KPMG Insights from the World Petrochemical Conference 2025

Houston

Chemicals, materials and ag: resilience in the face of uncertainty

This year's World Petrochemical Conference (WPC) in Houston underscored an industry facing much uncertainty with CEOs in a cautious mood. At the WPC in 2024, they predicted a rough year ahead, and they were right. 2025 is already proving to be a bumpier ride than anyone expected, with many questioning whether 2025 will be the trough with a glimmer of recovery in 2026, or the beginning of a decline that carries us through the end of next year.

But there is broad consensus that the chemicals industry is resilient. It has survived uncertain times before. And through exercising agility will do so again. Europe, however, faces existential challenges.

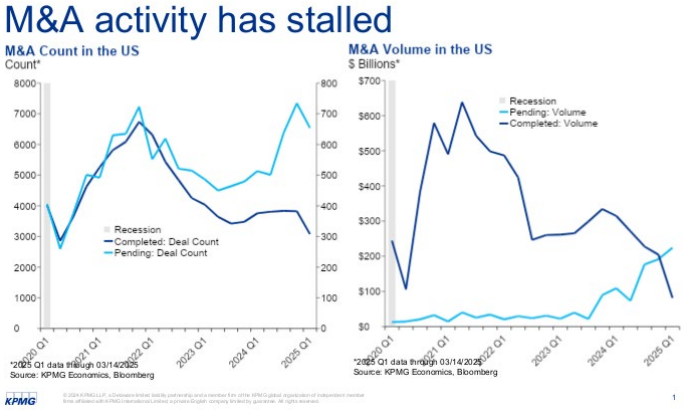
1. Galloping uncertainty

The current macroeconomic and geopolitical climate is expected to prompt a slowdown in economic growth, and delays in investment and merger and acquisition (M&A) activity. We have been here before, so what's different this time?

It's the combination of inter-related factors, the sheer scale of developments – and the uncertainty surrounding all these. Changing economic policy, international conflicts, stubborn inflation and relatively high interest rates, jittery financial markets, feedstock issues, and immigration controls are to the fore.

The tariffs announced by the White House have been answered with retaliatory tariffs by some U.S. trading partners. The pause in tariff enforcement prolongs the uncertainty of the final level of tariffs. The future of the global trading order is at its most unpredictable point in decades. There are about 300 different chemicals that will be subject to increased tariffs. Many delegates said it was hard to plan when you didn't know what you're planning for.

On the other hand, with relatively suppressed oil prices, feedstock may become cheaper.



© 2025 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. USCS028625

Workforce

There are several workforce issues that need to be addressed. In the U.S., for the near term, the need for workers to build and operate chemical plants is being affected by new, stricter immigration controls. In the long term, the industry needs to look at how to attract top white-collar talent in a competitive, dynamic labor market. For example, advocating and extolling the direct impact a young person's career in chemicals can have on the whole of life – around the world. Related to this last point, visa issuance for students studying engineering and data science should be reassessed in a positive light.

2. Supply chain disruption

While most delegates were "tired" of the tariff conversation, they acknowledge their companies are having to revisit their logistics and supply chain frameworks, partnerships, timelines, and risk profile. One consensus is that while these disruptions have a broad impact across the industry, few, if any, of the players in the supply chain (manufacturers, distributors, operators, traders) can fully absorb the cost increases. They will most likely be passed down, at least in part, to end consumers.

3. Energy security and feedstock

While most chemical industry executives were excited about including low-carbon petrochemical feedstocks in their portfolio – as a positive development on the road to carbon net zero – adoption is fraught with hurdles.

The sector's energy hierarchy of needs goes: security, affordability, reliability, and lastly sustainability, although low carbon was a topic of discussion. Over the course of history, energy transition has occurred when a new energy source is brought to market that is lower in cost and and/or has higher functionality. The current sustainability drive is introducing fossil-fuel alternatives, although there are higher cost considerations. But there are question marks over the availability of renewables like nuclear (as well as wind and solar), and the scalability and price efficacy of sources like plastic waste, chemical conversions or biofuels (for example, polyethylene from sugar cane) – all resulting in slow, broad scale adoption.

For many global south countries, there is a transition from firewood to natural gas. China and India are adopting coal as the key fuel source for energy demand as well as adopting alternative, sustainable sources. But coal remains the principal source in both countries[iii].

Companies present in North America and the Middle East have access to low-cost feedstocks and are better positioned than those skewed to Europe where energy and utility costs are exorbitant.

Europe

Accounting for 13% of the world's chemicals output, Europe is the second largest producing region. But it is the loser in the whole global dynamics[iii]. Higher energy and utility costs – particularly since reliance on cheap Russian gas is less viable – as well as high carbon taxes, ageing plants and a weakening home market are a threat to the continuation of chemical manufacturing in the region. The result is retrenchment by global petrochemical companies from inside and outside Europe. As many as 30 plants are being permanently closed or mothballed across the spectrum of raw materials and finished products (ICIS, Natural Earth).

