b>	<b>2682</b>	<b>2682</b>
<b>Global Total</b>	<b>12087</b>	<b>12487</b>	<b>12762</b>	<b>13077</b>	<b>13277</b>	<b>13727</b>	<b>14087</b>

Sources: Nameplate capacities have been compiled and updated using only publicly available information from a variety of published sources including investor reports, PU Magazine, pudaily.com, urethane blog.com, Urethane Technology International, ICS.com, CPUIA, Market drivers for flexible polyurethane foam and consequences for its main feedstocks Perspective to 2030 – EUROPUR 2021

**Chart 22: ISOCYANATES, JULY 2024 – JULY 2025, AVERAGE PRICES IN EUROPE**



Source: Plastics Information Europe

The above chart from PIE (Plastics Information Europe) illustrates the decline in prices throughout 2024 and 2025, reflecting reduced demand for the corresponding end products. While raw material prices may vary between service providers, the overall downward trend remains consistent across the market.

While each Isocyanate price source show slightly differing prices, the general direction is clear from all. The difference is due to the slightly differing information collection methodology.

### 4.3. Polyols

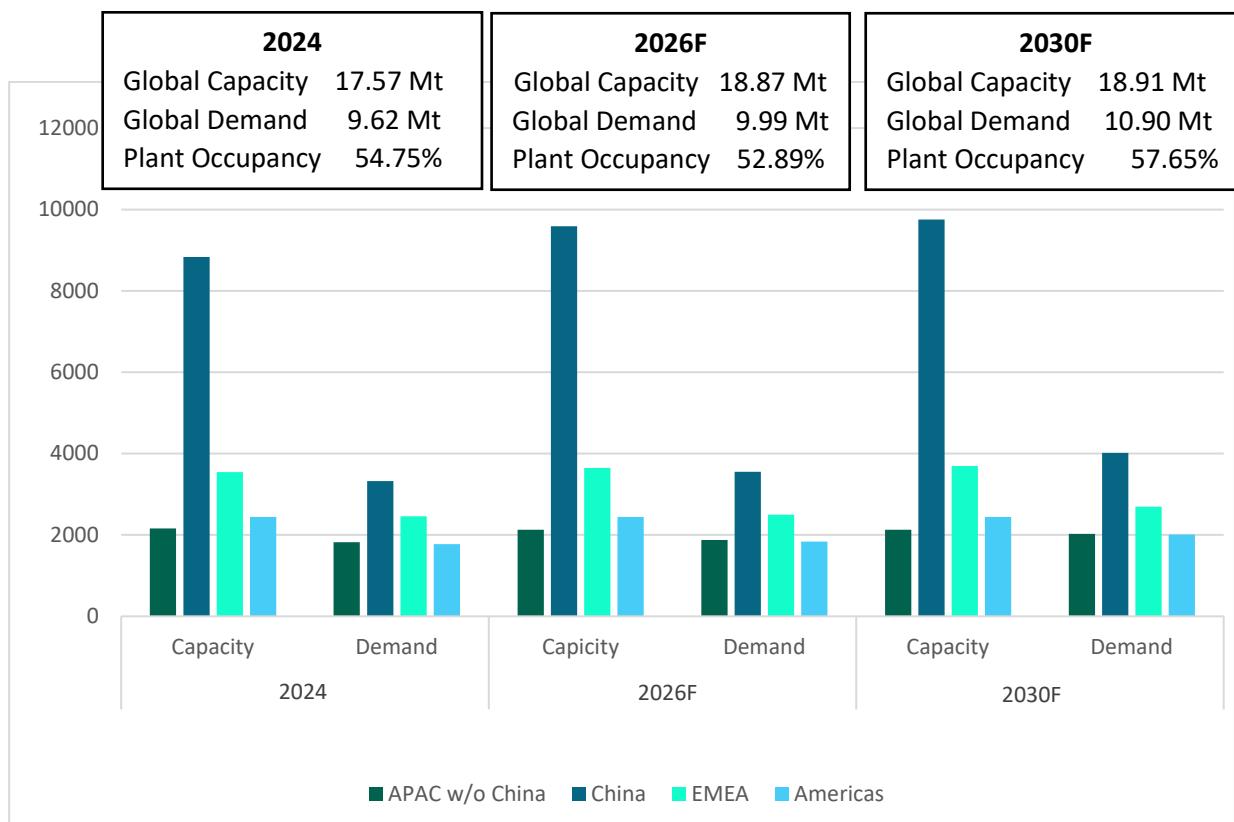
In 2024, the supply of flexible polyol in Europe began to stabilise. Despite the overall balance in the market, demand remained very low throughout the year. The second half of 2024 saw renewed disruptions due to tensions in the Middle East, which impacted supply and caused price volatility. However, by the first quarter of 2025, supply chains had adjusted to the new circumstances, and the situation began to normalise but low demand has persisted into 2025 and impacted supplier profitability.

