EXPERT PAPER

CHALLENGES IN CHEMICAL LOGISTICS (2026)

CREATING RESILIENCE IN THE 'NEW NORMAL'



This paper summarizes the findings, insights and opinions expressed by European experts and industry leaders during the 6th edition of the event “Challenges in chemical logistics” hosted by H.Essers in Bergen Op Zoom (Netherlands) on 9 June 2026.

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The author would like to extend his special thanks to Peter Crispeels, Partner at McKinsey, for his outstanding analysis of the European chemical industry and its supply chains, which provided important input for this expert paper.

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INTRODUCTION

Two years ago, the event ‘Challenges in chemical logistics’ hosted by H.Essers concluded that the European chemical industry had entered a fundamental shift, requiring it to transform both what it produces and how it produces it in order to restore its global competitiveness. It also highlighted that the Green Deal presents big opportunities for the transformation of Europe’s chemical industry.

Two years later, we can only observe that it didn’t deliver the expected impetus to restore European competitiveness, as other players (China essentially) and unexpected events (the multiple disruptions) reshaped the competitive landscape. The market conditions have been profoundly altered.

This Expert Paper aims to provide a constructive framework by outlining how the chemical logistics sector can manage supply chains in the new normal. It describes how structural shifts are reshaping chemical supply chains across Europe and what the implications are for the logistics industry. Today’s challenges demand resilience and agility. This paper goes beyond the buzzwords by offering actionable recommendations and a clear understanding of what resilience looks like in practice. It sketches the opportunities they offer to the industry, mainly through a deeper partnership between Europe’s chemical industry and logistics sector in order to achieve more resilient and more agile supply chains.

EXECUTIVE SUMMARY

Closures and capacity reductions led to a steep reduction in European chemical production. China increased its market share at a rapid pace, reinforcing its role as a major, if not dominant player. As a result, Europe increasingly becomes an importing continent of chemicals.

Europe's bright spot is its strength in specialty chemicals and downstream value. Companies in these sectors are well placed for success and will thrive. The main challenges are in base chemicals and commodities.

Disruptions fuelled by geopolitical decisions propelled the energy costs even higher for European companies, accelerating the loss in competitiveness of our chemical industry. On top of that, we can only observe that disruptions and market volatility are 'the new normal'.

This new environment has profound implications for the European chemical logistics. The increased imports reshape the supply chains; volatility in demand puts the transport capacity under pressure, certainly with the stringent driver shortage; more consolidation can be expected, as scale and specialization are key to win in this new market; thus, chemical logistics is no longer a generalist game.

Disruptions - mainly the geopolitical ones - have become the 'new normal'. Over 85% of them the past 15 years occurred in the last 5 years. Disruptions have a direct effect on costs and inflation; and - as the imports grow - they impact the supply chains even more, especially in ports. Disruptions made Europe's vulnerabilities and dependencies highly visible.

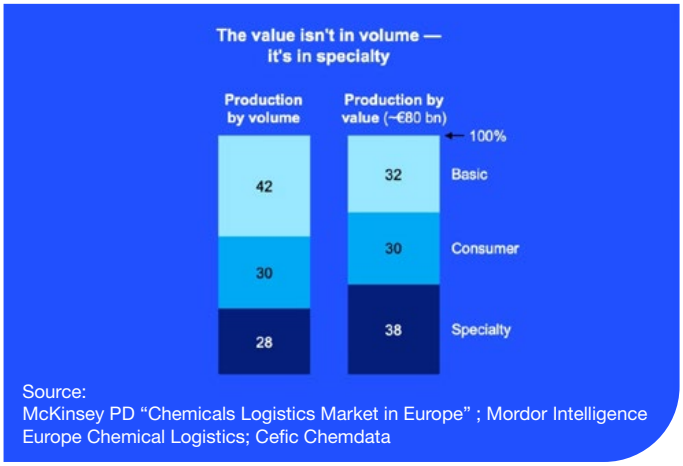
So, the market challenges are unseen. Yet, this Expert Paper aims to be a positive guideline by outlining how the chemical logistics sector can manage supply chains in the new normal. Addressing these structural trends requires a shift from efficiency to resilience. As a result, supply chain risk management and adaptability will play a crucial role. Resilient logistics operations and networks open opportunities for European chemical companies. Moreover, their competitiveness can be improved.