Jim Ratcliffe, chairman and CEO of INEOS, talks of the sector becoming extinct, pointing to factors that are leading to de-industrialization. At the firm's plan in Germany, 'the gas bill is €100m higher than its U.S. equivalent'; electricity is €40m higher, and the carbon tax bill is rising towards a shocking €100m'.[iv]

Similarly, Peter Huntsman, chairman, president and CEO of Huntsman Corporation, advocates for Europe to address its energy and utility costs (300-600% higher than in the U.S.), through allowing more fracking, additional nuclear power in Germany, and less regulation. [v]

The European chemical industry association, CEFIC, is urging European Union leaders to take action to increase the sector's competitiveness before it risks 'losing an entire industrial base'. [vi].

© 2025 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. USCS028625

4. Resilience and agility

Despite huge uncertainty, there are opportunities to continue to build resilience and revisit supply chain frameworks. As senior delegates were fond of saying, “this is not our first rodeo in Houston”. Chemical companies have faced many downturns before, and survived periods of volatility and uncertainty. Oil price hikes, pandemics, geopolitical tensions, supply chain dislocation, U.S. trade and public policy, recession, and financial crises, to name a few.

What is needed now is the required adaptability to respond, particularly with an agile supply chain, almost in real time.

The current landscape may not seem conducive to taking investment decisions. The petrochemicals timeline is lengthy: a typical 30 year lifecycle for a new asset costs hundreds of millions of dollars. Companies must take the long-term view and make wise investment decisions at the peak so that they are better positioned in the troughs. We have seen this currently with companies that have manufacturing assets in North America and the Middle East. They are in a privileged place because they can take advantage of low-cost feedstock. There are already a few large-scale polymer plant investments taking place in the U.S. and the Middle East.

GenAI

Generative artificial intelligence (GenAI) is already being deployed in selected use cases in the chemicals sector: in manufacturing such as predictive maintenance, as well as other operational areas: finance, transformation, supply chain, and front and back office.

There was considerable discussion on these topics, though little on governance and trust. Companies need to ask themselves, “How much trust does our organization have in its use of AI?” This has a direct influence on the value it generates from AI.

It is critical for companies to have strong governance, frameworks, and controls to drive trust and responsibility across functions and businesses. A strong framework ensures a client’s own AI solutions are aligned with their values, standards, and regulations, and they respect the rights and interests of all stakeholders. Data is front and center in any AI solution, though it must be secure and not subject to cyber-attack.

Successful implementation of GenAI requires an approach to designing, building, and deploying systems in a secure, trustworthy, and ethical manner. To do so, companies must develop an operating model and governance structure to establish accountability and ensure transparency and fairness for strategic decisions.

5. Recommendations

Our advice to companies in the sector is to:

- Continue to lobby governments and trade bodies around the world on issues such as tariffs, immigration, and in Europe: energy and utility supply, as well as carbon taxes
- Adopt GenAI technology as much as possible while keeping a close eye on accountability, transparency and trust
- Adopt scenario planning to stay agile and adapt to rapidly evolving external factors. Remember, while we may be in a long through, the hallmark of the chemical industry is resiliency.

How KPMG can help

- KPMG serves clients across the global chemicals, materials and ag inputs industries, helping with strategy implementation, M&A planning and execution, performance improvement and application of GenAI

© 2025 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. USCS028625

[i] Source: International Renewable Energy Agency report, *China's route to carbon neutrality: Perspectives and the role of renewables* (2022)
[ii] Source: Ministry of Coal, Government of India website (accessed April 3, 2025)
[iii] Source: Cefic, the European Chemical Industry Council, website (accessed April 3, 2025)
[iv] Source: Ineos website: Open letter to all European Politicians from Sir Jim Ratcliffe Chairman and CEO of INEOS (February 26, 2025)
[v] Source: Wall Street Journal (New York) Opinion section, Davos Devotees Deindustrialize Europe, Peter Huntsman (January 12, 2024)
[vi] Source: Cefic, the European Chemical Industry Council website: Europe's Industry Up Against the Wall: Cefic President Urges EU Leaders to Act on 10-Point Rescue Plan for Chemicals (accessed April 3, 2025)

Contact us

Gillian Morris
Principal, Deal Advisory & Strategy
Energy, Natural Resources, and Chemicals

Alessandra Domingos Vieira
Managing Director,
Advisory, Strategy

Benjamin Shoesmith
Senior Economist,
KPMG Economics

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

Learn about us: **kpmg.com**

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation.

© 2025 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. USCS028625

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.