Analysis of data provided from EUROSTAT, [PU Daily](#) and B&P shows that around 28% of all polyester polyol used in the Europur region was imported from APAC, mainly China in 2024. This trend had

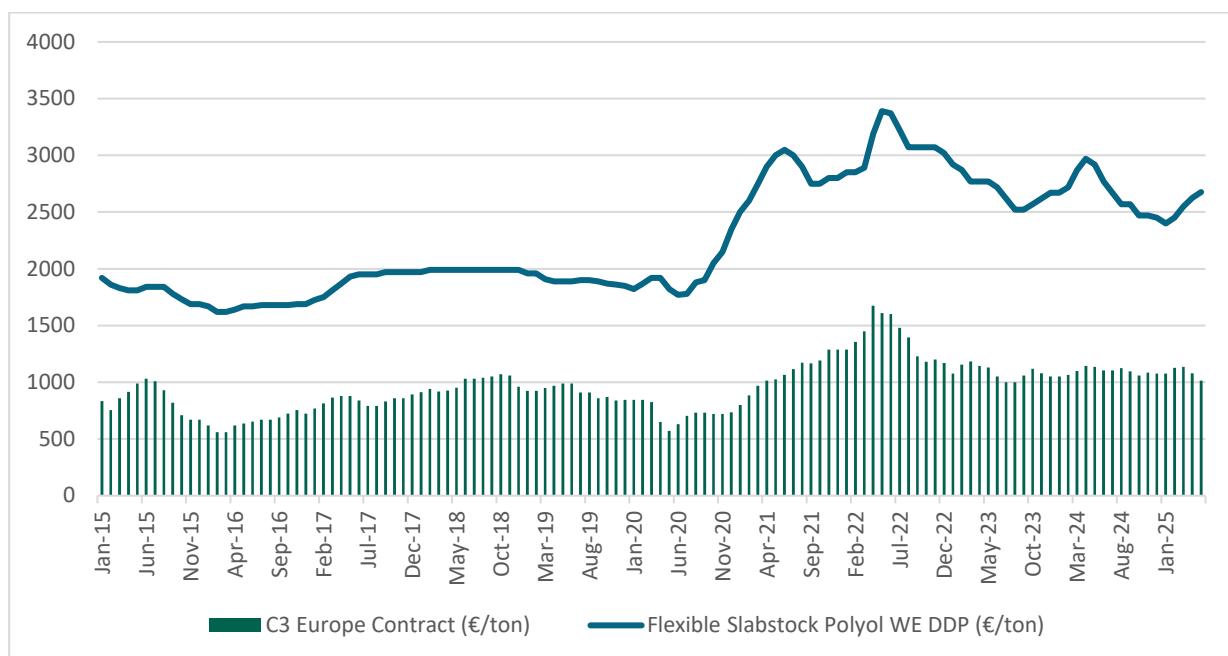
continued into 2025 with significant increases, compared with 2024, seen in France, Italy, Germany & Russia. In the first half of 2025 China's top polyether polyol export countries were Türkiye, India, Vietnam, UAE, Brazil, Russia, Indonesia, Italy, South Korea and Mexico.

Propylene oxide prices and propylene (C3) prices peaked in Quarter 2,2022, but this changed during 2023 as prices lowered around the mid-year and remained low into 2025. The global production capacity for polyether polyols (flexible and rigid) has continued to expand in recent years with supply keeping well ahead of demand, especially in Asia, notably China.

