THE EUROPEAN CHEMICAL INDUSTRY
A VITAL PART OF EUROPE'S FUTURE

FACTS & FIGURES 2023

Foreword

It has yet again been a turbulent year. The consequences of the Russian war against Ukraine, weak demand, high energy costs, rising interest rates and inflation continue to affect the European chemical industry. And then comes the US Inflation Reduction Act, challenging us even more.

With 10.6% decline, the EU27 chemical industry reported the third-largest drop in production in 2023 (Jan-Sep).

Capacity utilisation in the EU27 chemical industry declined once more and was at 74.1% in the third quarter of 2023.

This comes at a time when the EU chemical industry has to undergo the biggest transformation in the history of our sector and become climate neutral, circular, and digital at the same time as transitioning to safe and sustainable chemicals, all by 2050.

A transformation that requires billions of additional investments between now and 2050. But a worthwhile transformation, as solutions developed by the chemical industry extend the lifespan of wind turbines, turn waste into sustainable fibre for new clothes, and make electric vehicle batteries more powerful and efficient. Without the chemical industry thriving, Europe cannot achieve the Green Deal.

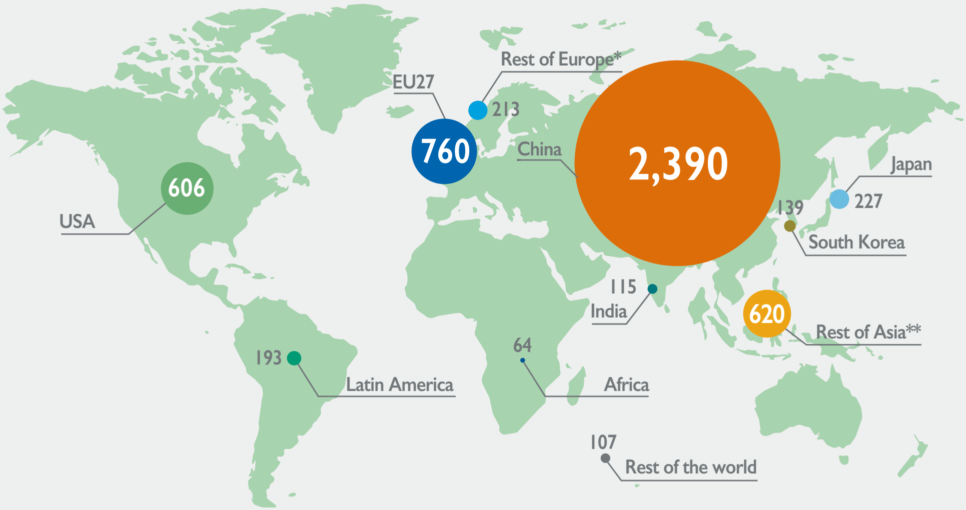
Creating a business case for investment in Europe should therefore be the main strategic political priority of the incoming European Commission. The numbers in this brochure give you all the proof you need.

Unless specified, chemical industry excludes pharmaceuticals

Disclaimer:
For the sake of data integrity, figures within Cefic's Facts & Figures publications are compiled and updated on a regular basis from public statistical sources (Eurostat, EU Commission, EEA, …). These sources regularly review their previous years' data and at times retroactively amend it. As a result of these updates, the comparison of annual Cefic Facts & Figures editions is not necessarily consistent over time.

In 2022, Europe was the second-largest chemical producer worldwide

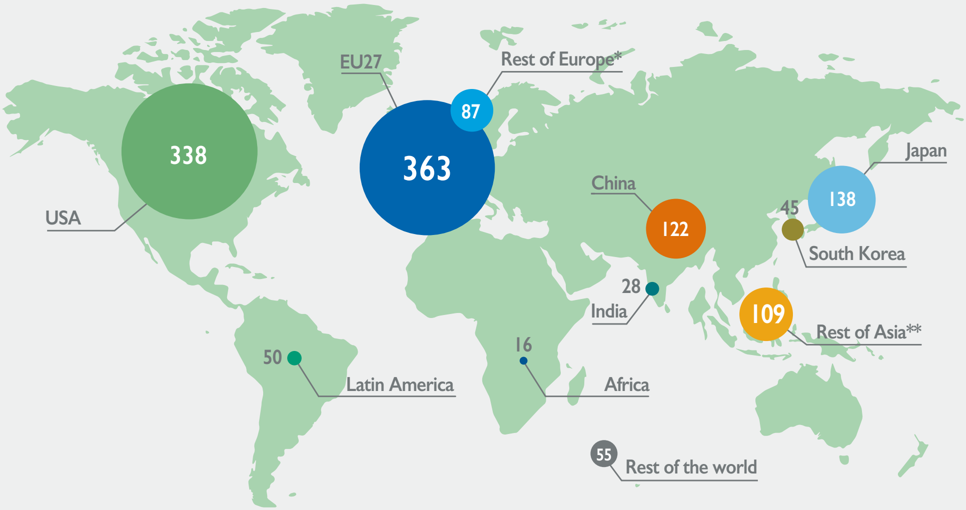
World chemical sales, 2022 (€5,434 billion)



