



Optimum GroupTM
Labels & flexible packaging solutions

V1.0 – 27 01 2023 - EN

Raw materials - shortages & price changes

Market update Q4 2022

Table of contents

- General
- Material costs trends
- Pulp and paper
- Film
- Chemicals
- Indirect

General















Material costs trends
Outlook material costs



Material Cost Trends Outlook

Q4 2022 and Outlook

- Energy index surprised forecast from mid Q4, will positively impact Q1 2023 cost.
- Supply situation. Paper and Film supply normalised during Q4. Raw materials capacity exceeds demand; the risk of short gas supply concern driving higher inventories has reduced; supply improved further early October with signs of demand decline and destocking which continued until december.
- Inflation continued early Q4, with energy and low demand. Cost index corrected from historical highs for Pulp, Film index declined. Film resins reduction continued and film prices trend started to change despite energy surcharges. Paper, Film and Chemical producers started to see lower demand from november and they had to reduce output, pressuring prices and surcharges as of december. Domestic EU freight is stable, international freight cost improved further. Prices were changed monthly during the Quarter with transacted volumes lower than anticipated by producers due to weak demand.
- Outlook for Q1 2023. War continues to bring instability. Paper inflation is expected to see some correction. Energy cost are volatile and a mild winter plus lower consumptions in addition to government actions across EU will limit the amount of inflation. This is expected to affect film and paper cost positively towards the end of winter. Demand correction continues to be visible; recession scenario in 2023. Macro deterioration is affecting demand, inventories and consumer spending.
- Outlook 2023, Commodity prices have peaked and should correct during H1 2023, demand slowing down. Energy, packaging and transport impact to raw materials cost will drive adjustments as old contracts expire compressing margins. Energy cost and the hedge positions from vendors for 2023 will affect and may delay price reductions of raw materials. Producers capacity may be adjusted affecting supply. North America increasing demand over Europe and China Covid policy change may add tensions to global supply. Volatility is expected to continue, while demand is expected to follow GDP changes.

Index Average December 2022 vs December 2021	Energy-Gas	Pulp	Coated Paper	PET Resin	PP Resin	Acrylic Monomers	Propylene	PE Resin	TiO2
Cost Index									
Change %	> -8%	+20%	+54%	-8%	-20%	-21%	-9%	- 9%	+12%
	 Sharp Increase (+10%)	 Slightly Increase (+3%~10%)	 Stable (±3%)	 Slightly Decrease (-3%~-10%)	 Sharp Decrease (-10%)	N/A = Not Available			

Pulp and paper

Pulp 50/50



Pulp and paper

Pulp 50/50 NBSK/ BHKP

Pulp (50% NBSK / 50% BHKP)

There was a disconnect between buyers and sellers in Q4: even though demand started to decline end of Q3 and the situation worsened in December, pulp suppliers kept prices in US\$ mostly unchanged on a high level (longer than necessary). Pulp prices declined in Euro terms only because of weaker US\$.

Papers (Facestock and Liners)

All paper vendors pushed further price increases in Q4, driven by high raw material and energy costs. In many cases, paper mills could no longer handle the exploding energy costs, forcing them to reduce production or temporarily shut down.

Due to the slow down in demand in Q4, a lot of paper mills are sitting on high stocks produced at very high input costs (energy & pulp).

Outlook

With energy prices still volatile and the impact of the high levels of stock in a context of a soft demand in January, paper vendors are not yet reducing prices in early Q1 2023. If pulp and energy prices continue dropping, market would expect price reductions later in the quarter.