**Chart 23: CHANGES IN GLOBAL POLYETHER POLYOL NAMEPLATE CAPACITY & DEMAND 2024-2030 (MT)**



Source: LRM, B&P Ltd, Company Announcements

**Chart 24: PROPYLENE AND FLEXIBLE SLABSTOCK POLYOL PRICES IN EUROPE 2015 – June 2025**

Source: Tecnon Orbichem, used with kind permission

**Table 22: GLOBAL POLYETHER POLYOL NAMEPLATE CAPACITY BY LEADING PRODUCER 2024-2030 (F), KTA**

Company	2024	2025	2026	2027	2028	2029	2030
<b>EMEA</b>	<b>Kta</b>						
SAIC/ Rabigh (KSA)	200	200	200	200	200	200	200
Sadara (KSA)	390	390	390	390	390	390	390
BASF, Antwerp(B)	350	350	350	350	350	350	350
BASF,Schwarzheide (D)	150	150	150	150	150	150	150
Covestro, Antwerp (B)	260	260	260	260	260	260	260
Covestro, Dormagen(D)	260	260	260	260	260	260	260
Covestro Fos sur Mer (F)	140	140	140	140	140	140	140
Dow, Tarragona(E)	60	60	60	60	60	60	60
Dow Terneuzen (NL)	570	570	570	570	570	570	570
Dow Tetre (B)	94	94	94	94	94	94	94
Oltchim (ROM)	120	120	120	120	120	120	120
PCC Rokita, Brezg Dolny (POL)	130	130	155	180	180	180	180
Huntsman (NL)	54	54	54	54	54	54	54
Repsol, Tarragona (E)	130	130	130	130	130	130	130
Repsol Puertollano €	70	70	70	70	70	70	70
Shell, Pernis (NL)	255	255	255	255	255	255	255
Nizhnekamskskneftekhim (Sibur) & other Russian producers	65	65	65	65	65	65	65
MOL (HUN)	200	200	200	200	200	200	200
Others-independent system houses	150	150	150	150	150	150	150
<b>Total EMEA</b>	<b>3648</b>	<b>3648</b>	<b>3673</b>	<b>3698</b>	<b>3698</b>	<b>3698</b>	<b>3698</b>

Americas	Kta						
BASF (MX)	60	60	60	60	60	60	60
BASF(US)	400	400	400	400	400	400	400
Dow (US)	515	515	515	515	515	515	515
Covestro (US) 3 plants (NMV, Channelview & South Charleston)	660	660	660	660	660	660	660
Monument (US)	150	150	150	150	150	150	150
Carpenter (US)	320	320	320	320	320	320	320
Huntsman (US)	45	45	45	45	45	45	45
Others	50	50	50	50	50	50	50
<b>Total NAFTA</b>	<b>2200</b>						
<b>South America</b>							
Dow (BR)	120	120	120	120	120	120	120
Dow (ARG)	60	0	0	0	0	0	0
Others	60	60	60	60	60	60	60
<b>Total South America</b>	<b>240</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>180</b>
<b>Total AMERICAS</b>	<b>2440</b>	<b>2380</b>	<b>2380</b>	<b>2380</b>	<b>2380</b>	<b>2380</b>	<b>2380</b>

Asia Pacific w/o China	Kta						
Sanyo (J)	110	110	110	110	110	110	110
Asahi Glass, Kashima (J)	100	100	100	100	100	100	100
MCNS(J)	90	90	90	90	90	90	90
Dow (TW)	35	35	35	35	35	35	35
Covestro (TW)	0	0	0	0	0	0	0
BASF(SK)	170	170	170	170	170	170	170
KPX (SK)	230	230	230	230	230	230	230
MCNS (SK)	180	180	180	180	180	180	180
Kukdo, (SK)	65	65	65	65	65	65	65
Shell (SG)	360	360	360	360	360	360	360
Dow/SCG (Thailand)	279	279	279	279	279	279	279
Dow (Aus)	45	45	45	45	45	45	45
Huntsman (AUS)	35	35	35	35	35	35	35
Manali (IND)	160	160	160	160	160	160	160
PTPL (IND)	0	0	0	0	0	0	0
PTT/Sanyo (Thailand)	130	130	130	130	130	130	130
Others (small Japanese manufacturers)	140	140	140	140	140	140	140
<b>Total Asia Pacific w/o China</b>	<b>2129</b>						

China							
Shell/CNOOC, Nanhui, Huizhou (PRC)	600	930	930	930	930	930	930
Sinopec Shanghai Gaoqiao	220	220	220	220	220	220	220
Hangjin Technology Co, Ltd (Fangda Jinhua)	170	170	170	170	170	170	170

