

How are the European and US chemicals industries diverging?



The global chemicals industry has reached a fork in the road. Taking the high road are businesses in the US. The more difficult path is the route that Europe is currently facing and one that the region may struggle to climb back up from. Olaf Gierlichs-Steffens is the Atradius trade sector specialist for the chemicals industry. Here he explores the reasons driving the increasing gap between the chemicals industries in the US and Europe.

Where does Europe get its natural gas from today?

Today the EU has pivoted away from Russian gas, with imports dropping from over 40% in 2021 to about 8% in 2023. Europe is consuming greater volumes of Liquefied Natural Gas (LNG) and is having to rely on more expensive and volatile imports. The majority of EU gas imports now come from the US and Norway, with additional supplies from North Africa, Qatar and the UK.

The current capacity utilisation rate of the chemicals industry in the eurozone is approximately 7% below its 2015-2019 average and is not much higher than

that seen during the pandemic. Falling capacity leads to higher cost per ton of output, adding to the already existing cost pressures generated by higher gas prices.

Director General of the European Chemical Industry Council (Cefic), Marco Mensink, pointed to energy costs as one of the main difficulties facing the industry.

He said: "Energy costs are the Achilles heel of the European chemical industry. No other region in the world is as affected as ours."

There is some light in the future for Europe's industry, but this is dimmer than that seen in other regions. After contracting by 4% in 2022 and 7% in 2023, Europe's chemicals production is forecast to rebound. But our predictions of a rebound are modest, amounting to just 3.2% in 2024 and 2% in 2025.

While the sector is looking much less bleak, structurally higher energy costs are likely to continue hampering recovery. There is speculation around whether some chemical producers in Europe will be able to survive until the region sees any meaningful recovery.

Why is the market more favourable for US chemicals producers?

The US chemicals industry has benefitted from the local shale gas boom. Drilling and extraction techniques developed around 15 years ago provide the USA with a cheap and reliable source of natural gas. US natural gas production more than doubled between 2005 and 2023, while prices dropped by more than 70% over the same period.

This has resulted in a reshaping of the US chemicals landscape, especially for commoditised basic chemicals, and a growth in new projects and investments. The American Chemistry Council estimates investments of USD 208 billion in more than 350 shale gas-related projects, including cracking.

This has led to low and more stable gas prices in the US, which have reduced the cost of producing chemicals, such as ethylene, and attracted considerable investment.

The outlook: Lower investment in the coming ten years in Europe

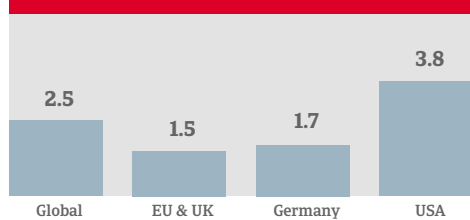
At the same time that the US is benefitting from the boom in shale gas, Europe is consuming greater volumes of LNG. This is reinforcing the divide between the two regions, at least in the medium term. US chemicals producers are able to enjoy fairly consistent access to competitively priced natural gas. In contrast, Europe has to rely on more expensive and volatile imports of LNG.

Looking further ahead Europe is facing significant loss of competitiveness in key products such as ammonia and fertiliser. Energy costs mainly affect basic chemicals, which use natural gas directly as a feedstock and for industrial heating purposes, with ramifications for more specialised chemicals production which are themselves downstream of basic chemicals.

Europe and Asia's use of naphtha to produce upstream chemicals also puts them at a long-term competitive disadvantage compared to the US.

The investment outlook for chemicals in the US is significantly higher than Europe and the rest of the world, with compound annual growth rates (CAGR) for 2024-2034 of 3.8% (see chart 1). In contrast, our predictions for Europe are much lower at 1.5%, and they even lag behind global investments which are estimated to be 2.5%.