Source: Cefic Chemdata International
* Rest of Europe covers UK, Switzerland, Norway, Turkey, Russia and Ukraine
** Asia excluding China, India, Japan and South Korea

In 2002, Europe was the largest chemical producer

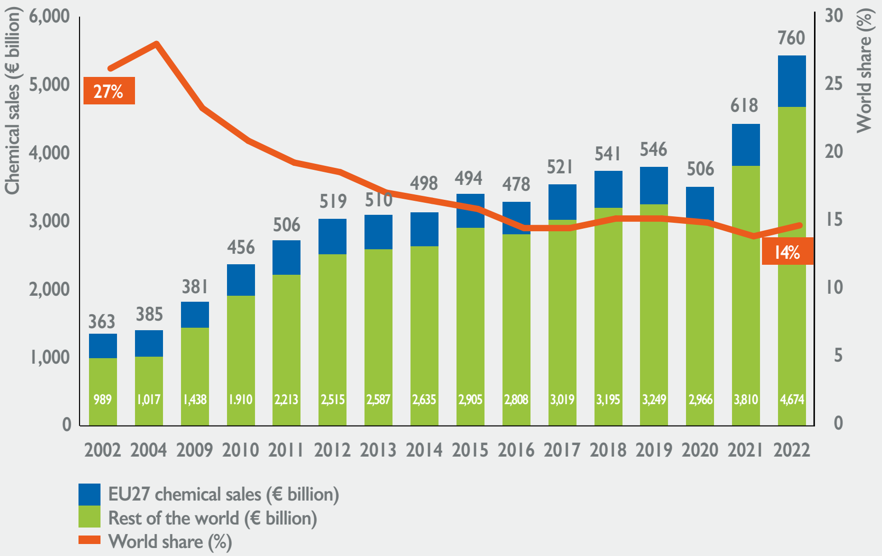
World chemical sale, 2002 (€1,352 billion)



Source: Cefic Chemdata International
* Rest of Europe covers UK, Switzerland, Norway, Turkey, Russia and Ukraine
** Asia excluding China, India, Japan and South Korea