+20%

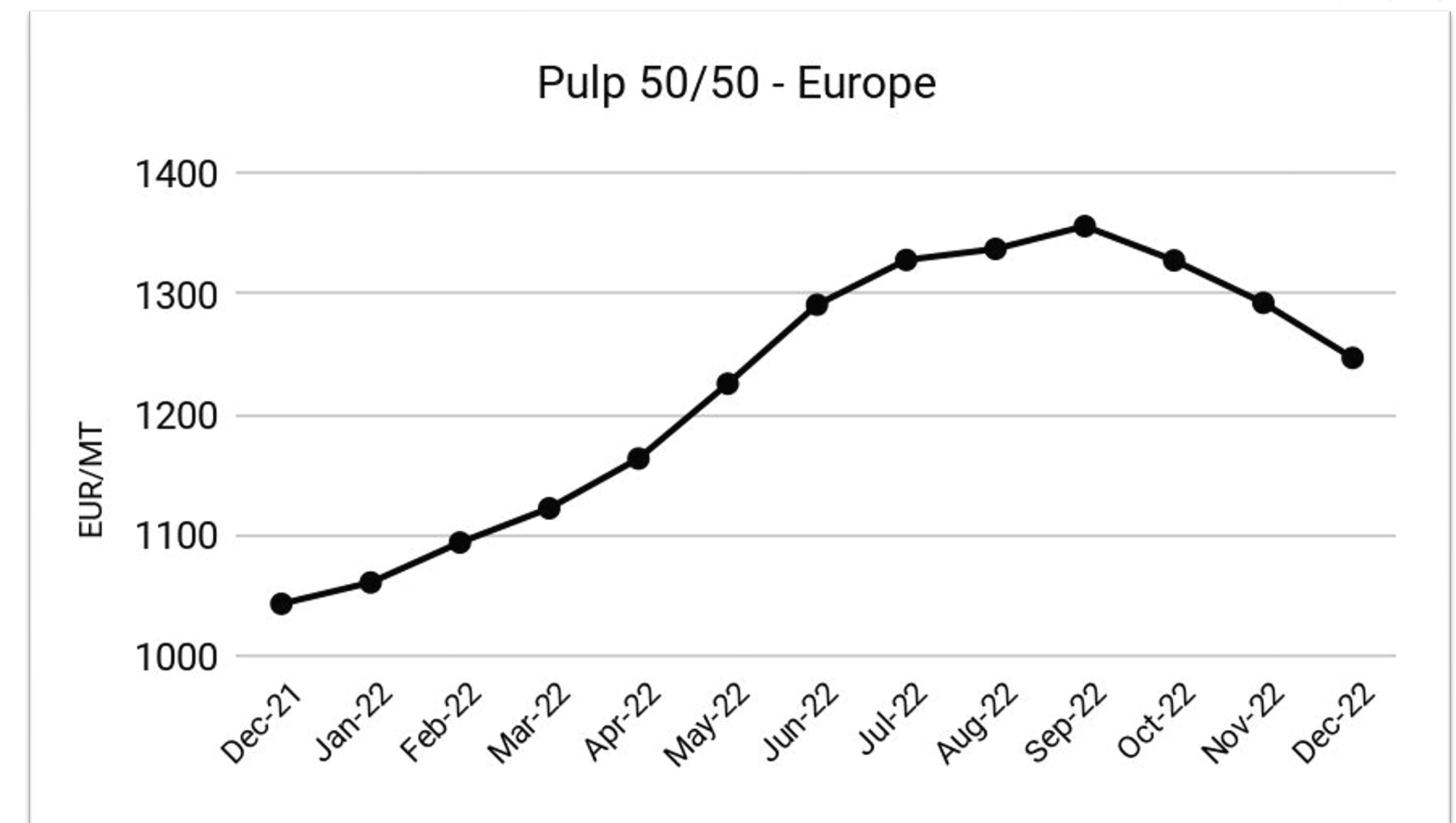
Dec 2022 vs Dec 2021

-4%

Q4 2022 vs Q3 2022



Q1 2023



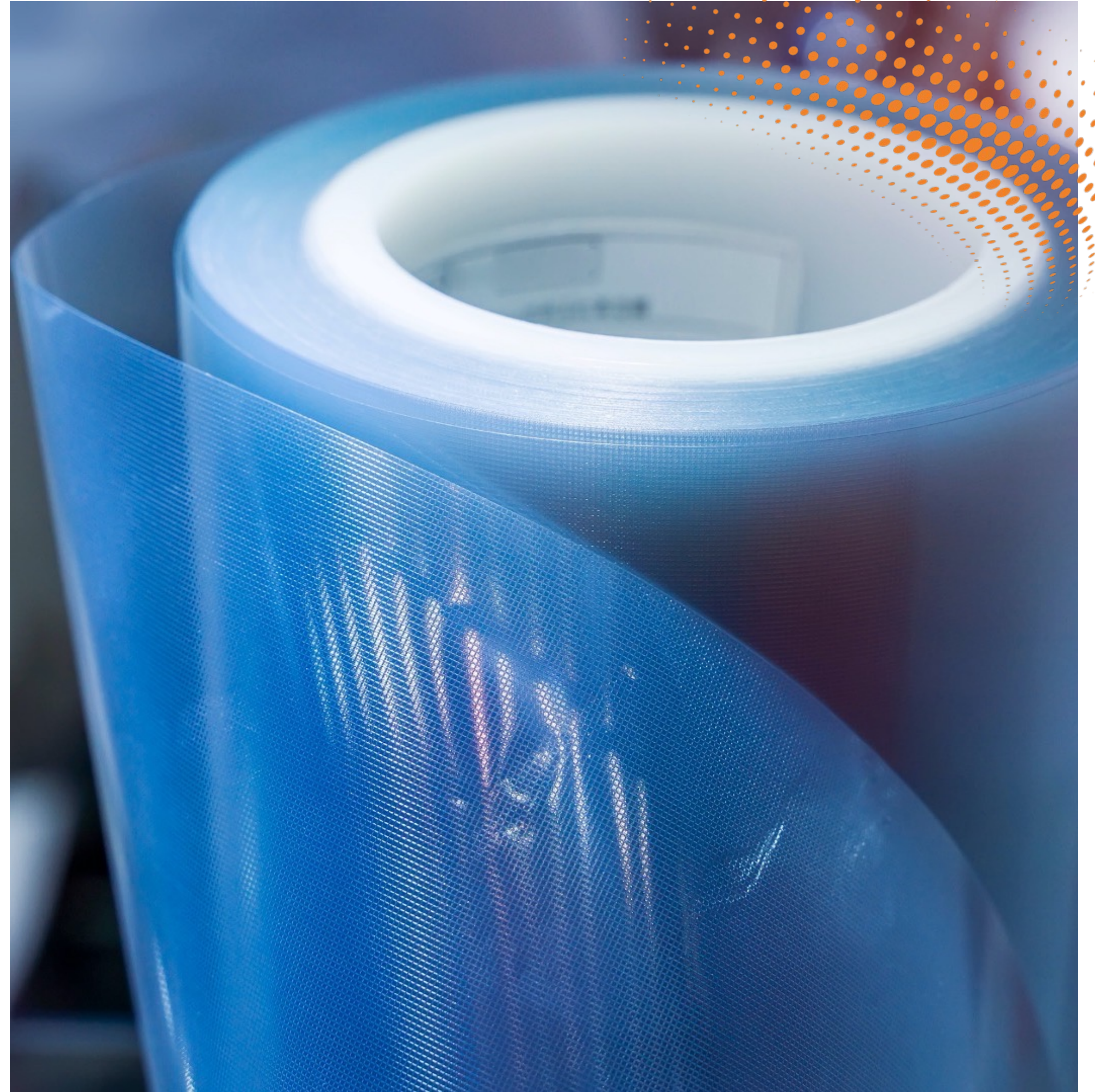
Source: ICIS

Film

Polypropylene

Polyethylene

Polyester



Film

PP - Polypropylene

The PP resin market has stabilised and the film market remains long. Demand for both resin and films dropped in Q4 at unprecedented speed. Polypropylene Film suppliers' costs remained high due to energy, which they passed on as upcharges that partially offsetted the decrease of resin index in Q4.

Outlook

Forecast for Q1 remains flat for the first half of the year. Demand is expected to remain soft during that period too but margins from producers are small due