In this context, collaboration within an ecosystem including the customers, vendors and logistics operators is key. In the past, the calls to increase partnerships too often remained unheeded. The current environment makes real partnerships not just desirable, but necessary.



THE CHEMICAL INDUSTRY IN EUROPE UNDERGOES A COMPLETE RESET

The chemical industry in Europe is an ecosystem representing a value of €110 billion, 65% of which is located in seven countries. The biggest concentration is in Germany (€15 bln euros), the Benelux (€13,7 bln) and France (€8 bln). One quarter of all chemical logistics flows in Europe pass through the small triangle Antwerp/Rotterdam/Ruhr.



The value of chemicals in Europe is mainly determined by specialty, not volumes. Basic chemicals represent 42% of the volumes but only 32% of the value, whereas specialty chemicals represent 28% of the production and 38% of the value.

The European chemical industry has been transitioning for many years. The idea that this transformation is a cycle was shattered by recent shocks, making it clear that a complete reset will happen in the coming years.

THREE MAIN SHOCKS

1

closures and **capacity reductions** led to a 2,4% reduction of the European chemical production in the last 12 months. Since corona, the production dwindled by 9%, equivalent to a staggering 37 million tons (of which 17 Mt last year alone). On top of that, capacity utilization decreased from 90% to about 70%. There is a structural decline in capacity related to petrochemicals, polymers and organic chemicals. The only exception is specialty chemicals (due mainly to the rise of demand in batteries). Profitability also decreased the last 15 years, from 13% on average (outpacing the market ROIC) to 8%.

2

these evolutions led to a **decrease in investments in Europe**, while they increased in other parts of the world. The acceleration of closures and collapsing in investments led to the loss of 37 million tons of capacity: 9% of the European capacity has been wiped out..

3

Energy cost has emerged as the most important disruptive factor, leading to these two shocks mentioned above. Europe has a structural disadvantage on energy costs, as it doesn't have the feedstocks: we have to import our energy. This disadvantage is structural and dents our competitiveness.

A SHIFT IN THE WORLDWIDE CHEMICAL PRODUCTION

As a result, we observe a shift in the worldwide chemical production. Europe's share in production capacity decreased from 21% a decade ago to 13%, while China's share grew from 35% to 46%. North America's roughly remained stable at 17%. This means that China evolved to Europe's numberone source of imports, totalling €17 bln per year in value. This is phenomenal, keeping in mind the total European market has a value of €110 bln. In the past 20 years, Europe's reliance on China exploded by a factor 4.7x.

China's position will strengthen as the government favors a repositioning from volume to value; from bulk chemicals to advanced material; from cost competition to innovation and technology. China implements this new strategy at a fast pace, while keeping 'green' aspects in mind.

EU COMPETITIVENESS REMAINS UNDER PRESSURE

By contrast, EU competitiveness remains under pressure, not only due to high energy costs and declining demand, but also regulatory complexity and inflexible policy. The focus on legislation and on the Green Deal objectives, although a 'must', act as a handicap. The European Commission should urgently turn the Clean Industrial Deal into concrete outcomes, as it is a way to help the industry achieve the Green Deal's net-zero objectives while remaining competitive.

SPECIALTIES ARE THE BRIGHT SPOT

As commodity chemicals are increasingly imported, European production will continue to shift towards specialty chemicals, which are less energy-intensive and compete on innovation and performance rather than price. Their share of European chemical production and value is therefore expected to grow. However, growth will vary across segments, with strong demand expected in areas such as pharmaceuticals, healthcare, food ingredients, and nutrition, provided companies continue to invest in innovation.