Over 20 years, the EU27 share of global chemical market dropped sharply

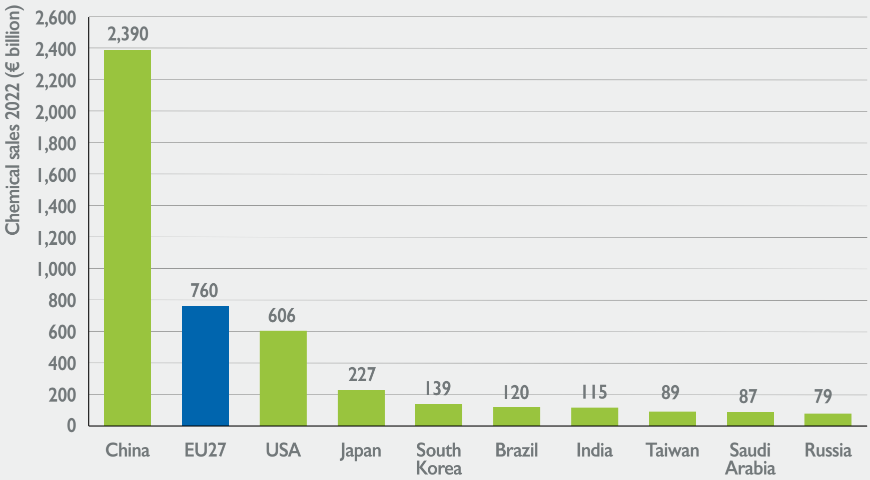
EU27 share of global chemical market



Source: Cefic Chemdata International

In 2022, China dominates the chemical sales globally

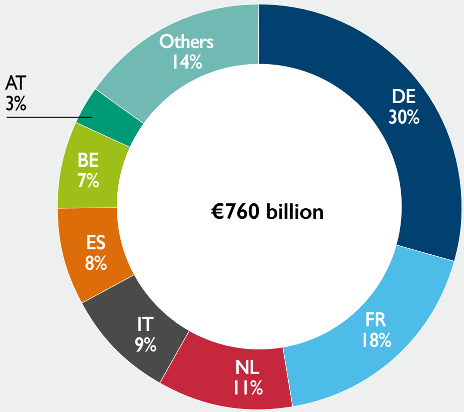
World chemical sales: top 10 countries



Source: Cefic Chemdata International

In 2022, two thirds of EU27 chemical sales was generated in four Member States

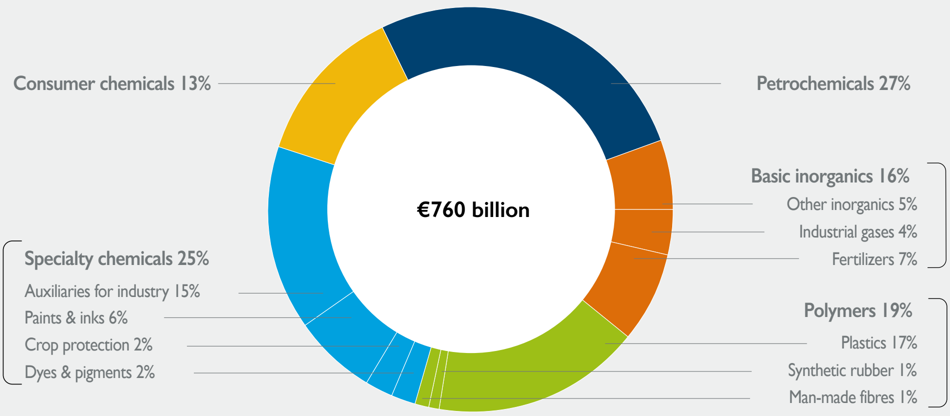
EU27 chemical sales broken down by country, 2022



Source: Cefic Chemdata International

Petrochemicals account for more than one fourth of EU27 chemical sales in 2022

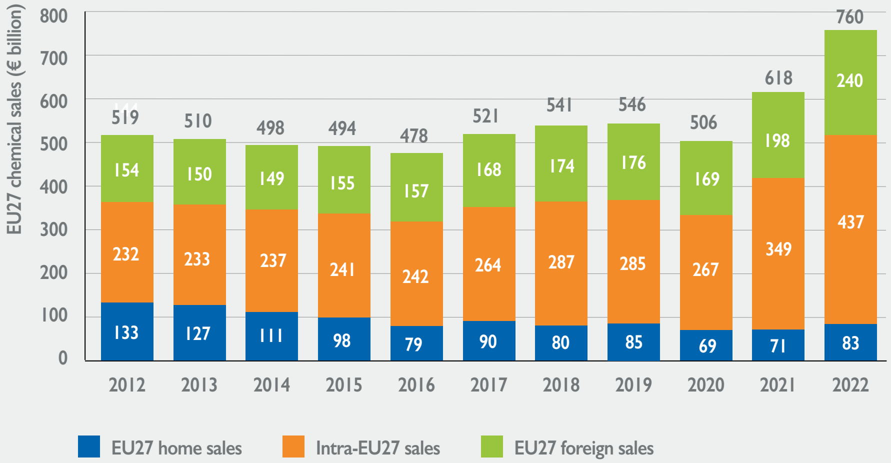
EU27 chemical sales, 2022 (€760 billion)



Source: Cefic Chemdata International

In 2022, €240 billion was generated from selling chemicals outside the EU27 area

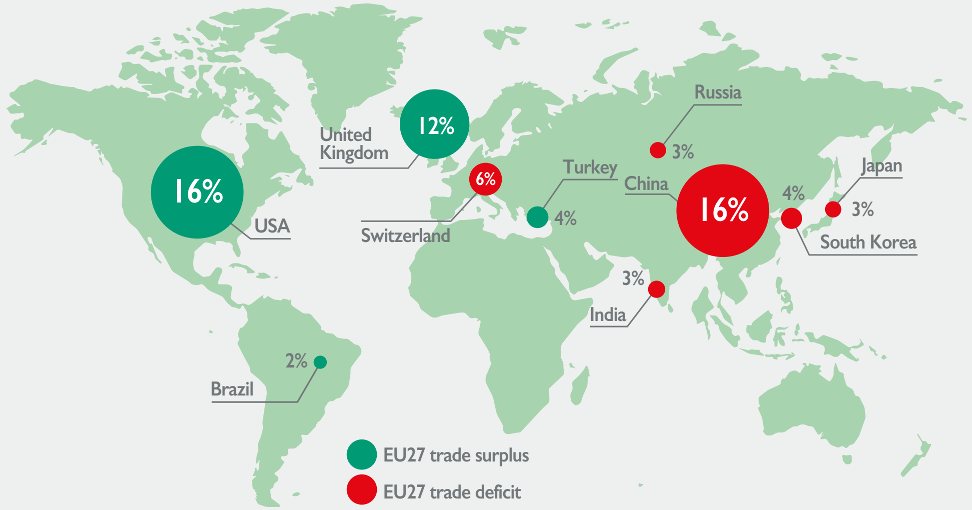
EU27 chemical sales structure (€ billion)



