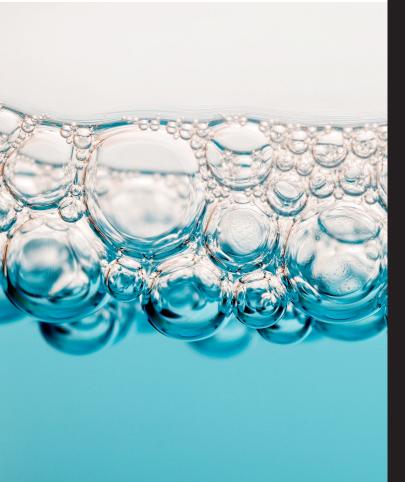
## **S&P Global**Commodity Insights



## Chemical Trends H1 2025

Navigating Complexity: Geopolitical tensions, macroeconomic uncertainty and sector-specific challenges

2025

#### **Credits**

**Authors:** Karina Trevizan, Baran Serdaroglu, Ashish Dhyani, Thiam hock Tan, Luke Milner, Gustav Inge Holmvik, Fumiko Dobashi, Akash kumar Jain, Rosa Castaneda, Miguel Cambeiro, Stuti Chawla, Daniel Pelosi, Paulina Wiener, Nanda Lakhwani, Divya Shah, Esther Ng, Andre Mikhail, Kamna Kapoor, Archit Singh, Maria-eleni Tsimeki, Haitian Fang, Aleksandra Zhagrina, Neirin Gray desai, Su Yeen Cheong, Benjamin Brooks, Daniela Morales pumarino, Mujidah Yahaya, Zhi Xuan Ho, Abdulaziz Ehtaiba, Maria Tsay, Guilherme Baida, Carla Bridi, Yazu Romero, Rob Westervelt

Editors: Benjamin Morse, Jim Levesque

Design: CI Content Design

## **S&P Global**Commodity Insights

#### **I** Contents

Greats	
Introduction	3
US-China trade relations to ripple through global fiber market in H1	4
Construction activity may boost demand for PVC, EPS in H1.	6
Inclusion commitments raise global demand expectations for recycled polymers	8
Low-carbon methanol markets gear up for FuelEU Maritime regulation	10
Global benzene markets to navigate uncertainty in H1	12
Capacity shifts, soft downstream demand to shape ethylene market in H1	14
Bearish sentiment clouds chemicals outlook for automotive demand	17
Latin American petrochemical importers expect lower US volumes	19
Modest recovery in US chemical volumes expected in 2025 .	21
Conclusion	23

### Introduction

In this report, S&P Global Commodity Insights explores the interconnected factors spanning global chemicals markets in the first half of 2025, as key regions and industries confront a landscape of complex challenges and opportunities.

The report delves into market fundamentals, geopolitical factors, logistics, sustainability, and the broader economic context, while addressing political uncertainties and trade challenges.

The global construction sector faces high interest rates and trade barriers impacting demand for polyvinyl chloride and expandable polystyrene markets, while the growth of recycled plastics markets is limited by legislative uncertainties across regions.

Meanwhile, ethylene markets see a mixed picture, characterized by permanent shutdowns in Europe, a high turnaround season in US, and new cracker startups in China.

The report also examines the potential impact of US tariff plans on commodity import prices in Latin American in light of the dollar's appreciation against regional currencies.

# US-China trade relations to ripple through global fiber market in H1

#### Market fundamentals to differ across regions amid trade uncertainties

The fibers market is expected to exhibit uneven conditions globally in the first half of 2025, largely depending on the direction of trade relations between China and the United States.

While the US outlook is characterized by uncertainty regarding domestic demand, in China, competitive prices are poised to support positive forecasts, although American trade barriers could alter this trajectory.

In other regions, India is anticipated to have more resilient demand, whereas concerns about the macroeconomic environment in Europe reflect more cautious forecasts.

#### Tariffs could boost US market

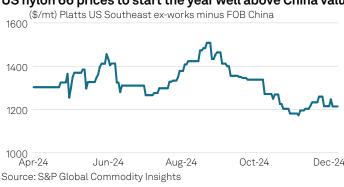
The incoming Trump administration has raised hopes of an improving US fibers markets. A nylon producer said market players have been "much more positive" of the macroeconomic environment, "especially tariff barriers against Chinese players."

US tariffs on China could prove pivotal for the automotive and construction sectors and the fibers used in everything from

carpets to upholstery textiles - in which fibers like nylons play an important role.

US nylon imports from China were up 3% on year through October. Throughout the year, Chinese prices were \$1,000/mt cheaper than US prices.

#### US nylon 66 prices to start the year well above China values



But the positive forecast for fiber is not a consensus, with a second producer cautioning a lack of clarity on the direction of interest rates.

"Since the US fiber market is primarily carpet fiber, much of the development in 2025 will depend on how interest rates develop," the source said. "For engineering plastics, there is some pent-up automotive demand that may help volumes."

A more optimistic scenario would prove to be a turning point in a market where prices have been falling steadily over the past few months. Platts, part of S&P Global Commodity Insights, assessed nylon-6 resin ex-works US Southeast at 98.5 cents/lb Dec. 11, down 91.5 cents/lb from April 1, amid decreasing demand.

## Oversupply pressuring China prices

In China, the domestic market has seen capacity for nylon-6 resins rise in H2 2024 to 600,000 mt/year, resulting in oversupply, market sources said.

FOB China nylon-6 resin prices have been on a downtrend since Platts commenced assessments April 1, falling to a low of \$1,532/mt for bright and semi-dull grades and \$1,582/mt for full-dull grade in mid-November. On Dec. 5, Platts assessed FOB China nylon-6 resin prices at \$1,564/mt for bright and semi-dull grades and \$1,614/mt for full-dull grade.

Market players said demand for nylon-6 resins is expected to pick up in late December 2024 and early January 2025 as textile and apparel makers ramp up production in preparation for the Lunar New Year. Price direction of nylon-6 resins would greatly depend on how well the oversupply is absorbed by the market, producers said.

