# EU TRADE EXPLORER

# Market evolution: Mineral fuels and oils (CN 27) — 2015–2025

## Introduction

This report examines extra-EU trade in mineral fuels, mineral oils and related products (CN 27) from 2015 to 2025. The decade was marked by a pandemic-driven demand collapse in 2020, an unprecedented energy price shock in 2022 amplified by the war in Ukraine, and a subsequent rebalancing of trade patterns. Throughout the period, the EU remained a large net importer, with import values far exceeding exports and the trade deficit widening to –297.9 billion EUR in 2025 from –226.2 billion EUR in 2015. The analysis below draws entirely on the data captured in the EU Trade Dashboard.

## Explosive value growth driven by the 2022 energy price shock

### Total trade values hit record peaks in 2022 before retreating, while physical volumes remained far more subdued

Both imports and exports surged to their highest levels in 2022, driven overwhelmingly by price increases rather than a sustained rise in quantity. The table below summarises the headline trade evolution.

| Indicator (EUR) | 2015 | Minimum | Maximum (year) | 2025 | Change 2015→2025 |
|---|---|---|---|---|---|
| Extra-EU imports value | 314.4 bn | 221.4 bn (2020) | 831.4 bn (2022) | 414.6 bn | +31.9% |
| Extra-EU exports value | 88.2 bn | 64.1 bn (2020) | 181.0 bn (2022) | 116.6 bn | +32.3% |
| Trade balance (EUR) | –226.2 bn | –650.4 bn (2022) | –157.3 bn (2020) | –297.9 bn | –31.7% |

In contrast, physical quantities moved within a narrow band. Import quantity actually fell by 16.9% (from 1 013 million to 842 million units), while export quantity contracted by 5.8% (from 196 million to 184 million units). This decoupling confirms that the dramatic nominal movements are primarily a price story.

### Import and export unit prices soared to historic highs in 2022, especially for natural gas

Average import unit price jumped from 306.6 EUR per unit in 2015 to a peak of 807.6 EUR in 2022, before easing to 468.4 EUR in 2025 (+52.8%). Export unit prices followed a similar trajectory, rising from 430.7 EUR to a 2022 peak of 853.9 EUR, then settling at 581.0 EUR (+34.9%). The product-segment breakdown (Product compare) reveals that the shock was concentrated in gas and oil-refined products.

| Import price (EUR/unit) | 2015 | 2022 | 2025 | Change 2015→2025 |
|---|---|---|---|---|
| Crude oil (2709) | 348.7 | 694.6 | 476.3 | +36.6% |
| Petroleum gas (2711) | 323.0 | 1 238.9 | 528.0 | +63.5% |
| Refined petroleum (2710) | 424.6 | 938.6 | 638.7 | +50.4% |
| Coal (2701) | 71.2 | 297.0 | 142.3 | +99.8% |

The shock was quantified by price-event analysis, with the largest import-side deviation registered for Algeria (abnormality 6.7, price shift +145.4%), and on the export side for Ukraine (abnormality 6.1, price shift +161.2%) — both centred on 2022 (Top shock events).

## The re-ordering of EU energy suppliers: Russia’s decline and the rise of alternative partners

### Russian imports collapsed by 80% over the decade, with the sharp contraction occurring after 2022

Russian imports fell from 87.8 billion EUR in 2015 to just 17.4 billion EUR in 2025, despite having peaked at 147.2 billion EUR in 2022. In physical terms, Russian volumes plummeted from 288 million units in 2015 to 35 million units in 2025 (a drop of 88%), visible in the Volatility bars where Russia exhibits the highest import volume coefficient of variation (0.534).

### Alternative suppliers, led by the United States and Norway, filled the gap

The top-partner data (Top partners by value) shows a marked re-orientation of supply.

| Import partner (EUR) | 2015 | 2025 | Change 2015→2025 |
|---|---|---|---|
| United States | 10.4 bn | 70.9 bn | +583.8% |
| Norway | 22.6 bn | 45.0 bn | +99.6% |
| Kazakhstan | 14.2 bn | 28.2 bn | +98.1% |
| Algeria | 17.4 bn | 24.7 bn | +41.4% |
| Russian Federation | 87.8 bn | 17.4 bn | –80.1% |

On the export side, “Stores and provisions” (mainly bunker fuels) remained the leading destination, increasing by 62.3% to 17.2 billion EUR, while exports to Gibraltar rose 113.2% to 7.0 billion EUR, emphasising the importance of maritime refuelling hubs.

### Import concentration decreased sharply, indicating a more diversified supply base

The Herfindahl-Hirschman Index for import values declined from 1 307 in 2015 to 794 in 2025 (–39.2%) (Concentration HHI). This reduction reflects the diminished weight of Russia and the simultaneous rise of several mid-sized suppliers, lowering overall supply risk.

## EU internal dynamics: rising production value, increased export propensity, and deep import reliance

### Domestic production value surged, yet net import reliance deepened dramatically

EU production of mineral fuels (in value terms) rose from 2.5 billion EUR in 2015 to 15.5 billion EUR in 2024, a 524.6% increase largely driven by higher energy prices (Production volumes). Physically, output grew by 92.0%, from 63.3 billion to 121.4 billion units. Despite this expansion, the net import reliance ratio plummeted from –1.3% in 2015 to –81.2% in 2024 (a –6 175.5% change), meaning the EU’s dependence on foreign supplies of mineral fuels intensified sharply over the period (Net import reliance).

### Export propensity more than tripled, underscoring the EU’s role as an energy processing hub

The export propensity (exports / production) rose from 19.1% in 2015 to 77.4% in 2024 (+304.4%), reflecting the fact that a growing share of the fuels processed within the EU is re-exported, particularly in the form of refined petroleum products. Simultaneously, overall trade intensity (exports + imports as a share of production) climbed from 31.4% to 83.0% (Trade intensity), confirming the sector’s increasing international integration.

### Member state specialisation reveals a cluster of refining-oriented economies

In 2025, the highest revealed symmetric comparative advantage (RSCA) was observed in Greece (0.50), Lithuania (0.46), Finland (0.44) and Malta (0.44), with Belgium (0.35) and the Netherlands (0.33) also strongly specialized (Most specialised reporters). These scores point to a group of member states that concentrate on refining, transhipment and bunkering activities, while larger economies such as Germany (–0.32) and Italy (–0.33) exhibit a much lower relative specialisation in this commodity area.

## Conclusion

The 2015-2025 period demonstrates the extreme sensitivity of EU trade in mineral fuels to geopolitical and market disruptions. The 2022 price shock propelled import and export values to record highs without a corresponding surge in physical volumes, while the subsequent reconfiguration of import sources sharply reduced the dominance of Russian supply and lowered overall concentration. Nonetheless, the EU's net import reliance deepened and export propensity rose strongly, highlighting the bloc's continuing vulnerability to external energy price fluctuations and the solidifying role of certain member states as international refining and logistics hubs. The data, viewed through the lens of the EU Trade Dashboard, portray a sector still in transition, where diversification is advancing but structural import dependence persists.

Generated on 2026-07-24 based on data from tradedashboard.eu



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.