Source: Cefic Chemdata International

About 70% of EU27 chemical trade* in 2022 took place with 10 partners

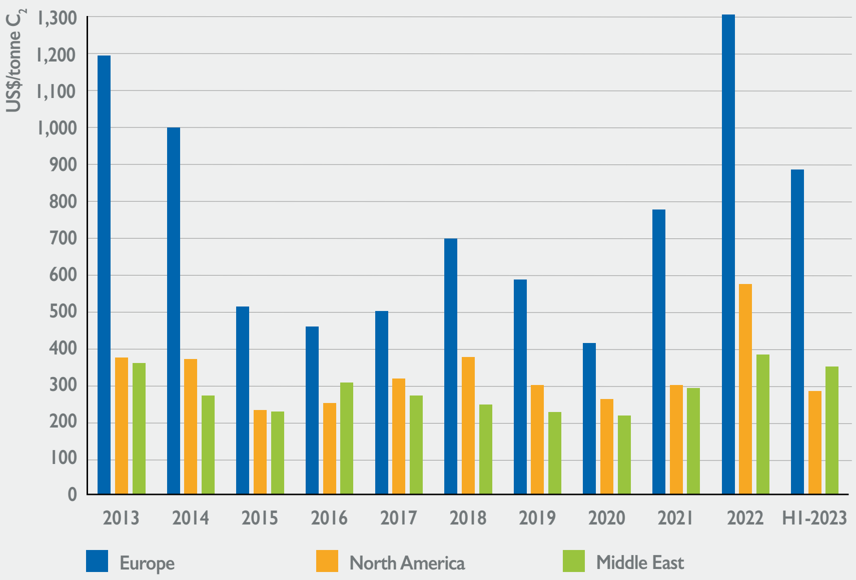
EU27 chemical trade* flows with top 10 partners, 2022



Source: Cefic Chemdata International
*Trade = exports + imports (in value terms)

Ethylene cash cost increased by 70% in 2022 versus 2021

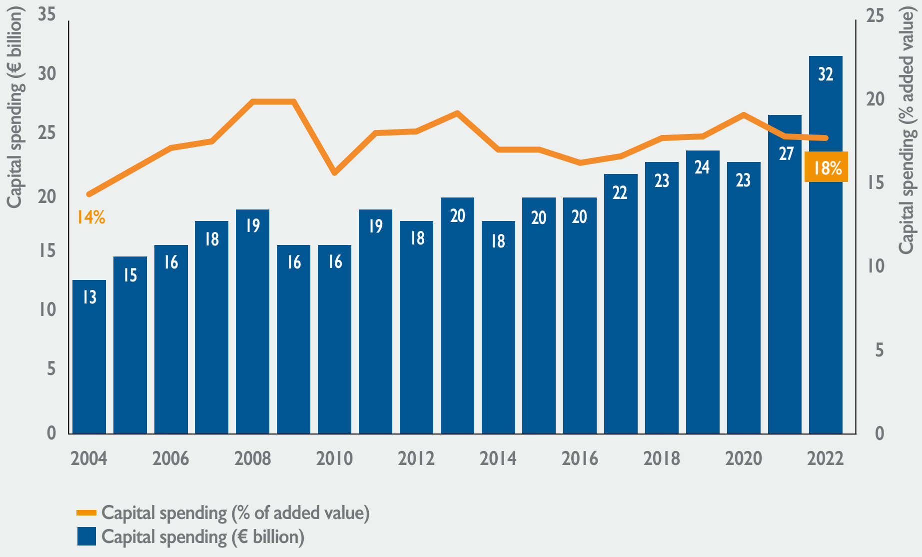
Ethylene cash cost of regional steam crackers (2013 - H1-2023)