Shanshan Dai, director of fibers at S&P Global Commodity Insights, expects further growth in the nylon-6 fiber market, especially in Asia in 2025. "Drivers will mainly come from branded sportswear and home textiles, as well as capacity growth in fiber manufacturing and the feedstocks," Dai said.

"Advancements in the skin-friendly features of nylon fibers, an increase in demand for functional textiles, and sufficient supply resulting in competitive prices will also play a major part in the growth of the industry," Dai said.

The market is also closely watching the latest developments on the imposition of additional US tariffs, especially on Chinese goods.

"Further tariffs introduced could noticeably hurt demand for China fiber exports," said Will Xu, associate director of polymers at Commodity Insights. "Otherwise, we will see in H1 2025 the continuation of the export momentum gathered in H2 2024."

(Demand) drivers will mainly come from branded sportswear and home textiles, as well as capacity growth in fiber manufacturing and the feedstocks

Shanshan Dai, director of fibers at S&P Global Commodity Insights

China's nylon 66 prices were

\$1,000/mt cheaper on average than US prices in 2024

#### Stable outlook for India

Market sentiment is that demand in India is likely to remain more resilient than in other regions, although the boost is likely to come more from improving profit margins, a major domestic fiber producer said.

If heavy competition from lower-priced imported material persists into 2025, fiber plant operations could go down, according to industry sources.

A trader said feedstock inquiries are expected to remain steady.

Acrylic staple fiber CIF India has been stable in the end of 2024. Platts assessed the product at \$1,695/mt CIF India on Dec 5.

#### European demand a concern

The European market is anticipated to continue facing challenges due to a decline in consumption. For nylons, demand remained flat towards the end of 2024, with sources indicating expectations were not evolving as projected, leading to a more pessimistic outlook.

In the acrylic staple fiber spot market, a general weakening in demand throughout the entire value chain has been seen, from fabric manufacturers to yarn converters and producers, with expectations the trend will persist into 2025, a source said.

Demand in the first quarter is unlikely to see improvement, with expectations leaning toward stability or further weakness at the beginning of the year, a market player said.

Due to their preferred characteristics and lower price, cotton and polyester are likely to capture a larger fiber market share in 2025.

Platts acrylic staple fiber prices have been stable heading into December and were assessed at \$3,000/mt DAP Turkey on Dec 5.

# Construction activity may boost demand for PVC, EPS in H1

#### Key chemicals may see boost on heels of construction growth

The construction sector is set to face challenges in H1 2025 amid high interest rates, political uncertainties and trade barriers, but proactive government initiatives and construction recovery in China, India and the US could lead to better demand for key chemicals such as polyvinyl chloride (PVC) and expandable polystyrene (EPS).

Even with an increase in demand, there could be trade flow issues to navigate in 2025. President-elect Donald Trump has threatened to impose tariffs across multiple commodity flows into the US, and such protectionism could have a detrimental impact on chemical trade globally.

Underscoring the interconnectedness of global supply chains, a Southeast Asian chemicals distributor said the market needs to be "very cautious" with the actions of the Trump administration.

## European political reforms bring uncertainty

To deal with the uncertainties abroad, European governments are pursuing supply-side reforms aimed at bolstering residential construction.

The UK's Labour government unveiled a budget in October that earmarked £500 million (\$637.735 million) for the Affordable

UK earmarks

£500 million

(\$637.735 million) for new homes

Homes Programme — and said it was the largest increase in social and affordable housing in a generation. This initiative, along with similar government proposals from Spain and Germany, aims to stimulate infrastructure investment and could provide muchneeded support to the European PVC market.

While interest rates may have eased, political pressures surrounding housing shortages remain a significant concern in Europe.

#### China new home price deflation eases on the back of property sector stimulus



Source: National Bureau of Statistics of China, S&P Market Intelligence

## China's stimulus measures, shifting trade dynamics

In China, the construction sector is expected to see acceleration in the first half of 2025, driven by a slower contraction in property markets and increased infrastructure investment, according to Xu Yating, principal economist at S&P Global Market Intelligence.

"We expect the housing market relaxations since September 2024 to facilitate the stabilization of housing sales and prices over the near term, and early signs of stabilization have already emerged," Xu said.

## China's construction sector is expected to accelerate in H1 2025

Xu Yating, principal economist at S&P Global Market Intelligence

Xu added that "over the long term, we anticipate increased government spending to purchase land and housing, which will help with the stabilization in housing prices and investment as early as the end of 2025."

An increase in construction activity could improve demand for PVC in China's domestic market and possibly provide a boost to prices that have floundered in the second half of the year. PVC prices in the country were depressed after June dropping \$70/mt from June 19 to \$750/mt CFR on Dec. 11, according to Platts, part of S&P Global Commodity Insights, assessments.

China's PVC exports increased to 14% year on year to 2.17 million mt over January to October 2024. However, with the expected introduction of anti-dumping duties by India on Chinese PVC, suppliers may need to pivot their exports toward Africa or the Middle East. This shift could alter trade dynamics significantly, especially as the demand for construction materials remains high in these regions.

China also plans to add PVC capacity in the H1 2025, as Wanhua Chemical plans to start up its new 400,000 mt/year PVC plant in Q1, S&P Global Commodity Insights reported.

## Funding issues for India construction

The growth of India's construction sector is likely to be hindered by funding challenges in government projects and tax-indexation issues in the private sector. However, experts predict a double-digit increase in demand for PVC, EPS and related chemicals by 2025, as

government allocations for infrastructure in 2025-26 (April-March) could accelerate projects and boost chemical demand.

PVC demand in India is expected to increase, driven primarily by construction and agriculture sectors, particularly irrigation. With several ongoing and upcoming initiatives, including the Smart City project, the outlook in PVC demand in 2025 remains positive.

Prices could also find support with the Indian government considering anti-dumping duties on PVC to protect the domestic industry, and non-tariff barriers that could prevent inflow of cheaper Chinese PVC into the Indian market.