to relatively high energy costs and other inflationary pressures. Therefore, prices should remain stable. Final prices could vary depending on: energy prices, economic growth and demand level.

-20%

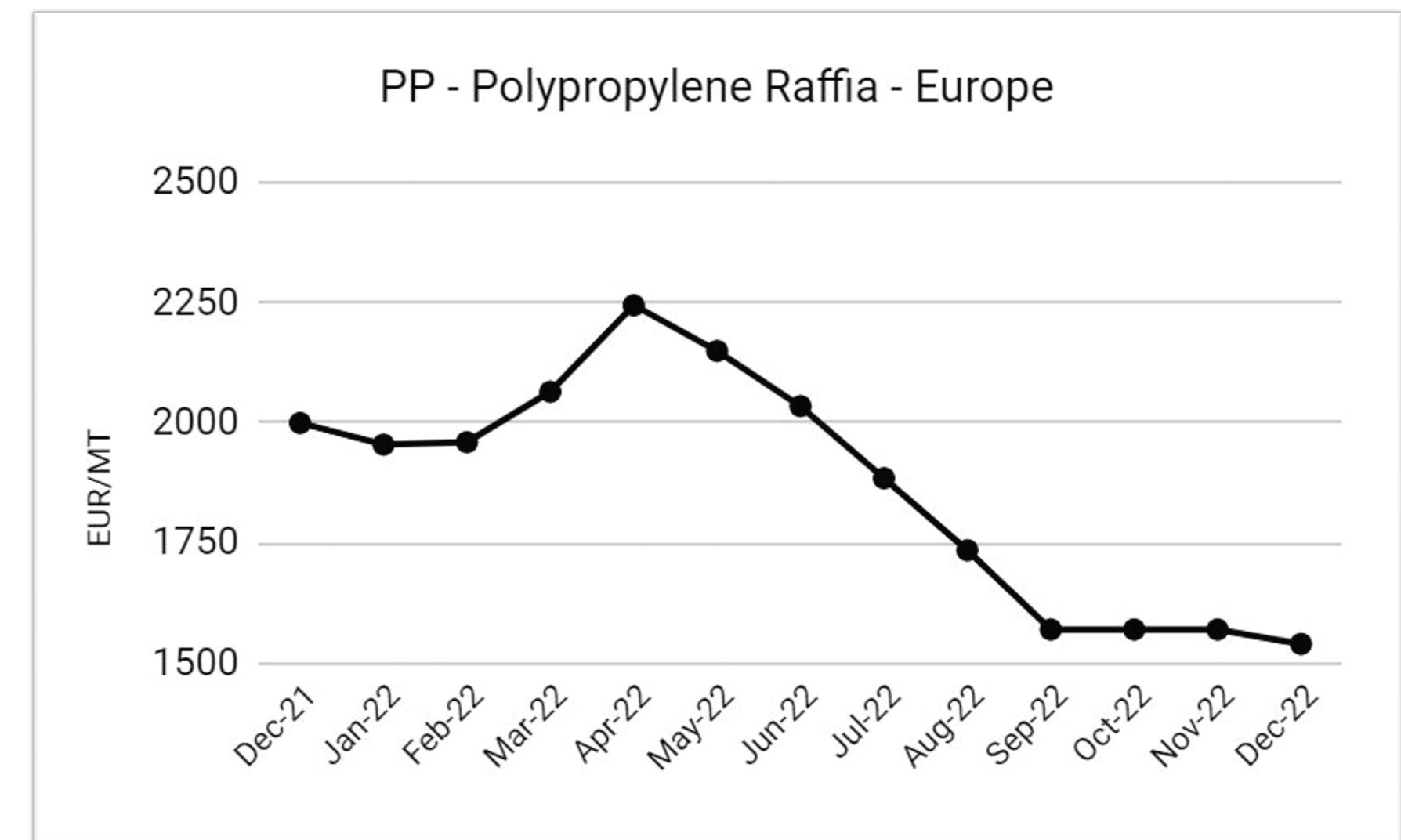
dec 2022 vs Dec 2021

-10%

Q4 2022 vs Q3 2022



Q1 2022



Source: ICIS

Film

PE - Polyethylene

Clear signs of demand softness were evident in the market and material was abundant, but convertors were very conservative in their inventory replenishment policies trying to end the year in a lean manner. However, soft demand was offset by high energy costs and overall low margins for resin producers which caused PE film prices to remain stable during Q4 2022.