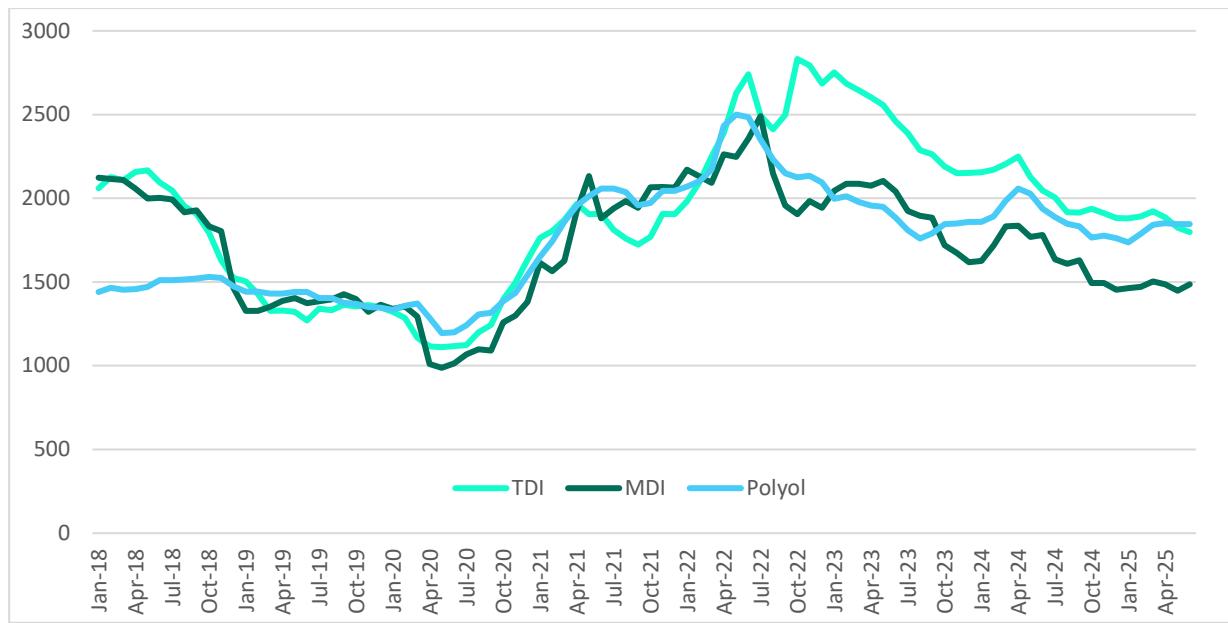
Blue Star Dongda, Zibo (PRC)	330	330	330	330	330	330	330
Ningwu Jurong, Juraon (PRC)	300	300	300	300	300	300	300
HongBao Li, Nanjing (PRC)	180	180	180	180	180	180	180
Tianjin Degu, Tianjin (PRC)	150	150	150	150	150	150	150
Dow/Zhiang Pacific, Zhangjiagang, (PRC)	50	50	50	50	50	50	50
Nanjing Kumho, Nanjing (PRC)	130	130	130	130	130	130	130
Fushan Jiahua	550	550	550	550	550	550	550
Wanhua, Yantai & Ningbo	800	1150	1150	1150	1150	1150	1150
Tianjin Petrochemical Co. Tianjin (PRC)	80	80	80	80	80	80	80
Guangzhou YutianChemicals (PRC)	200	200	200	200	200	200	200
Meizhouwan, Fujan (PRC)	50	50	50	50	50	50	50
Korea Polyol, Nanjing	100	100	100	100	100	100	100
Shandong, Longhua, Zibo (PRC)	720	720	720	720	720	720	720
Dexin Lianbang Zibo, Shandong (PRC)	330	330	330	330	330	330	330
Dexin Wudi, Zibo, Shandong (PRC)	300	300	400	400	400	400	400
Jiahua Chemicals, Shanghai Shangdong (PRC)	500	600	600	600	600	600	600
Juyuan Chemical Co Ltd, Jilin	235	235	235	235	235	235	235
Tida Chemical	100	100	150	150	150	150	150
BASF	100	200	200	200	200	200	200
Befar Chemical Co Ltd, Binzhou, Shandong.	120	120	120	120	120	120	120
INOV Chemical Co Ltd, Zibo, Shandong	300	300	300	300	300	300	300
Hebei Yadong Chemical Co Ltd, Shijiazhuang, Hebei	200	200	200	200	200	200	200
Changhua Polyurethane Co Ltd, Zhangjiagang, Jiangsu	360	440	440	440	440	440	440
Goudu Chemical (Ningbo ) Co Ltd	200	200	200	200	200	200	200
SinoChem, Dongda, Quanzhou City, Fujian	0	120	240	240	240	240	240
12 Others - including Jiangsu Samnmu, Nigbo Zhenhai, CITIC, Shandong HuaAn New Materials Co & Gulei	1980	1980	1980	1980	1980	1980	1980
<b>Total China</b>	<b>9355</b>	<b>10435</b>	<b>10705</b>	<b>10705</b>	<b>10705</b>	<b>10705</b>	<b>10705</b>
<b>Total Asia Pacific &amp; China</b>	<b>11484</b>	<b>12564</b>	<b>12834</b>	<b>12834</b>	<b>12834</b>	<b>12834</b>	<b>12834</b>
<b>Global Total Polyether Polyol Capacity</b>	<b>17572</b>	<b>18592</b>	<b>18887</b>	<b>18912</b>	<b>18912</b>	<b>18912</b>	<b>18912</b>

Sources: Nameplate capacities have been compiled and updated using only publicly available information from a variety of published sources including investor reports, PU Magazine, pudaily.com, urethane blog.com, Urethane Technology International, ICS.com, CPUIA, Market drivers for flexible polyurethane foam and consequences for its main feedstocks Perspective to 2030 – EUROPUR 2021

## Raw Material Price Trends

The chart below, offers a concise summary of fluctuations in European raw material prices over the past six years. This underscores the considerable volatility that has characterised this period. This volatility has reverberated throughout the entire supply chain, engendering significant downstream challenges for industry stakeholders.