#### India remains key export destination for China PVC



Source: China Customs Statistics Information Center

## Economic recovery brings optimism in Americas

The outlook for the construction sector in 2025 appears more optimistic in the Americas. PVC producers are hopeful that recent interest rate cuts by the US Federal Reserve will stimulate construction activity and drive demand for PVC.

Rebuilding in the aftermath of an above-average 2024 hurricane season could lead to increased repairs and renovations, further boosting PVC demand.

The American Chemistry Council projects housing starts to reach 1.4 million in 2025, up from 1.35 million in 2024. This anticipated growth underscores the potential for heightened demand for PVC, especially as homebuilder confidence rises. Each single-family housing start is expected to require approximately 33,000 pounds of chemical products, indicating a significant opportunity for chemical manufacturers.

As global inflation control solidifies and monetary policies become less restrictive, expectations for a resurgence in economic activity are growing. This environment may foster increased investment in construction, ultimately benefiting the chemical sector.

# Inclusion commitments raise global demand expectations for recycled polymers

# Legislative changes poised to bolster market following sluggish year

The first half of 2025 will be a critical period for the global recycled plastics markets. Sellers are tentatively optimistic for a possible increase in consumption but legislative uncertainties across Europe, Asia and the Americas could upend those expectations.

But with INC-5 negotiations on a global UN treaty for the elimination of plastics pollution breaking down in Busan, South Korea in late November 2024, pessimism continues to underline market sentiment as players call for support in establishing circular economies.

Despite this, some positivity has been expressed on improved conditions from 2024, with inclusion targets on the horizon.

## European demand depends on legislation

European participants have pinned their hopes on legislative changes to bolster recycled polymer demand following sluggish market conditions in 2024.

In the R-PET market, demand is expected to increase through the implementation of the European Union's Single-Use Plastic Directive (SUPD), slated to start in January. The directive mandates EU to mandate

25%

recycled content in plastic beverage

bottles in 2025

a minimum of 25% recycled content in plastic beverage bottles. Many held offer levels stable towards the end of 2024, building up stocks for the first half of 2025 in anticipation of the legislation.

During the first half of 2024, buying appetite increased in anticipation of the warmer months and the EU targets for 2025. However, in the second half of the year prices eased. Platts assessed recycled PET clear flakes in Northwest Europe at \$1,250/mt FD on Dec. 6, down from \$1,290/mt on April 30, according to S&P Global Commodity Insights.

EU member states have yet to announce penalties for non-compliance with the SUPD, leading market participants to suggest that it could take several months until its full effects are realized.

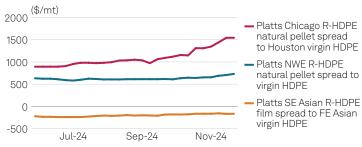
As a result, sources said there is limited incentive to switch to recycled products amid competitive virgin material offers.

There is limited incentive to switch to recycled products amid competitive virgin material offers.

For the European recycled polyolefin and styrenics sectors, the outlook is less positive due to an ongoing lack of competitiveness compared virgin material, while weak demand from the automotive and construction sectors is expected to persist amid continued high interest rates.

While some sources anticipate a slight uptick in activity during Q2, both sectors see less pressing mandated commitments when compared to R-PET, clipping a reliable consumption foundation.

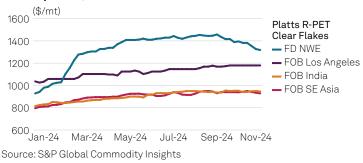
#### Wide recycled to virgin polymer spread in US, Europe hinders R-HDPE adoption



Source: S&P Global Commodity Insights

# Demand for recycled materials in Brazil is also expected to improve, driven by consumer goods companies that are striving to meet sustainability goals for 2025 and legislation promoting the circular economy. This has also led to a strong performance in the food industry and substantial government investment, which should increase material availability.

#### Regulations expected to lift stagnant global R-PET prices, demand



## Investment, legislative developments drive positivity in Americas

Recycled polymer players in the Americas enter 2025 with cautious optimism as government directives are expected to increase both supply and demand.

On the US West Coast, demand for recycled PET clear flakes has remained relatively stagnant throughout the year, with Platts FOB Los Angeles prices fluctuating between \$1,036/mt and \$1,179/mt from Jan. 3 to Dec. 6. In contrast, the US Midwest has experienced stronger demand levels, with FOB Chicago prices rising from \$1,179/mt on Jan. 3 to \$1,411/mt on Dec. 6, Commodity Insights data showed.

In Mexico, brand owners and the newly elected administration are expected to spearhead initiatives aimed at increasing post-consumer resin content and improving plastic recycling infrastructure. This push is likely to increase demand, which may exacerbate tight supply conditions. Nevertheless, some participants are optimistic that any surge in demand will also stimulate enhanced collection efforts.

## Virgin dynamics, trade constraints offer challenges in Asia

Across Asia, weakness in virgin plastics pricing has been undermining sustainability goals. On the other hand, R-PET prices have been supported by the cost of raw material bales that have risen since Q1 2024. Alongside legislation promoting recycled plastics, this has reduced the competitiveness of R-PET against virgin product.

Premium recycled PET clear flake prices FOB Southeast Asia increased from \$795/mt on Jan. 2 to \$925/mt on Dec. 9, according to Platts data.

India will enforce minimum content legislation in 2025, mandating 30% R-PET content in packaging. However, players continue to favor consumption of cost-competitive virgin material, with profitability remaining their primary concern.

The Asian recycled polymer market, which has historically seen strong exports, will face challenges in diversifying its export base as European regulations tighten in the informal waste sector. This was expected to complicate food-grade certifications and routes for material out of Asia.

### Low-carbon methanol markets gear up for FuelEU Maritime regulation

# Europe's new law could boost demand, but cost still a 'significant hurdle'

Supply and price concerns will dominate the low-carbon methanol market in 2025, particularly in Europe, as the FuelEU Maritime regulation kicks off at the start of the year.