Source: ICIS

In 2022, the EU27 capital spending reached the highest levels

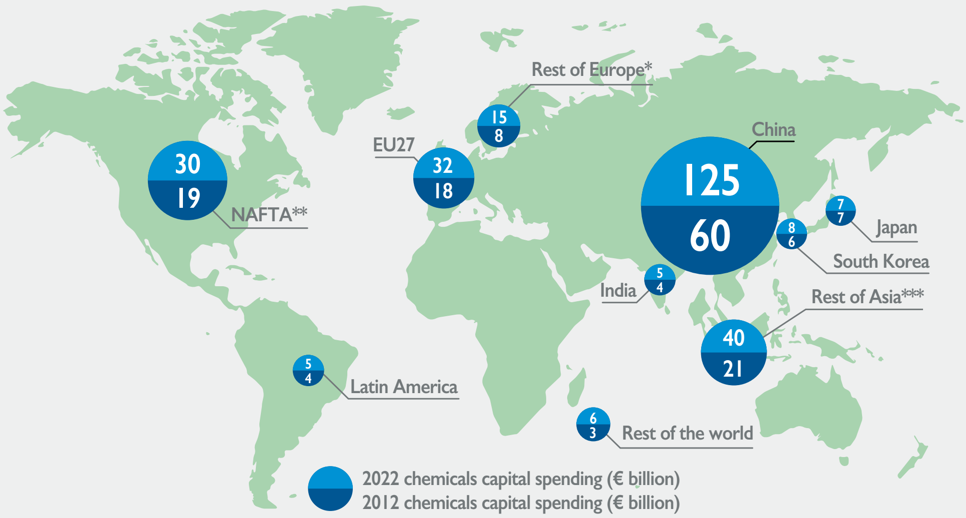
Capital spending in the EU27 chemical industry



Source: Cefic Chemdata International

In 2022, most of the chemical capital spending took place in China

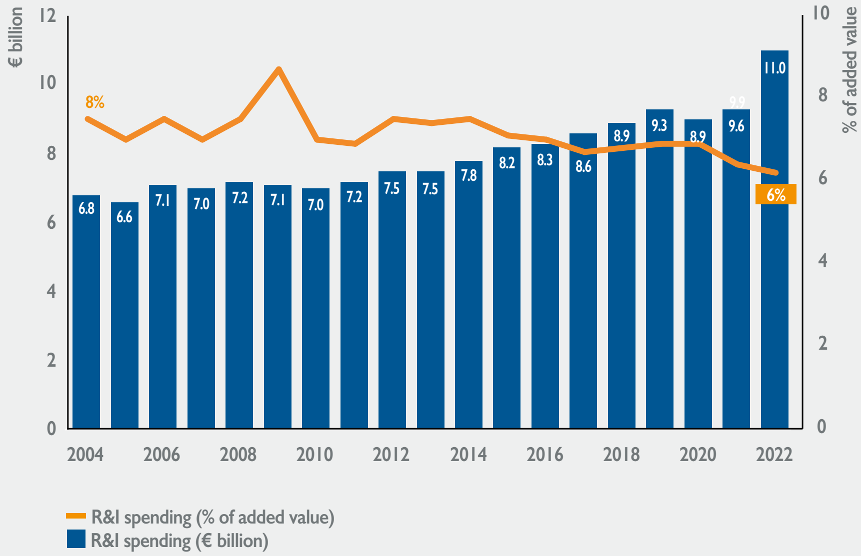
Capital spending by region (2022 vs 2012)



Source: Cefic Chemdata International
* Rest of Europe covers UK, Switzerland, Norway, Turkey, Russia and Ukraine
** North American Free Trade Agreement
*** Asia excluding China, India, Japan and South Korea

In 2022, the EU27 R&I spending reached the highest level

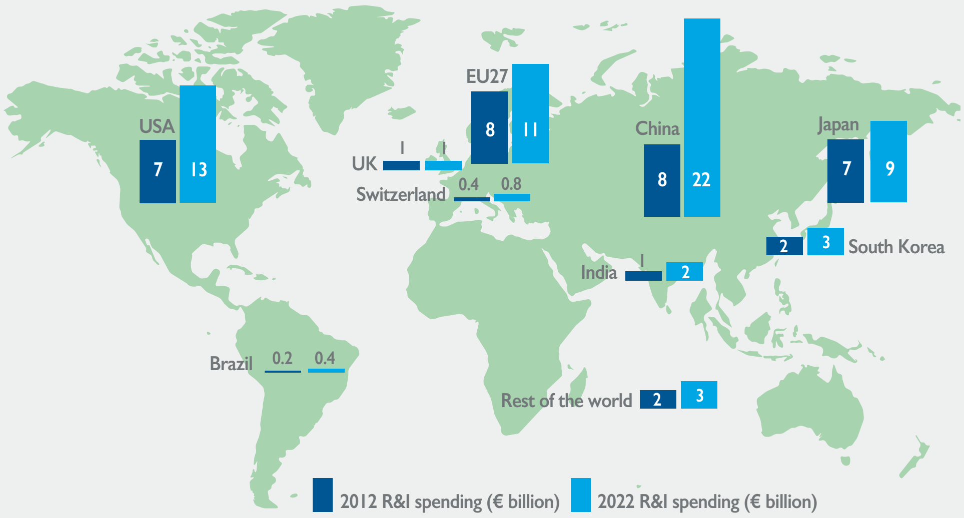
R&I spending in the EU27 chemical industry