Outlook

In an environment of soft expected demand and ample inventories, we expect prices to slightly go down throughout the first part 2023. Decreases observed during H2 22 were relatively smaller than in PP given that PE resins are associated to essential goods and demand is more resilient in a recessionary environment. Producers margins are slightly higher than in PP and hence, we see more room for slight decreases until demand picks up in the second part of the year.

-9%

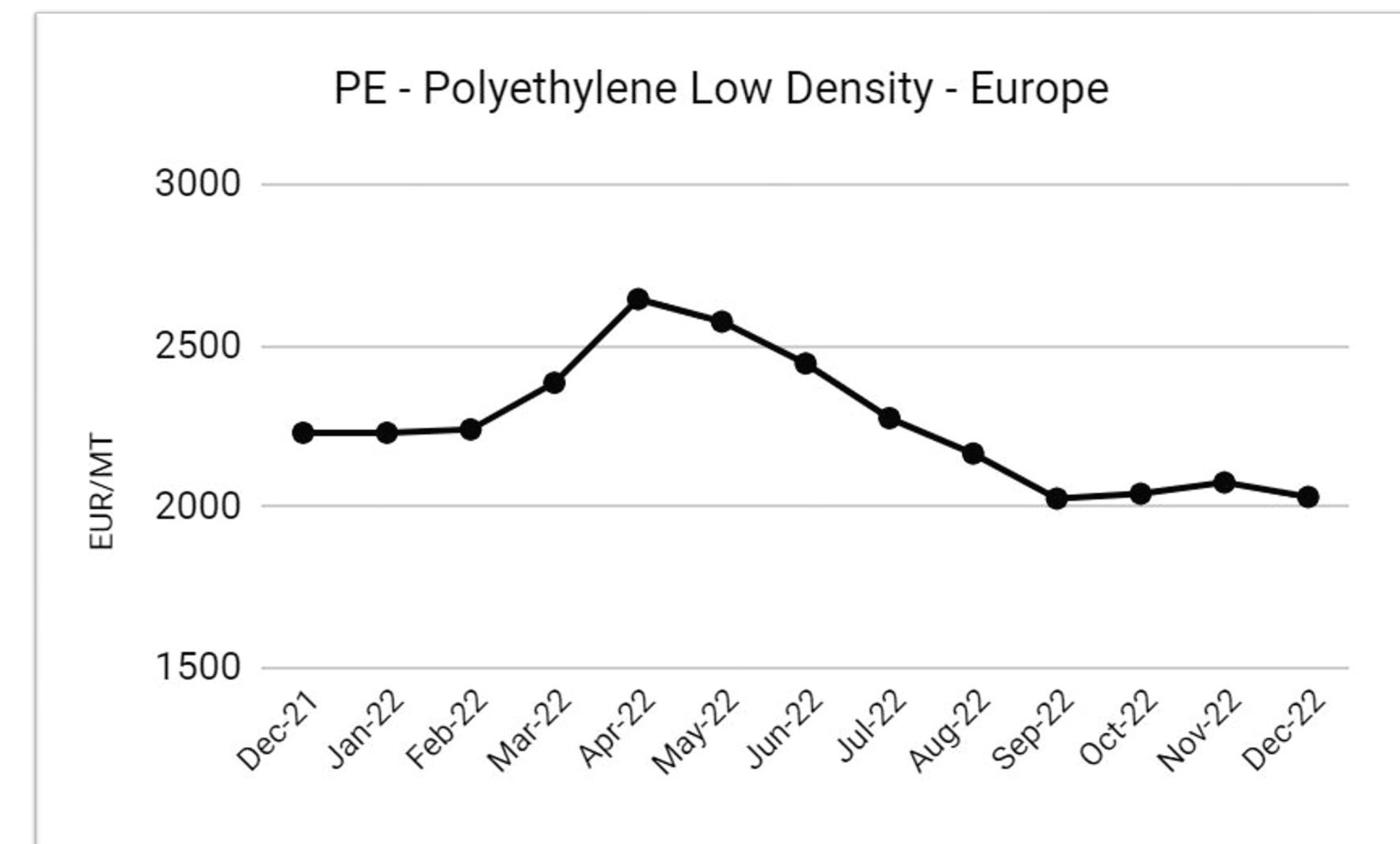
dec 2022 vs Dec 2021

-5%

Q4 2022 vs Q3 2022



Q1 2023



Source: ICIS

Film

PET - Polyester

The overall demand in the PET market continued slowing down in Q4 after an already weak Q3. PET producers are running production lines on and off and extending their maintenance longer than expected, because of the global low demand and to avoid high energy costs in Europe. This low level of demand continued pushing prices of resin down.

Despite these reductions of PET resin prices, PET film prices were mostly flat in Q4 vs Q3. Energy costs remained at an elevated level and mitigated all positive impact of resin reductions.