The new rule stipulates the greenhouse gas intensity of fuels used by the shipping sector will have to drop by 2% to 89.34 gCO2e/MJ from 2025 to 2029. The modest requirement, however, will likely fail to encourage the adoption of low-carbon methanol in the short term, with the EU's current bunker fuels mix, namely biofuels and LNG, able to cover 90% of 2025 requirements, according to the Maersk Mc-Kinney Moller Center for Zero Carbon Shipping.

It has become what a source called a "chicken-and-egg dilemma," where a lack of availability, partially due to restricted feedstock supply, keeps prices elevated for low-carbon methanol. This limits consumer interest in signing offtake agreements and, ultimately, hinders producers from scaling up operations.

"The premium for low-carbon methanol options remains a significant hurdle for the market," a trader said, adding eMethanol, in particular, costs around four or five times as much as conventional methanol.

The Platts FOB Rotterdam eMethanol price averaged \$2,168/mt through November in 2024, S&P Global Commodity Insights data showed.

Biofuel and LNG bunkers will be able to cover

90%

of FuelEU Maritime requirements in 2025

The lack of offtake agreements was partly behind Denmark's Orsted scrapping its FlagshipONE 55,000 mt/year eMethanol project in northern Sweden in August.

However, the European Energy-Mitsui eMethanol joint venture in Aabenraa, Denmark, will begin supplying methanol in H1 2025, with the plant's initial capacity at 32,000 mt/year.

"I see a few projects being announced, some even being constructed, but I see just as many projects being cancelled," a methanol distributor said. "There are bio-methanol projects being scrapped in Italy, for example."

It has become what a source called a "chicken-and-egg dilemma," where a lack of availability, partially due to restricted feedstock supply, keeps prices elevated for low-carbon methanol, limiting consumer interest in signing offtake agreements and, ultimately, hindering producers from scaling up operations.

Commodity Insights estimates low-carbon methanol production will reach 1.4 million mt by 2028 and 1.7 million mt by 2030.

#### Brazil: Americas' bunkering potential

The Americas low-carbon methanol marine fuel market will monitor European regulations throughout the first half 2025, particularly those stipulated by FuelEU Maritime surrounding the use of low-carbon bunkers, while also awaiting the International Maritime Organization's decision on the quantum for carbon levies for shipping in April 2025.

"Brazil has potential for methanol bunkering," said a South American producer, citing lower costs and shorter lead times on the Atlantic Coast as factors that make it "an attractive prospect."

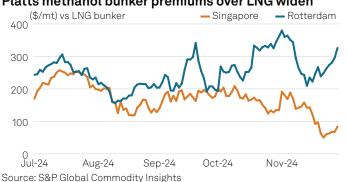
However, sustainable methanol "might not be the solution" for decarbonizing the shipping industry, according to a shipbroker, who said the industry needs further development for the fuel to become a competitively priced alternative.

"There is more interest in doing that with ammonia because ammonia will be widely used by other industries, not only shipping," the source said.

The source added that dual-fueled ships will be important for ease of adoption, and ships capable of running on three fuels would be "rough on capex," but would importantly offer "more flexibility."

The Platts Houston delivered carbon-accounted methanol marine fuel price, launched June 13, averaged \$1,056/mt through November.

#### Platts methanol bunker premiums over LNG widen



#### China trailblazing low-carbon methanol production

China has emerged as a leader in producing low-carbon methanol over Indonesia, India, Australia and the Middle East in the short to medium term.

The Hong Kong and China Gas Company (Towngas), the first Chinese company to receive ISCC EU and ISCC PLUS certifications for green methanol, is expected to reach output of 150,000 mt/year in 2025 at its plant in Ordos, Inner Mongolia.

Hong Kong-headquartered Chimbusco Pan Nation Petrochemical inked an agreement with Towngas in November to distribute low-carbon methanol bunkers to its customers. The memorandum of understanding was signed after Hong Kong announced an action plan to become a green bunkering center with a target to have 7% of its registered ships using green marine fuels by 2030, among other initiatives.

Chinese wind turbine maker Goldwind Green Energy Chemicals has signed a multiyear offtake agreement with Danish container line A.P. Moller-Maersk to supply 500,000 mt/year of bio- and e-methanol from 2026 into the next decade.

In Singapore, the Maritime and Port Authority is expected to release its technical reference for methanol bunkering by Q1 2025 in preparation for the supply of methanol bunkers in the citystate. Singapore has three methanol bunker barges with six more to be delivered from late-2024 into 2025.

Platts, part of S&P Global Commodity Insights, on Nov. 11 launched two Singapore delivered low-carbon methanol marine fuel price assessments. Prices for methanol with a carbon intensity of not more than 32.9 gCO2e/MJ were in a range of \$1,010-\$1,015/mt in November, while methanol bunkers with a carbon intensity of maximum 90 gCO2e/MJ were in a range of \$522-\$523.80/mt.



## Global benzene markets to navigate uncertainty in H1

# US, Europe construction sectors to support benzene demand

The global benzene market is anticipated to face uncertainty from broader macroeconomic factors in 2025; nevertheless, industry participants believe the construction sector in both the US and Europe could provide crucial support in the upcoming year.

"Uncertainty overhangs the benzene market for 2025; with companies closing or reviewing the future of assets, which are producing benzene feedstock, or consuming benzene," said Katherine Elliot, an analyst at S&P Global Commodity Insights. "We anticipate changes in trade flows both within the region and with the global market."

#### Asian benzene remains weak

After an impressive rally in the latter half of 2024 that drove Asian benzene prices to a two-year high, market sources were less optimistic in their outlook for early 2025.

Despite China holding its position as the world's largest benzene importer, sources noted new capacity additions coupled with a slowdown in downstream demand suggests the country's import volumes may be nearing its peak. In addition, ongoing losses and looming uncertainty in downstream operations could further cloud demand forecasts.