> IN THE NEXT FOUR TO FIVE YEARS CHEMICAL INDUSTRY AND LOGISTICS WILL DRAMATICALLY CHANGE. TODAY, WE LAY THE FOUNDATIONS OF WHAT WILL BECOME REALITY IN 2030. ACTING NOW IS THE WAY TO GO FORWARD AND WIN.
>
> - **Peter Crispeels**, McKinsey

IMPLICATIONS FOR THE EUROPEAN CHEMICAL LOGISTICS

1 MORE IMPORTS

Europe is increasingly becoming an import continent. This changes nearly everything about the flows. The logistics flows from ‘plant to plant’, ‘plant to warehouse’ and ‘plant to port’ decreased strongly while the ‘port to plant’ and ‘port to warehouse’ flows increased.

As production shifts to China, India, or the Middle East, international manufacturers sell their products in Europe without producing locally. The point of control shifts from manufacturing to supply chain.

2 MORE SPECIALTIES

Specialty chemicals logistics are likely to be in a stronger position. While commodity chemicals are increasingly exposed to global competition, specialty chemicals remain more closely linked to customer-specific requirements, technical expertise, and value-added services. This creates opportunities for late product differentiation, where final customisation steps such as blending, formulation, packaging, and labelling are performed closer to the customer. For logistics providers, this means a shift from traditional transport and storage towards more integrated roles.

3 LESS GENERALIST PLAYERS

The new market conditions make that the chemical logistics is no longer a generalist game. Specialization will be key to capture the flows of specialist chemicals. Other factors in this evolution are complex regulations (obtaining permits requires more expertise) and the need to invest in ADR-certified fleets and people, Seveso-infrastructure and corridor access.

4 MORE CONSOLIDATION

This can be expected, as scale and specialization are key to win in this new market. The chemical-3PL space will probably split between 5 to 10 global champions and a handful of regional specialists.

5 MORE EXTERNALISATION

New partnership models will arise, whereby chemical companies dedicate their investments to their own core business and 3PL-actors invest in transport and logistics assets for them. This will be especially the case in specialist chemicals.

6 DISRUPTIONS IN SUPPLY CHAINS ARE THE NEW NORMAL

The list of geopolitical disruptions is longer by the day. Over 85% of the disruptions the past 15 years occurred in the last 5 years. These disruptions have a tremendous impact on the supply chains and show us Europe’s vulnerabilities and dependencies. Disruptions also have an indirect impact on costs by fuelling inflation.

7 MORE UNPREDICTABLE MARITIME FLOWS

For decades, maritime flows were rather predictable. One of the reasons is that, in Europe, they were mainly export-oriented. Import flows are less stable as they depend on the efficiency of the upstream supply chains.

8 DELAYS CASCADE

Today, only 50% of the container vessels arrive on time. The average delay is 1.5 day. As the call sizes keep on increasing, the impact on thousands of trucks and dozens of barges is enormous. When anything goes wrong in the import supply chain, problems cascade: infrastructure comes under pressure, leading to losses in capacity; the coordination of downstream flows becomes chaotic (certainly in multimodal flows), and so on. Because everything is linked, even small misalignments multiply across the system.

9 MORE SYNCHRONIZATION IS NEEDED

The problem in ports is not space or capacity, but the synchronization between players. Indeed, the cascade effect worsens as the data across the players is fragmented, leading to limited visibility across the chain. Ports therefore will have a growing role as system integrators, organizing the coordination of physical and data flows between actors.

INSUFFICIENT POLITICAL SENSE OF URGENCY

On the political side, there is still insufficient sense of urgency to restore the competitiveness of the European chemical industry. European policymakers need to accelerate regulatory simplification and the implementation of key industrial initiatives. For example, while the chemical industry is calling for the Clean Industrial Deal to be already operational in 2026, the European Parliament is still debating the proposal.