**Chart 25: KEY RAW MATERIAL PRICE TRENDS (January 2018 - June 2025 in Europe)**



Source: Tecnon Orbichem, used with kind permission

From the above chart we see that raw materials have hit a low point reflecting the low demand with no sight of an improvement. This has resulted in the wider chemical industry rationalisation and plant closures, especially in Europe.

The above information refers to the standard polyols based on raw materials produced from crude oil via crackers. In parallel, as we have seen in the last few years and also studied in the EUROPUR (2021) report *“Market Drivers for Flexible Polyurethane Foam and Consequences for its Main Feedstocks - Perspective to 2030”*, the role of recyclates in standard polyether polyols is steadily increasing, as well as the use of bio-based polyols, with increased support by legislation and consumers demands in the framework of more environmentally sustainable products.

## 5. SUMMARY & CONCLUSIONS

In 2024, flexible polyurethane slabstock foam production across Europe—including Russia, Ukraine, Belarus, Kazakhstan, Uzbekistan, and Türkiye—totalled approximately 1.37 million tonnes, representing a marginal decrease of 0.1% compared to 2023.

However, again there were regional significant regional disparities. The European Economic Area (EEA) experienced a notable production decline of 2.66% year-on-year. The most pronounced decreases were observed in the UK & Ireland (-13.7%), the Balkans, Greece, and Cyprus (-11.05%), and Hungary, Croatia, Czechia, and Slovenia (-9.10%).

Conversely, growth was concentrated in a few key regions, with Eurasia leading at +17.86%, followed by Romania and Bulgaria at +2.62%, and Scandinavia and the Baltics at +1.32%. The substantial increase in Eurasia—comprising Russia, Ukraine, Belarus, Kazakhstan, and Uzbekistan—was largely driven by government incentives within the Russian economy.

Türkiye recorded its first contraction in a decade, with production declining by 5.03%, impacted by reduced finished product exports and a challenging domestic market. Notably, Türkiye and Poland emerged as the joint largest volume producers of foam in 2024.

Total production volumes in 2024 were once again broadly consistent with those observed in 2019.

To summarise, the research and subsequent member interviews confirm:

- 2024 exceeded expectations from June 2024, nevertheless, the regional differences were stark with the EEA area declining again by 2.66%. Even Türkiye showed a contraction with the whole region achieving “**net zero production**” due to the increases in Eurasia. This is mainly due to government incentive growth in Russia but also through new plants in Kazakhstan and Uzbekistan. The position to date in 2025 shows a somewhat different declining picture.
- Growth in **e-commerce**, particularly in the mattress segment, has **stagnated**. Companies are shifting towards a direct-to-consumer model, adjusting their marketing strategies accordingly and importing more finished goods from China.
- The **trend towards using lower-density foams** has persisted to control costs and meet retailer price points. This trend, which began in recent years, continued in 2024 and 2025, raising concerns about the impact on the quality perception of polyurethane.
- The **European mattress industry** has been, over the past few years, increasingly affected by **international trade issues**. European manufacturers are progressively losing access to the US market, one of the EU's main export markets due to anti-dumping procedures against several EU member states, while at the same time imports from China strongly increase, in particular for cellular plastic mattresses. This decline has been further reinforced by the trade tariffs currently imposed by the United States, which have led to a near standstill in EU exports to the US during the first half of 2025.
- The "bed in a box" sector has evolved, with producers modifying their supply chains. There is an increasing role of industry suppliers in providing finished products, and the market is seeing a rise in imported, mainly China, and rebranded finished goods. The sector has diversified beyond the initial 100% polyurethane mattresses, now including products with micro coils, mini-micro coils, zippered covers, and innovative fabrics.