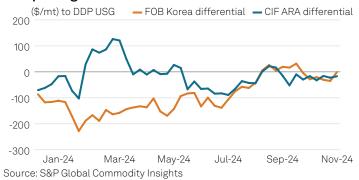


Uncertainty overhangs the benzene market for 2025; with companies closing or reviewing the future of assets, which are producing benzene feedstock, or consuming benzene," said Katherine Elliot, an analyst at S&P Global Commodity Insights. "We anticipate changes in trade flows both within the region and with the global market.

With the Asia arbitrage opportunity to the US likely closed in the first quarter of 2025, market participants said traders are likely to show limited interest in sending cargoes to the US Gulf Coast. Instead, there is a growing trend of moving cargoes from Europe to the US. Some market sources predict that this shift may partly replace the Asia-US flows, although there is hope that these flows could eventually resume as US imports remain cautious through Q4 2024.

On the supply front, weak gasoline markets at the end of 2024 could prompt integrated petrochemical producers to prioritize benzene production over gasoline. Moreover, supply from TDP units in the region could increase as margins improve due to a downturn in toluene markets.

#### Platts Europe becomes competitive with Asia in exporting benzene to US



## US benzene oversupply to persist in H1 2025

While the spot benzene market was in a backwardation structure for much of 2024, many market participants believe that the contango, which began in August, is likely to continue into the new year. The M1-M2 contango widened to 8 cents/gal on Dec. 9, out from a 3 cents/gal contango Oct. 31, according to Platts assessments.

The US benzene M1-M2 contango

widened to

8 cents/gal

on Dec. 9

Benzene inventories also climbed to record highs toward the end of the year, with sources noting that tanks were full in Houston and along the Lower Mississippi River. Domestic supply was expected to remain long as favorable TDP margins are driving production and keeping operating rates high, which are projected to remain strong in early 2025.

In spite of being a net importer of benzene, lackluster downstream demand for styrene and its derivatives has taken a toll in 2024. Producers and distributors of ABS resin, polystyrene, and styrene-butadiene rubbers remain hopeful for renewed buyer interest in the new year.

In the US, market participants are also optimistic about a rebound in new home construction in 2025, spurred by demand for building materials on the back of lower interest and mortgage rates. In the same vein, sources said the health of the automotive industry, which heavily relies on SBR rubbers and ABS plastics, will also be crucial, as these materials are essential for vehicle interiors and tire production.

#### Headwinds in European benzene

The European benzene market is grappling with challenges due to economic factors and Chinese imports.

"Our base case is for the wider European region to be roughly balanced, but an increasing shortage in the Mediterranean may drive increased trade flows within the region," Elliot said, adding the intermittent trans-Atlantic flow of benzene will continue to resolve regional imbalances, particularly during the winter when derivative demand is typically lowest.

Industry participants are increasingly reliant on the US to absorb benzene and stabilize the market. Operating rates in Western Europe remain low, with little expectations for improvement, raising concerns for benzene and its derivatives, which are closely tied to the struggling construction and automotive sectors.

The downstream landscape, particularly for styrenic chains and polymers, is challenging. Adding to the bearishness, a significant influx of Chinese products continues to pressure the European value chain. While many stakeholders are worried about stagnation in the construction industry, some believe that a slight recovery may be on the horizon for 2025.

The automotive sector is also facing headwinds, hindered by economic conditions and low consumer confidence. In contrast, the packaging industry is thriving, bolstered by steady demand driven by food consumption, providing essential support to the market.

# Capacity shifts, soft downstream demand to shape ethylene market in H1

# Global cracker industry faces European shutdowns, China oversupply

General market weakness in the past year is expected to carry through into 2025, as the global cracker industry faces varied challenges across regions.

Europe's producers confront closures, the US prepares for significant maintenance amid rising prices, and Asia grapples with new startups against a backdrop of feedstock volatility; all the while each region faces subdued downstream demand.

## Europe cracker rationalization threatens stability

Production capacity rationalization in response to persistently weak demand and economic pressures over the past few years in Europe could cause a period of instability as producers look to regain profit margins.

"Overall, uncertainty dominates the European olefins market," a producer said. "The industry is operating at full range; similar volumes but poor margins."



Three major producers—ExxonMobil, SABIC, and Versalis—have already announced the closure of European steam crackers. Other companies are also engaged in internal discussions regarding their European assets such as Lyondell Bassell, who has yet to announce results of a strategic review launched in 2024.

As Europe struggles to maintain competitiveness on the global stage with negative ethylene plant margins each month in 2024 except for September, according to S&P Global Commodity Insights, talk among participants is centered on who will shut down operations next.

Weak fundamentals are expected to continue, and ethylene's profitability will remain the primary driver of cracker run rates in Europe. Europe's cracker rates have averaged around 60%-70% through 2024, market sources said, substantially lower than the roughly 87% on the US Gulf Coast, according to Commodity Insights data.

With such tight margins, European producers will continue to maintain operating rates only to meet contracted volumes and avoid supplying material into the spot market.

"Most of the current contracts were discussed two years ago with conditions completely different," a consumer source said. "Demand has totally shifted, these volumes are not realistic anymore ... there has to be a realignment."

#### Global ethylene cracker closures, turnarounds, and startups



	Location	Company	Capacity (mt)
1	Channelview, Texas, US	LyondellBasell	930,000
2	Port Arthur, Texas, US	CP Chem	795,000
3	Lake Charles, Louisiana, US	Westlake	680,000
4	St. Charles, Louisiana, US	Dow	410,000
5	Gonfreville, France	TotalEnergies	525,000
6	Lavera, France	INEOS Naphthachimie	775,000
7	Brindisi, Italy	Versalis	490,000
8	Priolo, Italy	Versalis	450,000
9	Binhai New Area, Tianjin, China	Sinopec and INEOS	1,200,000
10	Longkou, Shandong, China	Yulong	1,500,000
11	Yantai, Shandong, China	Wanhua	1,200,000
12	Huizhou, Guangdong, China	Exxon Huizhou	1,600,000

Source: S&P Global Commodity Insights

(sized by capacity)

#### US market under pressure ahead of turnaround season

US ethylene producers have been stocking up ahead of substantial turnarounds in H1 2025, pushing US spot prices to near three-month highs in December 2024.

