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# Global Chemicals Outlook

# **Our Trade Sector Expert**

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Underwriting in the chemicals sector is an exciting and challenging task. Chemicals is a truly global industry and consists of many different sub-sectors. The chemicals industry is a supplier to virtually all commercial sectors and therefore has excellent diversification. As the chemicals sector is highly dependent on energy prices, it is important to keep an eye on these *in individual countries in order to anticipate* negative sector developments at an early stage. In addition, the increasing focus on sustainability affects the chemicals industry more than other sectors and offers both opportunities and risks.

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# Chemicals global output to remain subdued until second half of 2024

The outlook for the global chemicals market is gloomy with output growth predicted at just 0.1% this year. What growth there is in the market is mainly being generated from Asia-Pacific, where China and India are increasing production.

Meanwhile the Americas, Europe and Africa have all seen year-on-year contractions during 2023 and are unlikely to see production outputs pick up until the end of next year.

So why is the industry facing such a bleak year? The reasons are complex and are rooted in the industry's reliance on energy, feedstocks and consumer confidence. The chemical industry was amongst the worst impacted by the energy crisis. Output is heavily eliant on oil and gas as feedstocks and requires energy-intensive manufacturing processes.

High inflation and tight monetary policies are keeping feedstock prices high and are also causing buyers and consumers to cut back on spending. This weakening in demand means many chemical producers have been unable to pass on higher production costs to their customers.



# Chemicals: global key figures

Year-on-year, % change. (\* Forecast) Source: Oxford Economics.

ATRADIUS GLOBAL CHEMICALS OUTLOOK

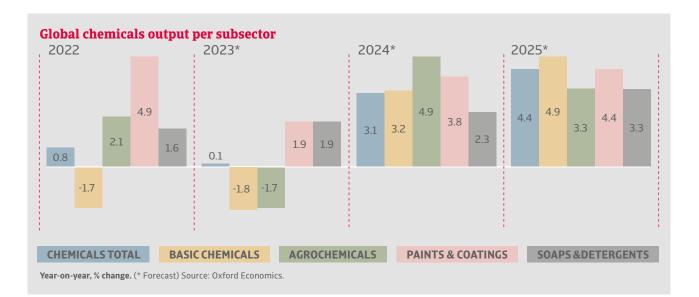


The global chemicals outlook also tends to closely track global economic conditions. Chemicals products can be found in many other downstream industries and, therefore, industry growth patterns have been reflecting the economic slowdown.

## A rebound is in the cards

The outlook will brighten next year. A rebound of 3.1% is predicted for the sector on a global level, driven by growing demand from sectors such as construction and household goods. Recovery will be gradual to begin with. Signs suggest that the growth momentum is unlikely to pick up pace until at least the second half of 2024.





# **Regional overview of chemicals performance**

# **Asia-Pacific**

## China

Chemicals production in China is showing resilience, buoyed by domestic demand. Output is predicted to increase by 6.9% in 2023 and 5.2% in 2024. While the industry has been impacted by slow growth in the nation's property sector, policy measures designed to promote growth in key sectors such as construction and automotive, are supporting domestic demand for chemical goods across a spectrum of subsectors.

Some clouds do darken the otherwise blue sky of the outlook for China, namely the prospect of trade tensions that could interrupt supply chains. These are mainly focused on trade and technology issues and, so far, chemicals multinationals have remained committed to their Chinese production and investment plans.

Chemical production remains competitively priced in China, supporting the outlook for exports. Will this remain the case? Possibly, although oversupply is an issue impacting margins for many producers.

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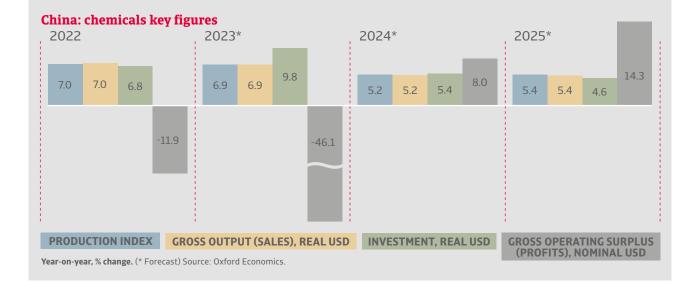
Chemical production remains competitively priced in China, but oversupply could become an issue, impacting margins.

# India

The Indian chemical industry is massive and is growing. It is currently the fifth largest in the world and is expected to extend its market share, outpacing global chemicals growth. Production is expected to increase 4.3% in 2023 and 2.8% in 2024.

Growth is being driven by domestic demand, with an expanding population and economy. There is also a government focus on growth in the industry locally. Government policies are supporting foreign direct investment and creating petroleum, chemicals and petrochemicals investment regions in a big to actively support growth over the coming decade.