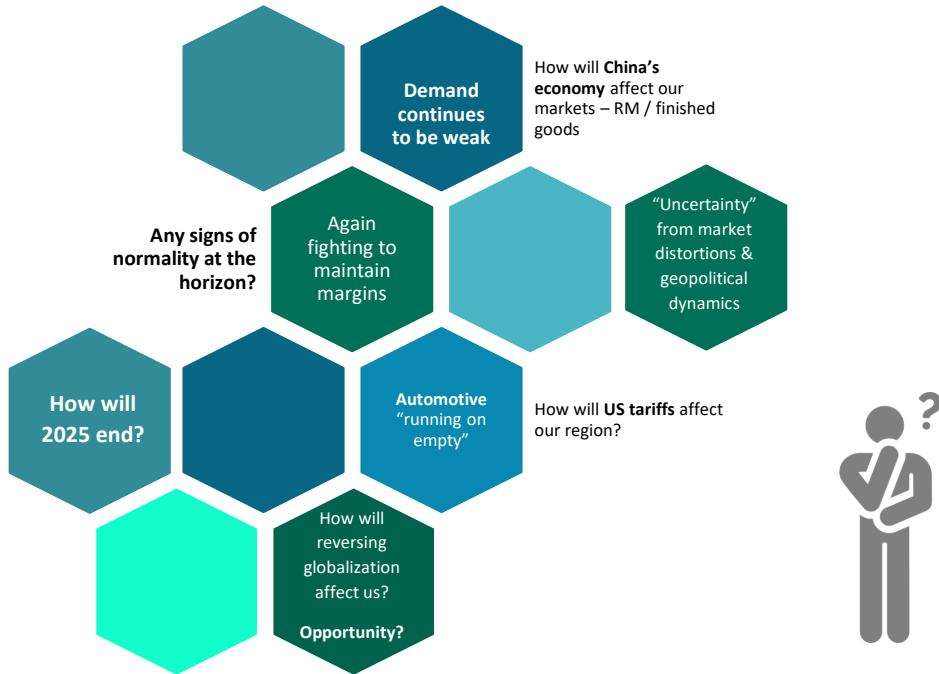
- Interviews indicate that discussions regarding the replacement of foams with alternative materials such as fibers and springs diminished somewhat in 2024, although overall volume shifts remain minimal.
- Rising raw material costs in late 2024 and into 2025 have prompted foam and mattress manufacturers to intensify efforts to **optimize supply chains** and further reduce costs. In response, some upholstery manufacturers are **increasingly adopting rebonded foams**, which offer reduced comfort levels but align better with retailer pricing requirements.
- In 2024 and early 2025, the sector witnessed a rise in bankruptcies, facility closures, and the postponement of several planned plastic recycling projects.

In 2024, the European automotive market (EU + EFTA + UK) experienced modest growth compared to 2023. However, according to *LMC Automotive*, global light vehicle production declined from 91.02 million units in 2023 to 90.36 million units in 2024, representing an approximate 1% decrease.

Looking ahead, the European automotive sector faces significant challenges, particularly within the electric vehicle (EV) segment, where production volumes remain stagnant amid rising imports from China.

## 6. VIEW INTO 2025 & 2026

2025 – After some challenging years – it doesn't get easier?



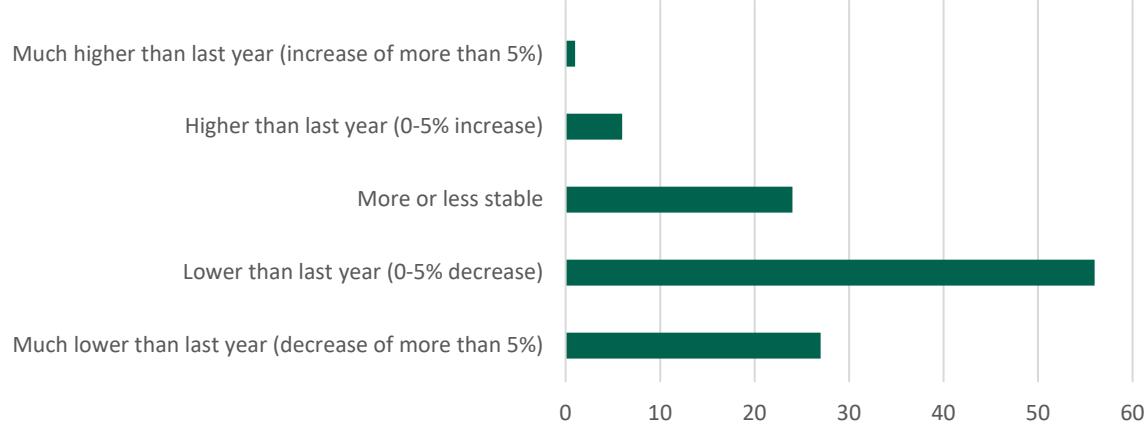
In 2024 the industry segment did not experience any growth. The persistent issue of weak demand affects not only Europe and USA but also Asia, with China particularly notable in this regard. Although recent GDP figures for this country indicate some improvement, with 5.3% growth in Q1 2024 and 4.7% in Q2 2024, the recovery appears uneven. Growth in Europe remains particularly subdued, with most forecasts predicting that any recovery will not occur until 2026 and anticipating a relatively stagnant 2025 at best.

Due to the subdued demand environment, input costs for various categories, including raw materials, have declined. However, logistics and shipping costs have experienced volatility, largely influenced by geopolitical events and raw material costs have started to increase in 2025 as suppliers attempt to reset profitability so that future investment can be secured.

The automotive sector faces significant challenges amid the ongoing transition to Electric Vehicles (EVs) and hybrid models. According to LMC projections, global production is expected to grow to around 100 million vehicles by 2032, although EU/EFTA see low single digit growth until 2032. This highlights the persistent difficulties the European automotive industry faces as it adapts to the industries transformative changes.