Platts assessed the spot Mont Belvieu ethylene price at 27.375 cents/lb FD on Dec. 6, the highest since it was assessed at 28 cents/lb on Sept. 23, Commodity Insights data shows.

"Pipelines and storages are full," a source said.

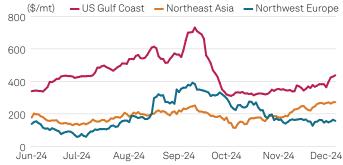
Several US producers, including LyondellBasell, Chevron Phillips and Dow, have announced H1 cracker turnarounds in the Gulf Coast region that would take out about 4 million mt/year of ethylene, or roughly 10% of US output.

The trend of building inventory goes against typical seasonal behavior of a destocking in response to end year-end inventory taxes in Texas.

"It's counter-intuitive, but ultimately it responds to an upcoming high turnaround season," S&P Global analyst Robert Stier said, adding it seems companies are willing to pay the inventory tax to avoid expected supply bottlenecks in 2025.

Uncertainty surrounding physical future supply has spurred an increase in paper trading as participants look to hedge their exposure, with memories of 2024 price volatility still fresh. In 2024, prompted by unexpected shutdowns midyear, physical spot prices in the Mont-Belvieu pipeline system fluctuated in a 20 cents/lb range, reaching a two-year high midsummer before shedding almost a third of that value in September.

#### Platts Asian ethylene margins overtake Europe despite capacity build up



Note: Margins are calculated as ethylene minus its feedstock. Feedstock for Asia and Europe is naphtha, for the US it's ethane. Source: S&P Global Commodity Insights

The average ethylene-naphtha spread has been around

204/mt n 2024

#### Asia continues to add capacity

While Europe eyes permanent shutdowns and the US Gulf prepares for a high turnaround season, Asia awaits new cracker startups, predominantly in China.

These integrated complexes would lead not only to ethylene supply growth, but increased supply of downstream ethylene glycol and polymers.

However, feedstock price volatility and less-than-positive projections for demand recovery in downstream sectors are likely to limit the run rates of steam crackers, several market sources said.

"The spreads between ethylene and naphtha have been dismally low in 2024, and while cracker operators are keen to bring that spread back into positive territory, many are also treading very cautiously to avoid making further losses," a Northeast Asiabased trader said.

The average ethylene-naphtha spread has been around \$204/ mt in 2024, under the typical breakeven spread of \$250/mt for integrated producers, Commodity Insights data shows.

Despite its capacity growth, China will also continue to import ethylene from South Korea to feed its spot market and nonintegrated downstream plants, which will feel little impact from integrated cracker startups.

While Europe eyes permanent shutdowns and the US Gulf prepares for a high turnaround season, Asia awaits new cracker startups, predominantly in China.

# Bearish sentiment clouds chemicals outlook for automotive demand

# Auto industry lightweighting supports increased plastics demand

As the global automotive industry continues to navigate a transformational period in 2025, the impact on chemical demand is becoming increasingly apparent.

A push for vehicle electrification is driving lightweight solutions, which is good news for the plastics industry; however, ongoing high costs, the phaseout of incentives to buy new EVs amid fierce global competition, as well as a global tariff tussle all threaten demand in the sector.

#### Europe's automotive crisis, Asian competition

Car manufacturers in Europe have raised concerns about the financial viability of plants across the region as sales have slumped. According to the European Automobile Manufacturers' Association, new car registrations have dropped in the second half of 2024, with a notable 18.3% year-on-year fall in August.

Strong competition from Chinese EV producers has eaten into the market share of traditional automakers and led to Volkswagen and Stellantis announcing the closure of less viable

factories. These bearish factors have weighed on the chemicals markets in Europe, resulting in softer consumption of plastics such as nylon, ABS, PVC and polypropylene, the most consumed plastic in car manufacturing.

The demand for European original equipment and replacement tires is also at historically lower levels, as cheaper Asian imports continue to flow into Europe. Manufacturer Michelin announced plans to shut down two plants in France by early 2026, citing high costs and competition from Asia as factors for the decision.

Data from the European Tyre and Rubber Manufacturers' Association showed replacement tire sales in Europe, the largest consumption segment for European SBR and PBR, were down 9% in Q3 2024 versus Q3 2021.

"We are compounding for the original equipment tire manufacturers, and in this line of business we are seeing a big decrease in demand," a converter said.

#### European new car registrations slump in H2 2024



#### China EV producers face tariffs

However, it is not all smooth sailing for Asia's automobile-related chemical markets amid uncertainty around China's automobile production and the backdrop of expanding chemical capacities.

China's EV production increased in 2024, hitting a record-high 786,000 units in September, according to the China Association of Automobile Manufacturers. However, market sources said this trend would likely slow in 2025 due to import tariffs in Europe and potentially the US.

The EU announced on Oct. 29 <u>tariffs</u> of 7.8%-35.3% on EVs produced in China, citing subsidies, which were causing injury to the EU industry.

Market sources also said the US will likely add <u>extra duties</u> on Chinese-origin products under the new Trump administration, which would affect China's industrial production further and, consequently, slow demand for chemicals.

There is still some optimism for synthetic rubbers in 2025, especially solution-grade SBR, supported by the EV sector and demand for high-performance tire applications. Synthetic rubber makers could see additional respite on margins, due to capacity expansions for upstream butadiene in the first half of the year.

"Synthetic rubber remains indispensable to automobile tires," said Bernd Helbing, director of C4s and elastomers at S&P Global Commodity Insights. "With stable growth expected in world auto production, the outlook for the synthetic rubber market appears positive, while pricing dynamics will be influenced by factors such as the availability of butadiene."

Sinopec's joint venture with INEOS began operations in mid-November at its cracker in <u>Tianjin</u>, which has a butadiene capacity of 150,000 mt/year. Three more butadiene plants with a combined capacity of 690,000 mt/year are due to start up in China in early 2025, which is expected to ease import demand.