# **United States**

Chemicals output in the US is contracting. We are expecting it to shrink by 1.9% in 2023 and by 0.8% next year. Demand recovery for most chemicals subsectors is not expected until the second half of 2024. Demand for value-added production is not likely to gather momentum until 2025.

Much of the slowdown has been due to high inflation and monetary policies delivering high interest rates, that in turn have created difficult lending conditions. The impact of this challenging economic situation has been particularly evident in downstream industrial sectors such as construction, durable goods and electronics.

However, the industry will not remain subdued long term. The prospect of growth is strong. When interest rates begin to ease and demand picks up, the highly competitive position of the US chemicals industry (especially base chemicals and fertilisers), along with the easing of supply chain disruptions, will support the rebound.

As with other nations government policies are supporting growth in the industry. The CHIPS and Science Act and the Inflation Reduction Act will accelerate the development of technology to reduce emissions. This will boost demand for chemicals used to make insulation materials, solar panels and other related products.

US natural resources will also help drive growth and attract investment. Shale gas, in particular, has led to more stable gas prices and has reduced the cost of producing chemicals such as ethylene. This is helping US chemical producers enjoy an advantage in cost competitiveness over their European and Asian peers, especially those that typically use naphtha (a derivative of oil) in order to produce upstream chemicals.

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For Germany's chemical industry hub, the possibility of manufacturers relocating to countries with lower energy costs is a potential downside risk.

## Europe

### Eurozone and UK

Despite the recent fall in energy costs, chemicals businesses in Europe have experienced a contraction in output this year. By the end of 2023, we think chemicals output for the Eurozone will contract by 6.4% and by 5.6% in the UK. As with the industry in other regions growth has been hampered by the decrease in demand caused by high inflation and interest rates. Many customers are also still destocking from elevated inventory levels, resulting in subdued demand.

We should start to see the green shoots of recovery in 2024, although this will be modest, with estimates pointing to 2.4% in the eurozone and just 0.3% in the UK. The slow return to growth will be influenced by weak global demand and the continuation of high energy costs.

#### Germany

Germany is by far the largest chemicals producer in Europe, accounting for more than 4% of global chemicals output.

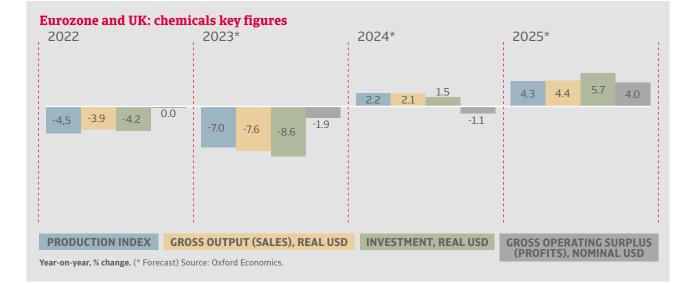




During 2022, chemicals production in Germany contracted by a significant 12%. By the end of 2023 production is prediction to shrink by another 10%, followed by a modest 1% rebound in 2024.

Although such huge drops in production will inevitably affect the industry in Germany, the impact is not likely to be severe. This is because the sector is fairly robust with strong capitalisation, good access to external financing and a well-balanced debt profile.

That said, energy prices are high and present a concern to the industry. The biggest risks include the possibility of manufacturers relocating to countries where energy costs are lower. 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.





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The increased global focus on sustainability is likely to result in improved processes, reduced environmental impacts and better, safer products.

# Issues that could impact the industry

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# Does the war in Ukraine impact the chemicals industry?

Russia's invasion of Ukraine has had a massive and possibly permanent impact on energy trade flows into Europe. Although this affects all sectors, the chemicals industry has been especially affected due to its reliance on energy intensive processes and on oil and gas for certain feedstocks.

Although gas prices have eased recently, they are still eye-wateringly high, and remain 70% above the average cost during the 2015-2019 period. These high energy costs, along with high production costs and tight regulations means many European chemicals businesses may struggle to compete with their American or Asian counterparts.

However, although some European firms are announcing plans to adjust their production strategies in order to ensure economic viability, in the short term at least we do not expect to see a serious deterioration in terms of the financial strength of the players. In the long term, they might be affected by high input costs and lower demand. It remains to be seen how long this situation will last. High investments in a "greener" industry will need to be financed in the short to medium term, but financing should not be a problem for players with very good credit ratios.



# How well is the chemicals industry prepared for the major shift towards sustainability?

There has been a growing recognition of the environmental impacts of the chemical industry, particularly in terms of energy consumption, emissions, waste production, and resource utilisation. In response many companies have started to develop sustainable production processes, including the use of eco-friendly technologies, and green chemistry processes.

This presents a range of opportunities for the industry as it brings to market new sustainable materials and processes. The industry already invests heavily in R&D. The increased global focus on sustainability is likely to result in improved processes, reduced environmental impacts and better, safer products.

However, without technological advances, such as using hydrogen as a sustainable feedstock or a source of fuel, there will be a limit on how much the energy mix can shift away from fossil fuels and lower emissions in the sector.