During the conference, we evaluated projections for the end of 2025 relative to 2024. To this end we collected spontaneous reactions of conference attendees through an anonymous Slido survey. The results of the survey are presented below:

In 2025, European flexible PU slabstock production (in tonnes) will be:

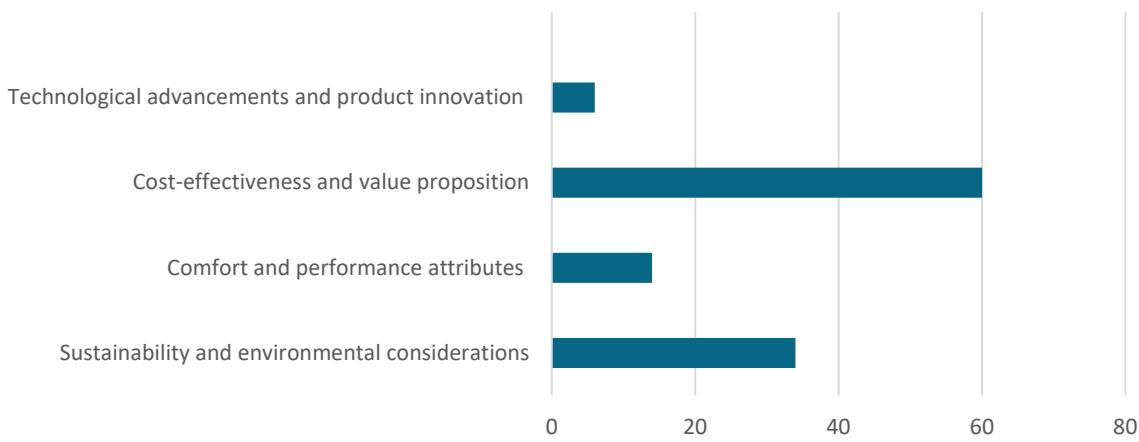


\*114 conference attendees participated in the survey

As of June 2025, the general consensus anticipates a continued decline in volume when the full-year 2025 figures are reviewed. At the mid-year point, there are no indications of a reversal in this trend.

Hereby it is worth reminding of the 2024 survey that examined the most significant factors influencing demand for PU foam. Consistently, cost-effectiveness was identified as the primary challenge facing the industry.

Which factor do you believe will have the most significant influence on consumer demand for flexible PU foam products in the coming years?



\*114 conference attendees participated in the survey

Unsurprisingly, sustainability remains the primary driver of innovation within the industry. It will be insightful to observe how perspectives evolve when we conduct the survey at our 2026 conference in Antwerp, scheduled for June 9–11, 2026.

## 7. LIST OF FIGURES

### a) TABLES

Table 1: DATA SUMMARY OF FLEXIBLE POLYURETHANE FOAM PRODUCTION FOR 2024* .....	2
Table 2: UPHOLSTERED FURNITURE CONSUMPTION IN LARGE MARKETS, 2025, FORECAST 2026 .....	7
Table 3: WORLD PRODUCTION AND TRADE OF UPHOLSTERED FURNITURE, (USD MILLION), 2024 .....	9
Table 4: UPHOLSTERED FURNITURE PRODUCTION IN THE EU16+NO+CH+UK, 2019-2024 (\$ million) .....	10
Table 5: UPHOLSTERED FURNITURE PRODUCTION IN THE REST OF EUROPE, 2019-2024 (\$ million) .....	10
Table 6: USA IMPORTS OF MATTRESSES OF CELLULAR PLASTICS, 2023 vs 2024 (USD million) (HS Code 940421).....	14
Table 7: MATTRESS PRODUCTION IN THE EU PER UNITS, BY MATTRESS CATEGORY, 2021-2024. ....	16
Table 8: TRADE STATISTICS – MATTRESS IMPORTS TO THE EU/MS FROM NON-EU COUNTRIES, 2022 VS 2024 .....	20
Table 9: AVERAGE PRICE PER KG OF CELLULAR PLASTIC OR RUBBER MATTRESSES FROM CHINA, 2019 – 2024. ....	21
Table 10: MONTHLY CHANGES OF MATTRESS IMPORTS FROM CHINA (2019-2025) .....	21
Table 11: AUTOMOTIVE SALES IN THE LEADING EU COUNTRIES, 2023, 2024 & Forecast 2025 (in million) .....	23
Table 12: PASSENGER VEHICLE PRODUCTION 2022-2024 AND FORECASTS TO 2029 ('000 vehicles) .....	23
Table 13: EU NEW CAR IMPORTS, MAIN COUNTRIES OF ORIGIN, trade in value (in € million).24	24
Table 14: EU NEW CAR IMPORTS, MAIN COUNTRIES OF ORIGIN, trade in volume (in units) ...24	24
Table 15: PU SLABSTOCK POLYETHER PRODUCTION EUROPE (t), 2020-2024, BY REGION .....	27
Table 16: ORIGIN OF IMPORTS OF FLEXIBLE FOAM INTO THE EU 28, 2019-2024 (tonnes, EUR thousand).....	33
Table 17: TOP 10 DESTINATIONS OF EXPORTS OF FLEXIBLE FOAM OF EU ORIGIN TO NON-EU COUNTRIES, 2018-2023 (EUR thousand).....	33
Table 18: Top 10 DESTINATIONS OF EXPORTS OF FLEXIBLE FOAM OF EU ORIGIN TO NON-EU COUNTRIES, 2018-2024 (tonnes) .....	34
Table 19: ESTIMATED RAW MATERIAL DEMAND, (EU28, NO, CH, RUS, EASTERN EUROPE & TR), 2024 .....	37
Table 20: GLOBAL NAMEPLATE CAPACITIES FOR TDI PLANTS, 2024-2030 (F) (KTA) .....	40
Table 21: GLOBAL NAMEPLATE CAPACITIES FOR MDI PLANTS, 2024-2030 (F) (KTA).....	43
Table 22: GLOBAL POLYETHER POLYOL NAMEPLATE CAPACITY BY LEADING PRODUCER 2024-2030 (F), KTA.....	46