Outlook

PET resin prices are expected to continue decreasing slightly in the first few months of Q1 and start rebounding as of March. As energy prices have also reduced since mid-December, it is reasonable to expect that PET liner prices will decrease in Q1.

-8%

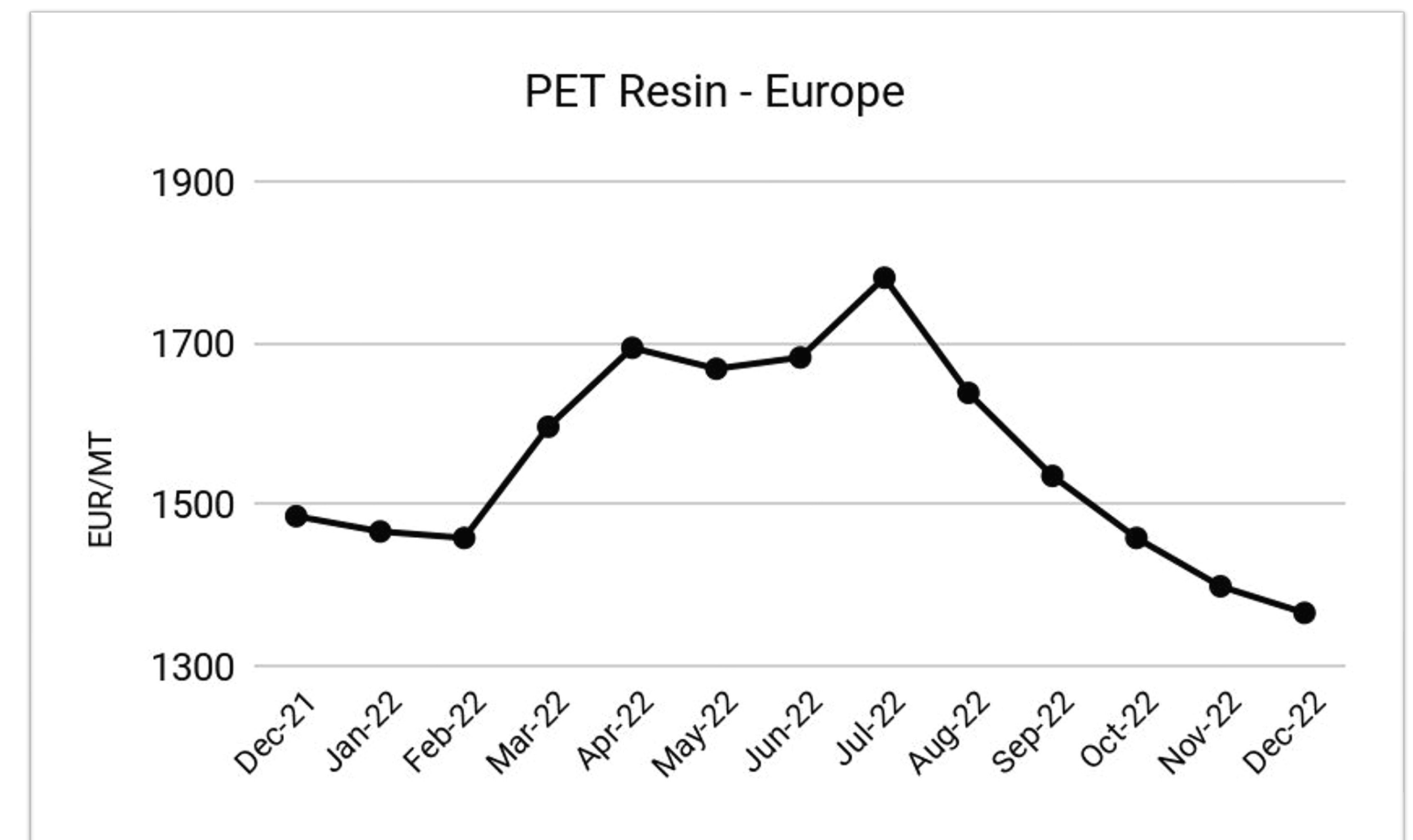
dec 2022 vs Dec 2021

-15%

Q4 2022 vs Q3 2022



Q1 2023



Source: ICIS

Chemicals

Acrylic Monomer
SBR[®]