Transport policy also remains largely absent from the European competitiveness agenda, despite its critical role in supporting industrial value chains. This creates a hidden structural competitive disadvantage for the chemical sector. The EU should take decisive action to remove counterproductive legislation and establish a regulatory framework that enables more efficient, resilient, and sustainable transport systems.

> THE VALUE TODAY IS NOT CREATED JUST BY HANDLING THE VOLUMES, BUT BY HANDLING THE COMPLEXITY AND THE DISRUPTIONS WE EXPERIENCE EVERY DAY.
>
> - **Hanna Stelzel**, Port of Rotterdam



A SHIFT FROM EFFICIENCY TO RESILIENCE

European chemical supply chains are challenged by a decrease in local production, an increase in imports and disruptions that are here to stay. Addressing these structural trends requires a shift from efficiency to resilience.

RESILIENCE BY DESIGN

For years, chemical supply chains were designed for scale, centralization and cost efficiencies. This translated into large chemical clusters and hubs. Today, the environment requires a different logic: resilience by design, whilst being selective in the degree of resilience for economic reasons. For low risk and low critical products and flows, the focus will remain on cost and efficiency. But the higher the risks and the criticality, the more resilience really matters. Resilience, indeed, is primarily protecting the right flows.

Today already, chemical producers in Europe reshape their supply chains - often in collaboration with their logistics partners - to increase their resiliency. It is expected that this trend will accelerate in the short and medium term.

DECENTRALIZED NETWORKS AND FLOWS

Building resilient supply chains requires more focus on risk management, scenario planning, operational visibility and, most of all, redesigning flows and networks. Design, indeed, facilitates and accelerates decisions and increases the efficiency of daily execution.

For pure efficiency reasons, clusters and flows tended to be centralized. In the new resilient design, networks are being adapted to reduce the dependence on single hubs or single ports of entry. This creates more distributed and decentralized flows, increases routing flexibility and avoids critical single points of failure.

SCENARIO PLANNING AND INCREASED VISIBILITY

A second important aspect of resiliency is scenario planning: by identifying critical nodes and lanes, and by monitoring disruption signals, companies are able to elaborate response playbooks and define triggers to clear actions.

A third aspect is operational visibility by focusing on the reliability of the predictions and on critical data. These include data on inventories at key nodes, capacity availability and shipment executions. This operational visibility enables faster decisions and communications.

A KEY COMPETITIVE ADVANTAGE

As the chemical industry moves towards higher-value products and late product differentiation, resilience becomes a key competitive advantage. By postponing final customisation until products are closer to the customer, companies can respond more quickly to changing demand and supply disruptions while reducing inventory risks.

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COMPANIES NEED TO WORK MORE ON SUPPLY RISK MANAGEMENT: DIVERSIFY, BUILD BUFFER CAPACITY AND EXPLORE ALTERNATIVE TRANSPORT ROUTES.

- **Marleen Pauwels**, CEFIC

RESILIENCE IS NO LONGER JUST A CONTINGENCY PLAN, BUT A DESIGN PRINCIPLE FOR THE CHEMICAL SUPPLY CHAIN IN EUROPE.

- **Lucas Senis**, DOW

PARTNERSHIPS BECOME VITAL FOR THE CHEMICAL INDUSTRY

In this challenging environment, logistics is more critical than ever for European chemical companies in order to increase their competitiveness and to put those new, resilient supply chains in place.

MORE COLLABORATIVE EFFORTS WILL BE NEEDED

Companies can't set up new, efficient and resilient supply chains all by themselves. They need partners to collaborate within an ecosystem including the customers, vendors and logistics operators. Indeed: the more structural the problems become, the more collaborative efforts will be needed to reshape the supply chains, certainly as they transition to a more distributed model. Collaboration on data and cybersecurity also becomes crucial.

AN OPPORTUNITY FOR REAL PARTNERSHIPS

In the past, the need for stronger partnerships across the supply chain has repeatedly been highlighted, but these calls have too often remained unheeded. The current environment provides an opportunity to move beyond intentions and genuinely put these partnerships into place.