Source: Cefic Chemdata International

In 2022, China led the global R&I spending in the chemical industry

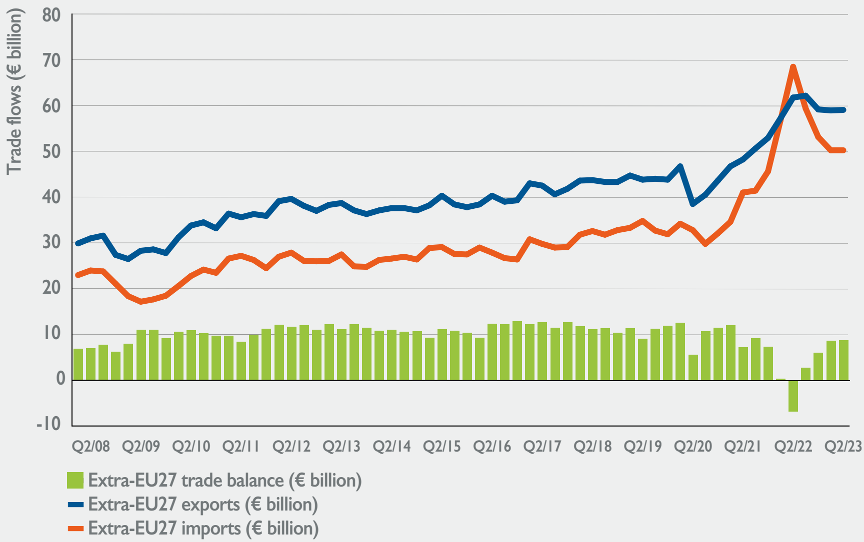
R&I spending in the chemical industry by region (2012 vs 2022)



Source: Cefic Chemdata International

Since Q2-2022 the energy crisis has severely hit the EU27 chemical trade balance

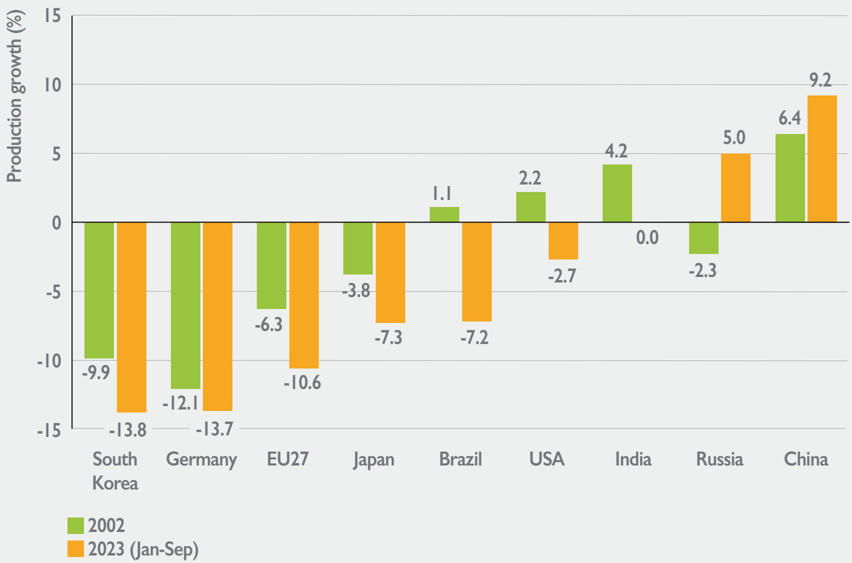
Extra-EU27 chemicals trade flows (€ billion)