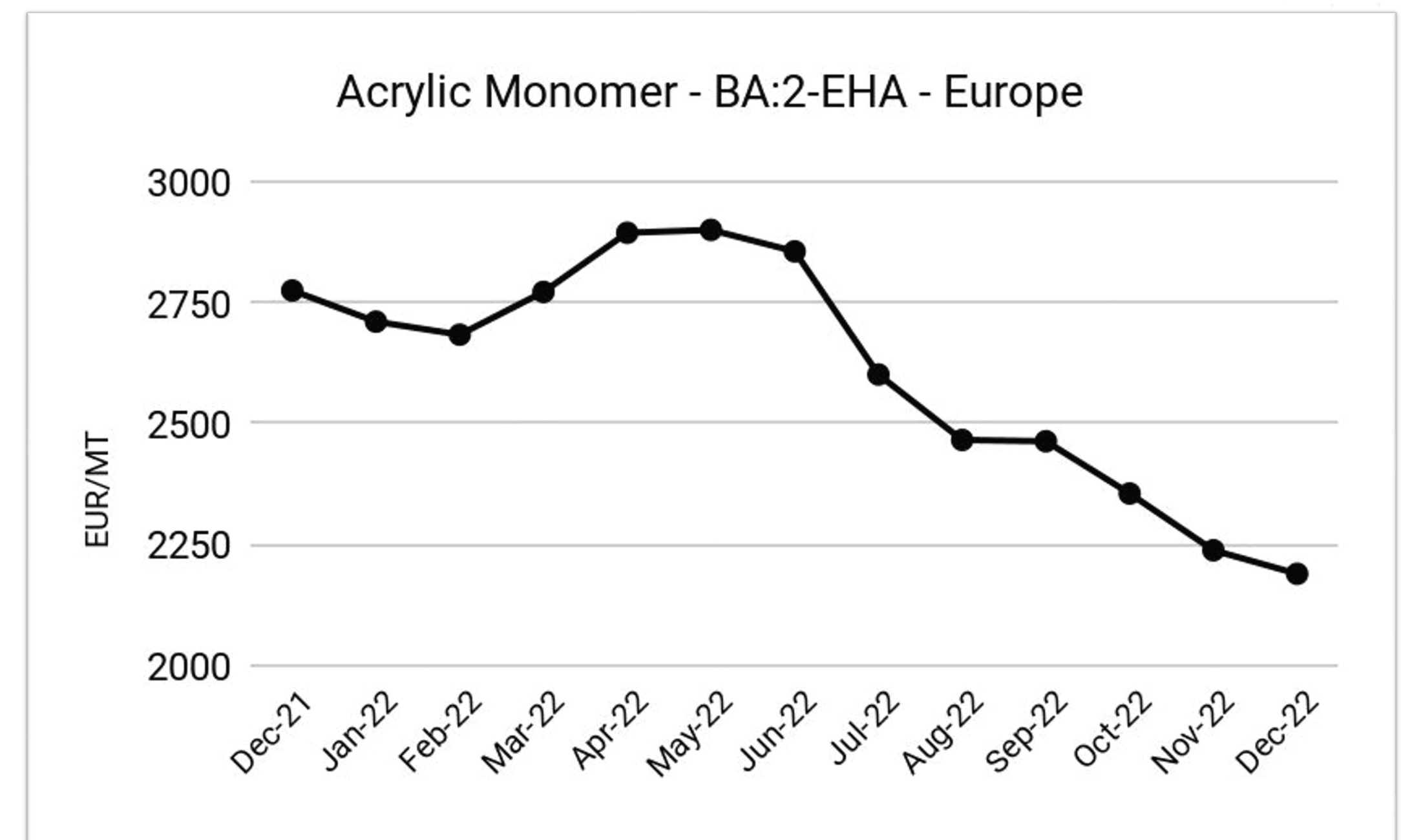
Chemicals

Acrylic Monomer

The EU monomer market continues to be long due to significant demand erosion and more-than-adequate supply driven by an influx of less expensive imports that has more than offset any supply curtailments from domestic manufacturers. The price trend illustrated in the chart reflects the long market conditions, reduced gas volatility, favorable raw materials, and the added downward price pressure from the less expensive imports, supported by lower ocean freight cost.

Demand is expected to pick-up in Q1 2023 as the value chain looks to restock inventories after the massive destocking seen in Q4. Despite the demand pick-up, the market outlook remains dismal due to recession fears, supply chain risk, and less imports.

Adhesive manufacturers provide mixed signals about the demand either still being very strong or showing significant reductions since the third quarter.



Source: ICIS

Chemicals

Hot Melt adhesives

Global market for hot melt components has been changing with still challenging conditions in Europe and softening market in Asia. Changes in gas prices and sea shipment cost are pressuring factors for manufacturers to reduce prices, opposite to remaining high cost of inventory causing stable prices for most of the hot melt components.

Materials based on Pine Chemistry continue to face important competition from the biofuel market. No issue on availability at the moment but prices are moving up on the market. In general, the demand for HM adhesives is softening with destocking in Q4.

