Market evolution: Plastic sheets (CN 3921) — 2015–2025

Introduction

CN 3921 covers “Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, or of cellular plastic, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918).” This report examines the evolution of extra-EU trade in this product group over the 2015–2025 period. The EU consistently ran a large trade surplus, with exports growing by 23 % in value while imports surged by 44 %. The decade was shaped by a dramatic geographical reorientation of import sources towards Asia, the collapse of trade with Russia, a sharp divergence between price-driven export growth and volume-driven import growth, and a concentrated price shock in 2022.

1. Export resilience built on value growth and a pivot to the United States

EU exports rose by nearly one-quarter in value, almost entirely because of higher unit prices

Over the whole period extra-EU exports of CN 3921 increased from €3.34 billion to €4.11 billion, a gain of 23.1 %, while the volume shipped barely changed (+1.1 %). Consequently the average export price climbed by 21.8 % to €5,847 per tonne. The highest export value was recorded in 2022 at €4.56 billion, after which values eased.

Indicator (exports)	2015	2018	2020	2022	2025	Change 2015→2025
Value (€ million)	3,336	3,542	3,443	4,559	4,108	+23.1 %
Quantity (tonnes)	695,235	764,201	727,112	761,638	702,576	+1.1 %
Price (€/tonne)	4,798	4,635	4,734	5,985	5,847	+21.8 %

Data from General overview: trade.

The United States overtook the United Kingdom as the premier export destination

The United Kingdom remained the largest single market by value, with exports of €715 million in 2015 and €736 million in 2025 (+2.9 %). However, the most dynamic large outlet was the United States, where sales surged from €525 million to €871 million (+65.9 %), making it the top destination in value by the end of the period. Switzerland grew moderately (+17.2 %), while Norway expanded by 24.8 % and Turkey by 39.4 %.

Export partner (value)	2015 (€ million)	2025 (€ million)	Change
United States	525.3	871.5	+65.9 %
United Kingdom	714.8	735.6	+2.9 %
Switzerland	315.4	369.7	+17.2 %
China	334.9	212.8	-36.5 %
Turkey	115.3	160.7	+39.4 %
Norway	122.5	152.9	+24.8 %

Data from Top partners by value.

Russia collapsed and China retreated as export markets

Two large-scale disengagements marked the period. Exports to Russia, valued at €209 million in 2015, fell to practically zero by 2025 (–100.0 %), with the bulk of the contraction occurring after 2022. Shipments to China shrank from €335 million to €213 million (–36.5 %), reflecting rising local self-sufficiency and geopolitical headwinds.

Reinforced and laminated sheets (subheading 392190) dominate the export basket

Throughout the decade the reinforced/laminated segment (392190) accounted for the majority of exports. In 2015 its export value stood at €2,026 million (60.7 % of the total) and reached €2,288 million in 2025. The next largest segment, cellular polyurethanes (392113), grew from €409 million to €632 million, while cellular plastics n.e.s. (392119) moved from €526 million to €781 million.

Segment data from Product segment breakdown.

2. Import growth powered by Asian volume and a broadening supplier base

Extra-EU imports rose 44 % in value, driven by a strong volume expansion

Imports of CN 3921 into the EU grew much faster than exports, from €1.63 billion to €2.35 billion (+44.3 %). Unlike exports, import growth was primarily volume-driven: the quantity rose by 29.3 % while the average price increased by 11.6 %. The import value peaked in 2022 at €2.91 billion.

Indicator (imports)	2015	2018	2020	2022	2025	Change 2015→2025
Value (€ million)	1,631	1,766	1,866	2,914	2,353	+44.3 %
Quantity (tonnes)	403,239	450,829	469,802	544,891	521,310	+29.3 %
Price (€/tonne)	4,045	3,918	3,973	5,348	4,513	+11.6 %

Data from General overview: trade.

China, Turkey and India became the fastest-growing import partners

The import supplier landscape shifted decisively towards Asia. China more than doubled its sales to the EU (from €204 million to €429 million, +109.7 %). Turkey (+136.2 %), India (+140.6 %) and the Republic of Korea (+100.9 %) all recorded triple-digit increases. By contrast, imports from Switzerland fell by almost one-third (–27.4 %) and the United Kingdom grew only modestly (+4.2 %).