Source: Cefic Chemdata International

EU27 reports a severe drop in 2022

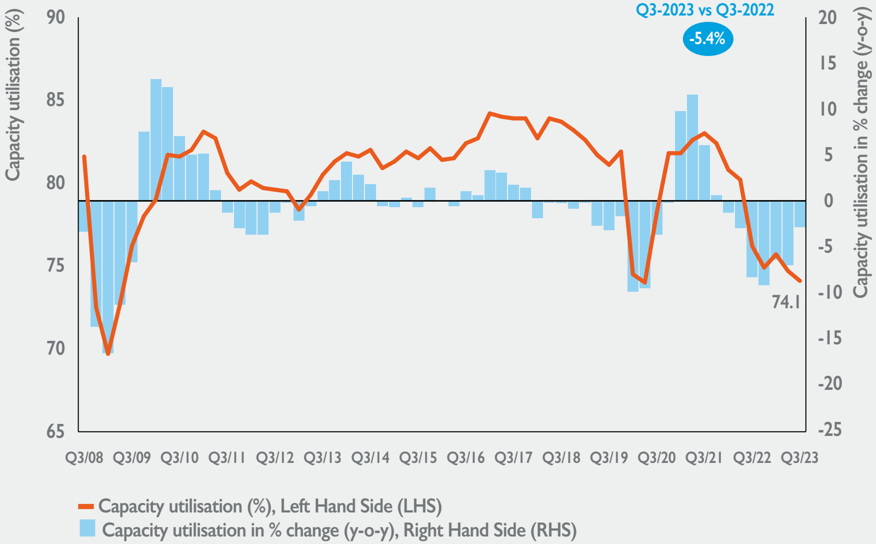
Chemical production growth for main countries