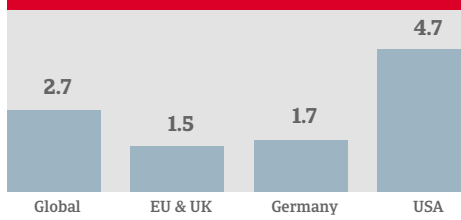
Chart 1: CAGR investments by chemicals sector 2024-2034



% growth in real terms. Source: Oxford Economics

The gap between markets is even wider when we look at investments for the same period for basic chemicals. The CAGR for investment in basic chemicals in the USA 2024-2034 is 4.7% (see chart 2), markedly higher than the global rate of 2.7% and Europe's 1.5%.

Chart 2: CAGR investments by basic chemicals subsector 2024-2034



% growth in real terms. Source: Oxford Economics

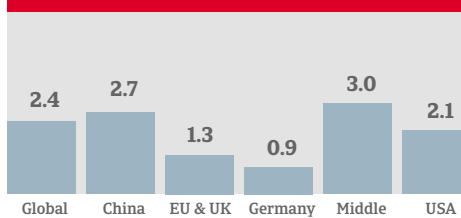
China and Middle East also enjoy better growth prospects compared to Europe

The Chinese chemicals industry has increased capacity over recent years, supporting its ability to maintain competitive prices. The road ahead may not be entirely smooth however, as there is a risk that oversupply could put pressure on the margins of chemicals producers.

Chemicals manufacturers in the Middle East continue to benefit from plentiful supplies of local oil, gas and chemicals feedstocks, helping to underpin strong growth projections. Most growth will be seen in Saudi Arabia, following significant investment in oil and gas infrastructure.

As can be seen in the CAGR predictions for chemicals production over the next ten years, Europe lags behind the USA, China and the Middle East in the production of both chemicals (see chart 3) and basic chemicals (see chart 4). Driven by the strength of its petrochemicals sector, the Middle East is forecast chemicals output growth of 3.0% and basic chemicals growth of 3.1% between 2024 and 2034.

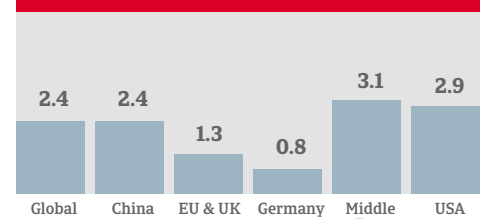
Chart 3: CAGR chemicals production 2024-2034



% growth in real terms. Source: Oxford Economics

In contrast the predicted growth rates for Europe are 1.3%, where several markets are struggling. This can especially be seen in Germany, by far the largest chemicals producer in Europe, where CAGR production of chemicals is 0.9% and basic chemicals is just 0.8%.

Chart 4: CAGR Production of basic chemicals 2024-2034



% growth in real terms. Source: Oxford Economics

The downside risk of relocation for Europe's chemical industry

In order to stay competitive, the chemicals industry in Europe is likely to focus on increasing efficiency and developing new products and technologies (speciality chemicals) in order to meet the challenges of the energy transition. The pressure to adapt is particularly great in Germany, and indeed across Europe, because the competitive disadvantages caused by high prices of energy and raw materials will not change in the near future. The possibility of manufacturers relocating to the US and other countries where energy costs are lower is a downside risk for Europe. What's more, businesses that are unable to pass on increased production costs to customers could struggle with cash flow and, in turn, may present a credit risk to their suppliers.

Are we facing a cataclysmic event? The short answer is yes, the chemicals market is facing a structural upheaval and one that is likely to reshape trade in the industry for many years to come.

Based in Cologne, Germany, Senior Underwriter **Olaf Gierlich-Steffens** is the Atradius Trade Sector Specialist for the chemicals industry. Olaf started his career in 1987 at Atradius and has been a Senior Underwriter since 2005.



Atradius

David Ricardostraat 1 · 1066 JS Amsterdam
P.O. box 8982 · 1006 JD Amsterdam
The Netherlands
Phone: +31 (0)20 - 553 91 11

info@atradius.com
www.atradius.com

**Connect with
Atradius on social media**
[linkedin.com/company/atradius](https://www.linkedin.com/company/atradius)
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