According to Chinese customs data, the country's 2024 butadiene imports from January to October stood at 308,261 mt, down 13% from the same period a year earlier.

With stable growth expected in world auto production, the outlook for the synthetic rubber market appears positive, while pricing dynamics will be influenced by factors such as the availability of butadiene

Bernd Helbing, director of C4s and elastomers at S&P Global Commodity Insights

## Conservative outlook in North America as car production slows

In North America, the share of EVs is expected to grow in 2025; however, overall light vehicle production is projected to decline, resulting in softer demand for chemicals used by the industry.

According to forecasts by S&P Global Mobility, production is expected to fall from 15.5 million in 2024 to 15.3 million in 2025, while anticipated tariffs on the import of cars from Mexico and Canada to the US, as well as the removal of tax incentives on electric cars, could further harm production.

A drop in automobile production will impact US demand for synthetic rubbers as OEM tires manufactured in North America are sold for fitment to new cars, while cash-strapped consumers looking to replace worn tires on used vehicles increasingly turn to cheaper imported tires from Asia.

Projected demand for polymers like ABS, used to make both internal and external automotive components, may therefore be insufficient to restore ABS prices, which came down over the final three months of 2024, from a high of 97 cents/lb on Sept. 11 to 73 cents/lb on Dec. 11, according to Platts assessments from S&P Global Commodity Insights.

Noth American ABS production is expected

to fall from

15.5 million

in 2024 to 15.3 million in 2025

# Latin American petrochemical importers expect lower US volumes

#### US tariff plan, dollar strength to pressure Latin America's import prices into 2025

Latin American petrochemical importers are keeping an eye on US President-elect Donald Trump's tariff plans, but participants already expect more pressure on commodity import prices in 2025 due to the appreciation of the dollar against regional currencies.

The new year is also expected to bring intensified trade relations with China as Latin American governments look at tariffs of their own amid increasing trade competition.

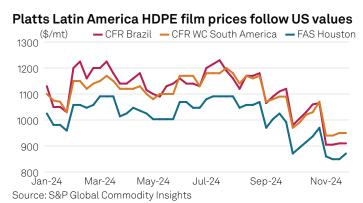
Following Trump's election win, the US dollar rose against other currencies due to expectations of tariffs and other measures to stimulate the country's economy. In addition to tariffs, uncertainties over interest rate cuts by the Federal Reserve in 2025 could further strengthen the dollar and make imports more expensive.

"Everyone knows that a higher exchange rate inhibits imports," André Passos, president of Abiquim, the Brazilian Chemical Industry Association, said in an interview with S&P Global Commodity Insights.

"This would further pressure the unfortunate reality of the Brazilian chemical industry," he said, noting a dependence on imported raw materials. "We do not set prices in Brazil; we take international prices. We are price takers, not price makers."

The US was the main supplier of polyethylene to Brazil throughout 2024, providing about 72% of the country's inflows

from January to November, according to data from Brazil's Ministry of Development and Trade. US import volumes represented 67% on the same period in 2023.



We do not set prices in Brazil; we take international prices. We are price takers, not price makers

André Passos, president of Brazil's chemical industry group, Abiquim.

**US** supplied

72%

of Brazil's polyethylene from Jan-Nov 2024

In the Mexican recycled PET market, the strengthening of the dollar has already benefited trade flows for certain commodities being exported to the US.

"With the dollar uptick and higher recycled PET flake prices, it is now feasible for us to export into the US," a Mexico based seller said.

The expectation of a stronger domestic market in the US brings another expectation for Latin America.

"A heated economy pulls internal market prices. Is it worth exporting?" a Brazilian polyethylene trader said. "We may see a decrease in volumes to Latin America," he said, considering higher domestic consumption in US local markets.

A local PVC trader said, "the one who loses is the Brazilian importer, who will not have US supply at such low prices."

West Coast South America (WCSA) PVC prices fell over 21% from \$930/mt CFR WCSA on July 3 to \$730/mt on Nov. 20 shadowing FAS Houston prices, which also showed 22% volatility over the same period. Brazil, on the other hand, suffered less volatility in prices during the year, with the highest point at \$940/mt and lowest at \$820/mt, following Asian markets movements. Trends for 2025 are expected to continue with WCSA markets following the US and Brazil taking price direction from China and Southeast Asia markets.



## Competition between US and China

The relationship between the US and China is also expected to have an impact in 2025. Implementation of US tariffs on Chinesemade products could force China to seek out other import markets like South America.

"Certainly, what we will see is a difficulty for Chinese products to penetrate the US market," said Passos. "If this happens, it is likely that we will see increased demand for Chinese products in the Brazilian market."

As a result, "the Americans, to compete with the Chinese product, drives prices lower to penetrate markets like Brazil," said Passos, noting it would effectively create a price war in Brazil.

Some participants expect to see more competitive offers from China during the first half of 2025, while others said higher fright rates, longer delivery times and a more limited range of available products would keep China from gaining market share in Latin America.

#### Influence on other countries

Trump has said on a social media he would impose a 25% tariff to all products coming from Canada and Mexico to the US, and an extra 10% on Chinese goods. How those tariffs would impact markets has created much uncertainty in the region and could bring a backlash.

Higher interest rates in the US, combined with elevated import tariffs, could lead to a global response against the Trump Administration.

"The US under Trump would want to push both Canada and Mexico to the same level of elevated import tariffs," said Satyam Panday, chief economist at S&P Global Ratings. "If we also consider a scenario of lower growth and higher inflation in the US, the Federal Reserve and the rest of the world have to respond."

In Brazil there are already discussions to raise the antidumping tariff against US PVC, currently at 8.2%. In addition, on Nov. 14, the Brazilian government initiated a dumping investigation against the US and Canada on polyethylene imports. Several market sources believe antidumping duties against US and Canada PE imports is now certain, just a matter of when and how much the duties will be.

### Modest recovery in US chemical volumes expected in 2025

#### Demand projected to increase following two years of decline

US chemical makers face a mix of market and geopolitical challenges and opportunities heading into the New Year with demand forecast to recover in 2025.