Import partner (value)	2015 (€ million)	2025 (€ million)	Change
China	204.4	428.6	+109.7 %
United States	243.6	389.5	+59.9 %
United Kingdom	288.0	300.2	+4.2 %
Switzerland	380.4	276.0	-27.4 %
Turkey	113.0	266.9	+136.2 %
India	51.6	124.3	+140.6 %
Korea, Republic of	63.0	126.6	+100.9 %

Data from Top partners by value.

Import concentration declined markedly as new players gained ground

The Herfindahl-Hirschman Index (HHI) for extra-EU imports (value basis) fell from 1,334 in 2015 to 1,130 in 2025 (–15.3 %), reaching a low of 923 in 2021. This signals a meaningful diversification of supply away from a few dominant sources, notably Switzerland, and towards a wider array of Asian and other partners.

Data from Concentration HHI.

Cellular plastic segments displayed the sharpest import price growth

Within the import basket, reinforced/laminated sheets (392190) remained the largest segment, rising from €985 million to €1,426 million. However, the most striking price dynamic occurred in the “other cellular plastics” segment (392119): its unit import price jumped from €4,893 per tonne in 2015 to €11,716 per tonne in 2025, far outpacing the aggregate import price rise.

Segment data from Product segment breakdown.

3. The 2022 price shock and the asymmetric recovery

Several major import sources suffered acute price spikes in 2022

Price-shock detection identified clear events in 2022. Imports from Switzerland registered a 26.0 % price jump relative to the 2020-2021 baseline (abnormality 13.3). Turkey (+23.1 %, abnormality 5.9), China (+37.9 %, abnormality 3.9) and Norway (+39.1 %, abnormality 3.2) also experienced abrupt price rises. On the export side, sales to Ukraine saw a 29.0 % price shock that same year, while the quantity tumbled.

Shock event (2022)	Flow	Price shift	Baseline period
Switzerland	Import	+26.0 %	2020-2021
Turkey	Import	+23.1 %	2020-2021
China	Import	+37.9 %	2020-2021
Norway	Import	+39.1 %	2020-2021
Ukraine	Export	+29.0 %	2020-2021

Data from Top shock events.

EU-Russia trade in plastic sheets was practically eliminated after 2022

Exports to the Russian Federation fell from €208.7 million in 2015 to €35,749 in 2025, with the steepest drop occurring after 2022. Import quantities from Russia collapsed from a pre-war level of tens of thousands of tonnes to virtually nothing by 2025 (quantity recorded as 0.002 tonnes). The coefficient of variation for Russian imports (0.84) and exports (0.45) was the highest among the major partners, reflecting the abrupt cessation of trade.

Elevated volatility persisted for niche partners and specific products

Beyond the Russia shock, several smaller trade relationships showed high volatility over the decade. The coefficient of variation for imports from Serbia stood at 0.44 and from India at 0.33, while export volatility was pronounced for Morocco (0.21) and Ukraine (0.21). The cellular plastics segment (392119) also experienced the most pronounced price swings, consistent with its sensitivity to raw material and energy cost spikes.

Volatility data from Volatility bars.

Conclusion

EU trade in CN 3921 over 2015-2025 was characterised by a growing export surplus, a deep re-routing of import sourcing towards Asia, and a powerful but transient price shock in 2022. Export value rose by 23 %, almost entirely through higher unit prices, while the United States became the pre-eminent foreign market. Imports expanded much faster (+44 %), driven by volume and a surge from China, Turkey, India and Korea, which together eroded the former dominance of Switzerland and substantially lowered supplier concentration. The 2022 spike in input and logistics costs hit import prices particularly hard, but many of those price pressures moderated by 2025, whereas the trade rupture with Russia remained permanent. Looking ahead, the EU's strong competitive position in reinforced and laminated sheets, its diversified import base, and the moderate recovery in unit prices after 2022 suggest a resilient market structure, albeit one that remains exposed to sudden energy and geopolitical shocks.

If you need advice on European trade policy, or representation for your interests in Brussels, feel free to contact me at support@tradedashboard.eu. You can find my CV at this address.