### b) CHARTS

Chart 1: GLOBAL CONSUMPTION OF UPHOLSTERED FURNITURE. 2014-2024. Currency USD billion .....	6
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Chart 2: PERCENTAGE OF GLOBAL UPHOLSTERED FURNITURE EXPORT IN 2015 .....	7
Chart 3: PERCENTAGE OF GLOBAL UPHOLSTERED FURNITURE EXPORT IN 2024 .....	8
Chart 4: MATTRESS CONSUMPTION IN THE TOP 50 MAJOR MARKETS, \$ billion .....	11
Chart 5: GLOBAL MATTRESS PRODUCTION, 2024, number of units .....	12
Chart 6: GLOBAL MATTRESS PRODUCTION, 2024 in value. ....	12
Chart 7: SOURCE OF MATTRESS IMPORTS TO THE USA, 2024, USD million .....	15
Chart 8: EXPORTS OF MATTRESSES FROM THE EU TO THE USA (2019 – 2024), IN VALUE.....	16
Chart 9: PRODUCTION AND APPARENT CONSUMPTION OF MATTRESSES IN THE EU, 2019 – 2024, in units .....	17
Chart 10: MATTRESSES IMPORTS TO THE EU APPARENT CONSUMPTION, 2019-2024, % of units .....	18
Chart 11: IMPORTS AND EXPORTS TO AND FROM THE EU, ALL MATTRESSES (940421 AND 940429, in value (€) .....	19
Chart 12: IMPORTS AND EXPORTS OF CELLULAR RUBBER AND PLASTIC MATTRESSES, TO AND FROM THE EU, 2019 – 2024, in value (€).....	20
Chart 13: 2024 NEW EU CAR REGISTRATIONS BY POWER SOURCE, in % .....	22
Chart 14: POLYETHER SLABSTOCK PRODUCTION EUROPE (in tonnes), 2019 – 2024 .....	26
Chart 15: POLYETHER PRODUCTION BY TYPE (%), 2020-2024 (EUROPUR MEMBERS ONLY)....	31
Chart 16: POLYETHER PRODUCTION BY TYPE (%) AND REGION, 2020-2024 (EUROPUR MEMBERS ONLY) .....	32
Chart 17: CHANGES IN GLOBAL TDI NAMEPLATE CAPACITY & DEMAND 2024-2030 (MT) .....	39
Chart 18: TOLUENE AND TDI PRICES IN EUROPE 2015 – June 2025 .....	39
Chart 19: TDI Price Trend in China, 2023 – 2025 (CNY/tonne).....	41
Chart 20: CHANGES IN GLOBAL MDI NAMEPLATE CAPACITY & DEMAND 2024-2030F (MT)....	42
Chart 21: BENZENE AND MDI PRICES IN EUROPE 2015 – June 2025 .....	42
Chart 22: ISOCYANATES, JULY 2024 – JULY 2025, AVERAGE PRICES IN EUROPE .....	44
Chart 23: CHANGES IN GLOBAL POLYETHER POLYOL NAMEPLATE CAPACITY & DEMAND 2024-2030 (MT) .....	45
Chart 24: PROPYLENE AND FLEXIBLE SLABSTOCK POLYOL PRICES IN EUROPE 2015 – June 2025 .....	46
Chart 25: KEY RAW MATERIAL PRICE TRENDS (January 2018 - June 2025 in Europe).....	49





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