The American Chemistry Council (ACC) anticipates slight improvement in US chemical volumes in 2025, projecting a gain of 1.9% in its "Year-End Situation & Outlook" report released Dec. 12. Growth will be supported by a slow recovery across various enduse segments both domestically and internationally, said Martha Moore, ACC chief economist.

#### Tracking US chemicals demand recovery (% Y/Y change in volume)

	_		-	
	2023	2024*	2025*	
Total Chemicals (ex. pharma)	-0.2	-0.4	1.9	
Agricultural chemicals	0.6	1.2	1.3	
Fertilizers	-0.2	-0.4	1.0	
Crop protection	2.1	2.2	1.5	
Consumer products	4.3	5.0	1.1	
Basic chemicals	0.5	-1.5	2.4	
Inorganics	4.8	-0.2	1.2	
Bulk petrochemicals & organics	-1.2	-3.9	3.6	
Plastic resins	2.5	2.3	1.2	
Synthetic rubber	-12.8	-3.0	0.3	
Manufactured fibers	-12.4	-4.2	0.3	
Specialties	-7.0	-3.2	1.5	
Coatings	-7.5	-3.3	1.9	
Other specialties	-6.7	-3.2	1.3	

<sup>\*</sup>estimated

Source: American Chemistry Council

#### Global chemical demand expansion continues (% Y/Y change in volume)

	2023	2024*	2025*
Region	2023	2024*	2025*
North America	-0.5	0.2	2.0
Latin America	-0.5	-0.8	1.0
Europe	-8.1	1.9	1.4
Former Soviet Union	5.3	3.4	2.8
Africa & Middle East	3.6	2.4	4.2
Asia/Pacific	4.3	4.8	3.7
Total world	1.0	3.5	3.1

\*estimated

Source: American Chemistry Council

A gain would follow two years of declines in US chemical volumes due to persistent manufacturing and industrial weakness. "We expect to see a rising industrial tide, including construction improving," Moore said. "More than 80% of basic and specialty chemicals are consumed by the industrial sector, and industrial production stalled in 2024 following essentially stagnant growth in 2023."

Demand in the US and abroad was hampered by strikes, supply chain disruptions and several hurricanes. "We see another decline in basic and specialty chemical volumes in 2024 before a modest recovery in 2025," she added.

Globally, chemical production growth should continue into 2025, with worldwide volumes expected to rise by 3.1% after growth of 3.5% in 2024. The largest increases are projected in the Asia-Pacific region, the former Soviet Union economies, Africa and the Middle East.

The outlook across key US chemical end markets is improving; ACC expects 16 of the 20 key sectors it tracks to expand in 2025. This marks improvement from 2024, which saw 12 of the 20 sectors expanding, and 2023, when only eight sectors grew. End markets linked to electronics, including semiconductors, computers and electrical equipment, performed well, while those associated with housing and broader construction continue to face challenges.

Chemicals should be on the front edge of industrial recovery, Moore said. "Because of its position in the supply chain, we expect chemical demand to pick up before the broader industrial sector," Moore said.

Recovery in the automotive and housing sectors remains critical to demand improvement and the outlook is positive for both sectors. The average automobile built in North America contains over \$4,400 worth of chemical products, including 426 pounds of lightweight and durable plastics and composites. US light vehicle sales are expected to rise 3.2% in 2025, to 16.2 million, according to the ACC.

Housing starts fell to 1.35 million in 2024 but are expected to rebound slightly to 1.40 million in 2025 as interest rates ease. Roughly, 33,000 pounds of chemical products are in the average single-family home built in the U.S.

"In 2025, we anticipate gains across all segments, in line with a modest recovery in construction and manufacturing," Moore said.

In 2025, we anticipate gains across all segments, in line with a modest recovery in construction and manufacturing 📮

> Martha Moore, American Chemistry Council chief economist.

US housing starts expected to rebound slightly to

single-family home

in 2025 and roughly 33,000 pounds of chemical products are in the average US

Chemical makers also face trade uncertainty in the year ahead. The potential for new tariffs under the incoming Trump Administration poses risks with industry exposed on both the export and import fronts. "If tariffs are raised to the levels that have been talked about, that would be very troubling to the US economy and to chemical demand," Moore said. Recovery in US chemical exports in expected in 2025 as global demand for goods slowly improves. The ACC forecasts 2025 US chemical exports at \$175.4 billion, a year-on-year increase of 4.8%. Some 28% of US chemical output is exported, according to the ACC.

The longer-term outlook for US chemistry remains positive, with the ethane feedstock advantage continuing to favor US production. Shale-advantaged investment continues in the US, with electronics, specialty and low-carbon projects also drawing investment. ACC expects chemical capital expenditures to grow 3.2% in 2025, with 25% of capital budgets tied to sustainability.

© S&P Global Inc. All rights reserved. 2025

## **S&P Global**Commodity Insights

### Conclusion

The global chemicals market in the first half of 2025 faces a range of challenges driven by geopolitical, economic, and sector-specific factors. US-China trade relations will continue to impact the global fiber market, with growth expected in Asia. Macroeconomic uncertainties, particularly in Europe, may affect PVC and EPS demand, while China's stimulus measures and US interest rates could support construction activity.

The growing focus on sustainability and the circular economy will boost demand for recycled polymers, though regulatory hurdles for Asian players may present challenges. Low-carbon methanol markets are preparing for the FuelEU Maritime regulation, but low supply and high prices are key obstacles, as China takes the lead in production.

In the benzene market, demand in Asia may improve, but Europe will depend on the US to absorb excess supplies. The ethylene market faces soft downstream demand, with concerns over European production margins and feedstock price volatility in Asia.

Sector-specific struggles include weak automotive chemicals demand in Europe and Latin American petrochemical challenges due to the strong US dollar. Overall, the first half of 2025 will be marked by uncertainties across multiple markets due to shifting trade dynamics, economic conditions, and regulatory changes.