Source: Cefic Chemdata International

EU27 chemical capacity utilisation in 2023 was below its long-term average

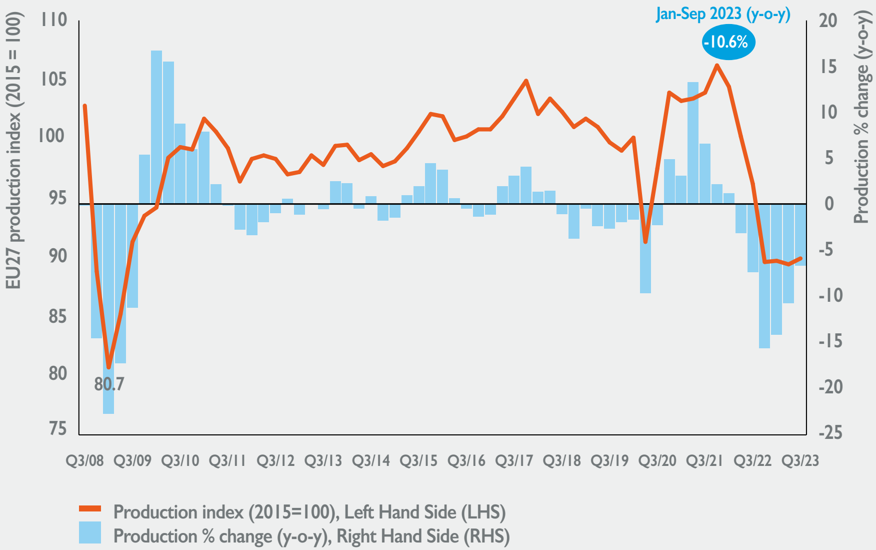
EU27 chemical capacity utilisation



Source: Cefic Chemdata International

EU27 chemical output is disappointing for both 2022 and 2023

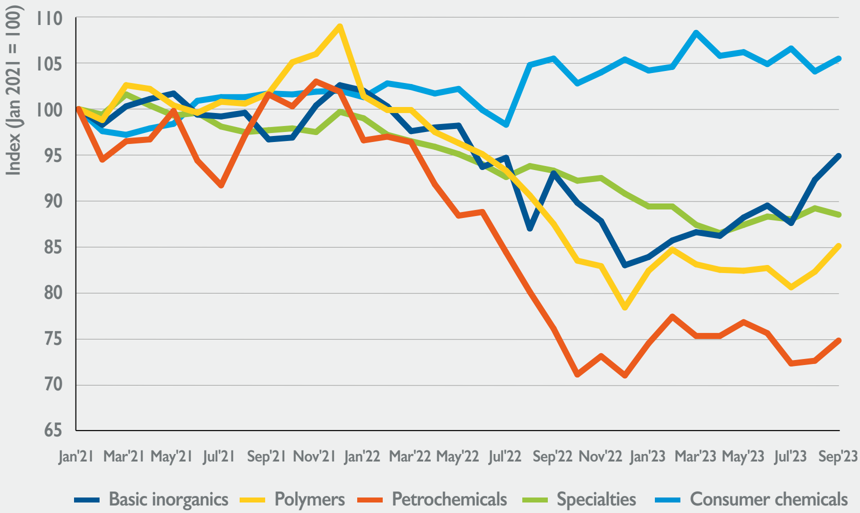
EU27 chemical industry production



Source: Cefic Chemdata International

EU27 basic chemicals on a downward trend since 2022

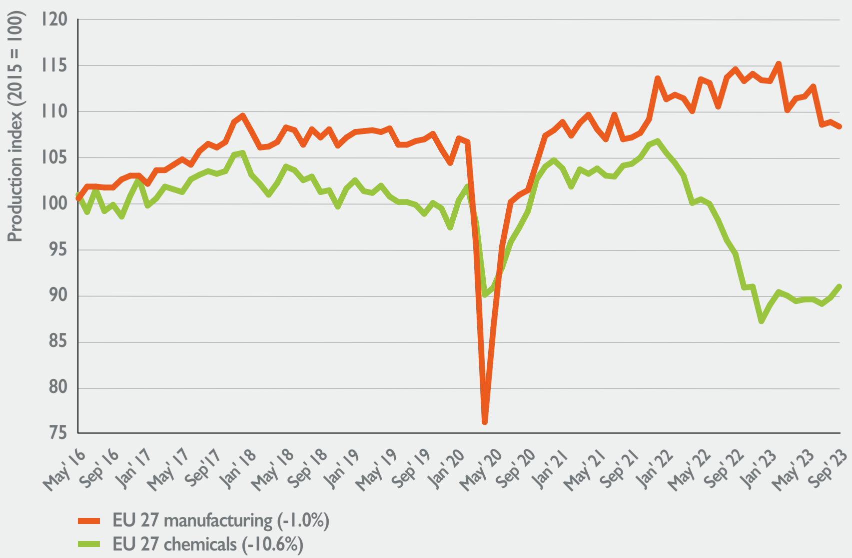
EU 27 chemical production by sector (2021 - 2023)



Source: Cefic Chemdata International

Since 2022, production of the EU27 chemical sector is decoupling from the EU27 manufacturing

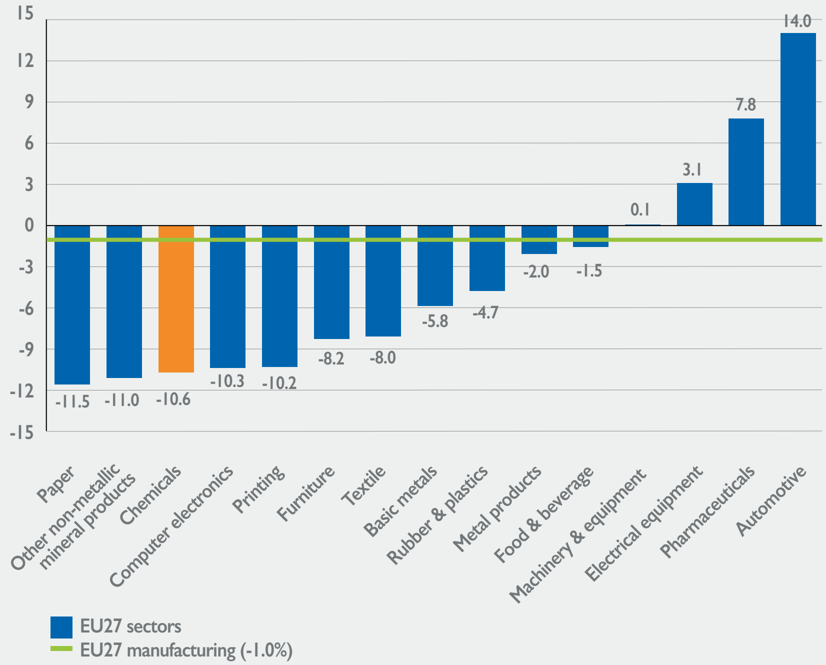
EU27 production trend: chemicals vs manufacturing



Source: Cefic Chemdata International

EU27 chemicals reported the third-largest output decline in 2023

Production growth for most EU27 manufacturing sectors (Jan-Sep 23, y-o-y)



Source: Cefic Chemdata International

A full version of the 2023 Cefic Facts & Figures of the European chemical industry is available online on the Cefic website.

Enquiries
Dr. Moncef Hadhri
Economic Affairs
mha@cefic.be

Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.2 million jobs and account for about 14% of world chemicals production.

Cefic members form one of the most active networks of the business community, complemented by partnerships with industry associations representing various sectors in the value chain. A full list of our members is available on the Cefic website: www.cefic.org/about-us

Cefic is an active member of the International Council of Chemical Associations (ICCA), which represents chemical manufacturers and producers all over the world and seeks to strengthen existing cooperation with global organisations such as UNEP and the OECD to improve chemicals management worldwide.

FOLLOW US

Cefic (European Chemical Industry Council)

@Cefic

Cefic

Chemistry can

cefic

European Chemical Industry Council - Cefic aisbl
EU Transparency Register n° 64879142323-90
www.cefic.org