Some industry commentators have raised the possibility of an increased credit risk for the industry in Europe, in light of the EU's ambitious sustainability plans. However, this is hard to predict. It depends on various factors like energy price levels, the cost of environmental protection measures, changes in demand for more eco-friendly products and the risk of losing market share to competitors that have already implemented sustainable practices.

### Plastics subsector

Individual subsectors also face their own challenges. For example, bans on many single-use plastics are being implemented in growing numbers of regions and territories throughout the world including the EU, UK, China, Taiwan, Canada some US states and cities, and some African nations. While unquestionably good for the environment, such policies will impact the plastics industry which is tasked with the challenge of finding alternative materials that are more environmentally friendly while offering similar functionalities.

## Agricultural chemicals subsector

Pesticides and fertilisers used in agriculture can have environmental impacts, including soil and water pollution. The challenge for the subsector is to develop more sustainable agricultural practices and meet environmental targets. Some of these are legally binding, such as those laid out in the EU's Farm to Fork strategy, which seeks to reduce the use of hazardous pesticides by 50% by 2030.



# What are the industry's primary growth drivers?

The chemicals industry enjoys an almost unique position in that its products are in demand from a wide range of other industries. Chemical goods are widely used in global manufacturing supply chains from pharmaceuticals to agriculture and manufacturing to cutting-edge technology. This creates strong resilience and is a major driver of the industry's growth trends.

In addition to robust demand in B2B markets is a growing consumer demand, especially in emerging markets. Growing affluence among consumers in emerging markets is resulting in greater purchasing power and growing demand for consumer goods, cars, household disposables including soaps and detergents, as well as construction materials that are chemicals-based.

Growing global consumer demand for electric vehicles can also be identified as an important growth driver for the industry. The recent surge in electric vehicle production is resulting in increased demand for high-performance plastics and chemicals for use in batteries.

As the global population grows, so does the need to increase agricultural productivity. This is likely to drive long-term demand for fertilisers, pesticides and other agrochemicals, as well as potential growth in areas such as genetically modified crops.

# What are the main headwinds most likely to affect the industry?

As previously discussed, energy prices are a critical factor affecting growth in the chemicals industry. As an energyintensive industry, it is highly susceptible to oil and gas price volatility. As the industry, and indeed the world, transitions toward clean energy this will create challenges as well as opportunities for the sector. Chemical businesses will face ever tighter regulatory directives, as well as changing customer preferences. In fact, there is already growing demand for green and ethical products. This includes consumers asking where ingredients come from and assessing environmental impacts.

Decarbonisation involves substantive financial investment. However, few chemicals businesses can afford to be left behind as they face increasing pressure from various stakeholder groups. Moving forward, ESG performance is expected to be benchmarked as highly as cost and other productivity metrics.

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Currently it is still hard to predict if the EU's ambitious sustainability plans will lead to increased credit risk for the chemicals industry in Europe.

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# Summary

# What are the top three opportunities for the chemicals sector during the next few years?

### Sustainable and green chemistry

Global demand for sustainability presents a significant opportunity for the chemical industry to develop and market environmentally friendly products and processes. This includes bio-based materials, renewable energy solutions and circular waste and resource consumption.

## **Digital transformation**

Embracing digital technologies such as artificial intelligence, machine learning and the Internet of Things (IoT) can help chemicals companies streamline their operations and enhance their efficiency. Data analytics can optimise production processes, supply chain management, enable predictive maintenance and even support product development.

### Advanced materials

Sectors such as electronics, automotive and aerospace are driving increased demand for high-performance materials. This is creating opportunities for the chemicals industry to develop materials to meet specific needs, as well the chance to collaborate with technology providers and engage with sustainability initiatives. Strategic investment into R&D will be needed to help chemicals businesses capitalise on opportunities. Growth in the electric vehicle sector is creating demand for high performance plastics.

# What are the constraints and downside risks for the chemicals industry in the mid and long term?

### Regulatory and compliance pressures

Stricter environmental regulations mean chemicals businesses will face increasing regulatory scrutiny. Meeting these requirements while maintaining profitability and innovation could be challenging, especially for companies with complex supply chains and operations.

## Transition to sustainability

In addition to providing opportunities for the industry, the focus on improving sustainability also presents challenges. Primary among these is the need for investment into research, technology and process reengineering. In addition, growing consumer demand for green or ethical products often chemicals companies are increasingly required to explain environmental impact, list chemicals in products and benchmark decarbonisation actions.

## Geopolitical uncertainties

The chemicals industry can be vulnerable to supply chain disruptions, tariffs, trade restrictions and geopolitical conflicts. Addressing these challenges necessitates strategic planning, agile business models, collaboration with regulatory bodies, and proactive approach to adopting sustainable practices. As an energy-intensive industry, the chemical industry is highly susceptible to oil and gas price volatility.



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