As disruptions become the new normal, partnerships are essential to create visibility in the whole supply chain and to manage reliable contingency plans.

Chemical companies therefore need to take a strategic approach and foster partnerships, especially when it comes to resilient supply chains, planning and inventory management.

COLLABORATIVE PLANNING

One of the main areas for the new partnerships lies in the implementation of integrated planning systems to connect chemical companies, customers, and logistics service providers, enhancing transport capacity utilization and reliability.

Another field is resilience. Companies need to partner with experienced logistics providers to develop resilient strategies using scenario planning and collaborative demand planning. This creates opportunities for logistics providers to offer value-added services and become integral partners in building more flexible and resilient supply chains.

EXPERTISE SHARING

Expertise will play a bigger role. Companies need to establish industry-specific expertise to monitor regulatory changes and align compliance frameworks across operations. This is only possible with the collaboration of the logistics operators.

It is often argued that SMEs have no viable future in the "new normal." In reality, the winners will be, regardless of their size, the most agile companies -those with a clear strategy, a thorough in-house expertise and the organisational capabilities to execute it.

Even in this more collaborative environment, SMEs have every opportunity to claim their role in the value chain.

THE PORTS AS SYSTEM INTEGRATORS

In linear or even in distributed supply chains, partnerships can be established if the will of all the partners is present. But as import flows grow, the importance of ports as physical and digital hubs will increase. These are environments where players are so numerous, that collaboration is difficult to set up. Hence the ports will have a role as system integrators, in order to create mutual understanding and collaboration; and to make flows visible.



> IN ALL THIS CRISIS MODE THAT WE ARE CURRENTLY EXPERIENCING, THERE IS ALSO AN OPPORTUNITY… IF WE GET IT RIGHT.
>
> - **Dorothée Arns**, FECC

CONCLUSION

The European chemical industry and its supply chains are under pressure from declining production driven by plant closures and limited investment in new capacity, rising imports, and recurring disruptions that have become the ‘new normal’.

These trends are not cyclical but structural, requiring companies to rethink how they balance efficiency and resilience. The challenge is further compounded by uneven impacts across the industry: while basic chemicals face continued volatility and pressure, specialty chemicals are generally better positioned for growth.

Regardless of segment however, only the most resilient and adaptive companies - whether chemical producers or logistics operators - will be best placed to navigate uncertainty and seize new opportunities.

It is not the biggest or the most efficient companies that will survive, but those that adapt most effectively to this changing environment. Those that will thrive are not the ones with the lowest costs today, but those that strengthen their supply chains, building the resilience, flexibility, adaptability, and visibility needed to be ready for the next disruption.

For logistics operators, these structural shifts create new opportunities. Rising imports will strengthen the role of ports as integrated logistics hubs, while more distributed and complex supply chains will increase demand for partners capable of managing multimodal networks. The growth of specialty chemicals and late product differentiation will further expand opportunities for value-added logistics services.

Building these new resilient supply chains will require closer collaboration and partnerships between chemical companies, traders, and logistics providers.

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IT’S NOT THE STRONGEST THAT WILL SURVIVE, BUT THE MOST ADAPTABLE TO CHANGE.

- **Barry McNally**, Stolt

AUTHOR

Philippe Van Dooren, seasoned editor in chief in supply chain management media.

This article is initiated by H.Essers.

ABOUT H.ESSERS

H.Essers was founded in 1928 by Henri Essers and has since become one of the leading companies in Europe for logistics services for sectors such as chemicals and healthcare. In recent years, the company has experienced solid expansion thanks to organic growth and a number of strategic acquisitions. In 2024, H.Essers booked an annual turnover of over one billion euros. The company currently has more than 1,300,000 m² of warehouse space, a fleet of 1.497 trucks, 4.159 trailers, 774 Safeboxes and 1.968 ISO tanks. Over 50% of this fleet is multimodal. More than 7.500 people work at H.Essers, in 86 locations and 21 countries worldwide.

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