-7%

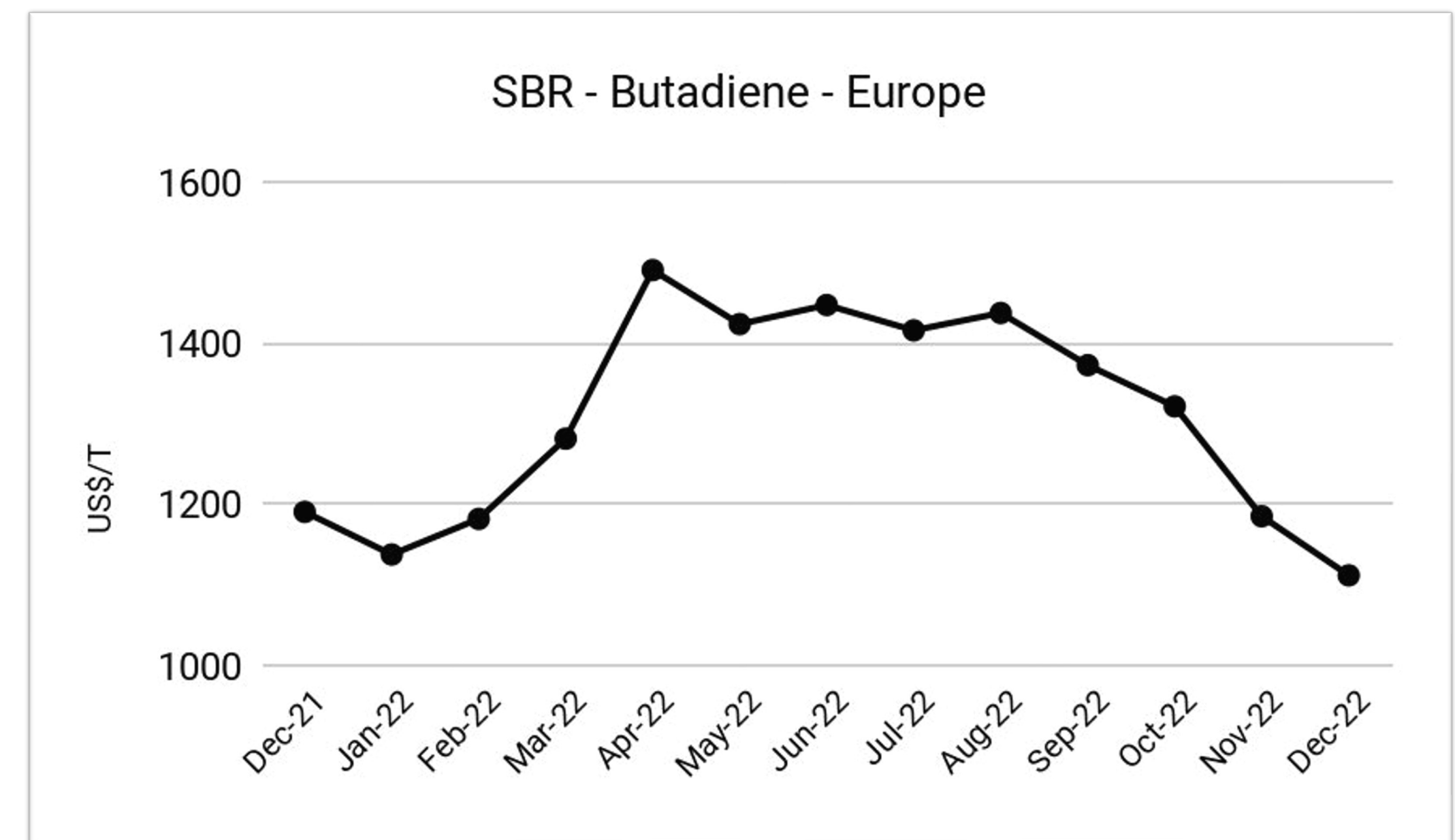
Dec 2022 vs Dec 2021

-14%

Q4 2022 vs Q3 2022

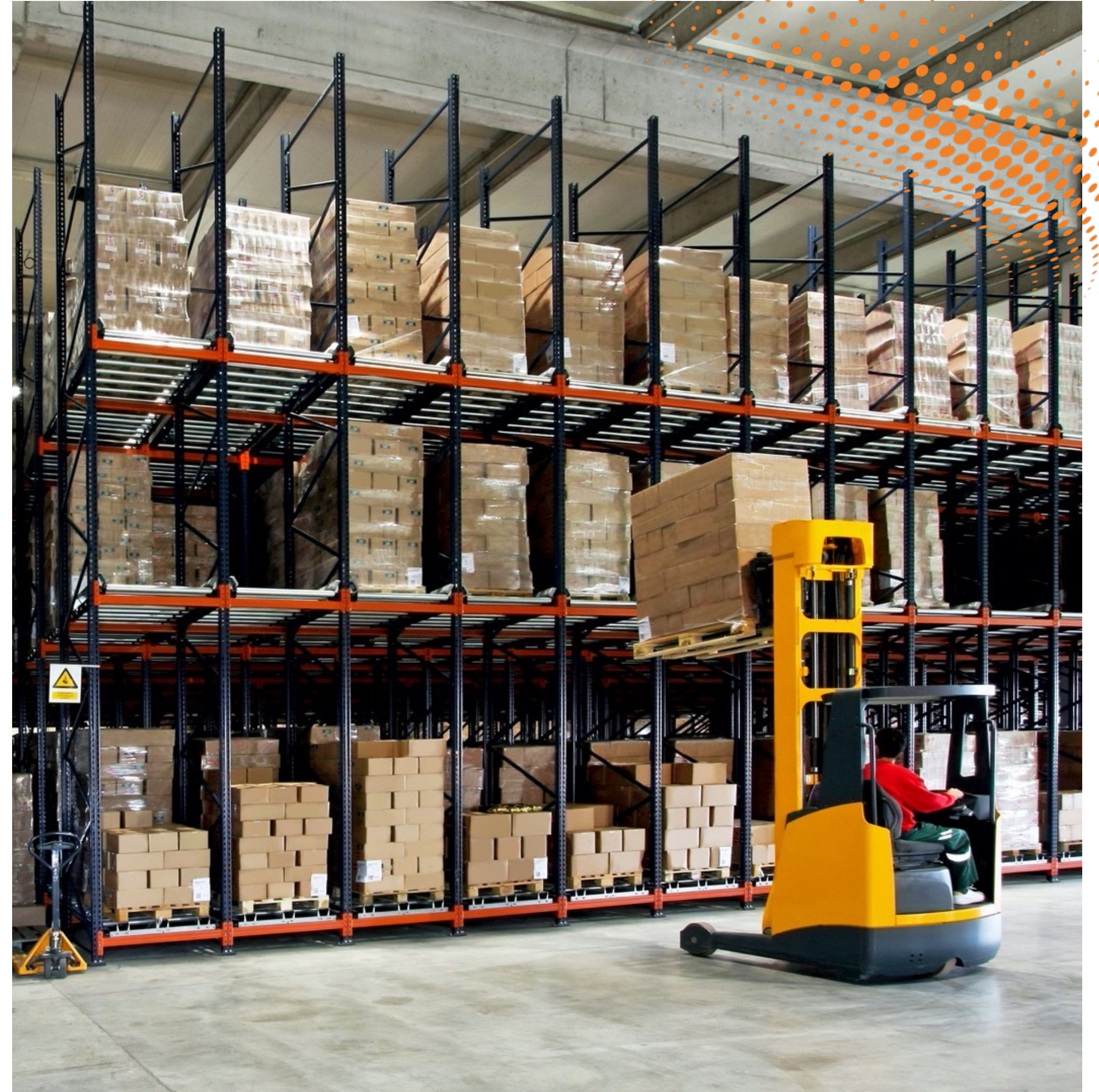


Q1 2023



Source: ICIS

Indirect Energy



Indirect

Energy

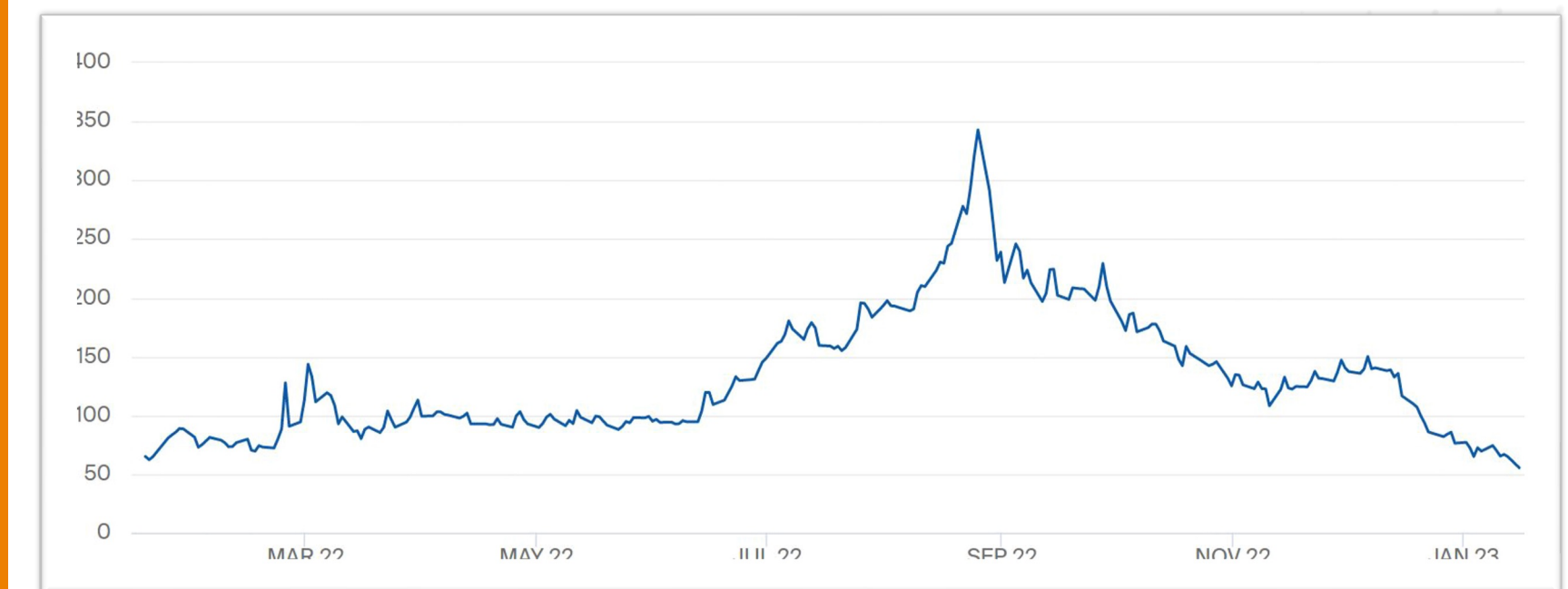
European Energy market continues its bearish momentum as a result of lower demand, healthy gas storage, and an improved weather outlook. In addition, the improved French nuclear capacity has lowered the region's demand for gas-fired power generation. However, the crisis is far from over as the global gas supply conditions are still tight.

Volatility remains. European energy markets continue to slide as a colder outlook these weeks fails to overcome the ongoing bearish fundamentals, but are not expected to fully stabilize.

Regulation has been released by both EU and many European countries to mitigate the inflated energy bills on both companies and households. Both UK and Germany have announced the price cap policy to alleviate part of the energy cost burden for larger companies.

Outlook: Despite the energy prices being at pre-war levels, European countries are still trying to design and implement more market regulations and mechanisms that can further safeguard the European energy complex.

Natural Gas



Electric Power

