

The Competitiveness of the European Chemical Industry

A joint study by Cefic and Advancy

Background

Cefic's competitiveness study – commissioned to Advancy – emphasises the severity of the situation for the EU chemicals industry; over 11 million tons of capacity have already been announced to be closed for 2023-2024, affecting 21 major sites in Europe. By delving into the current state of the European chemical industry and its competitiveness on the global stage, this report not only reinforces the Antwerp Declaration call, but makes it clear through a wealth of data and comparative illustrations, that the time to act is now.

1. European Chemicals, an Essential Industry for Europe

- **Chemicals are a fundamental building block of everyday life**, used in most manufactured goods and for the supply of strategic sectors for Europe (pharmaceuticals, electronic chips, defence).
- **Chemicals are an integral part of the European manufacturing industry**: they represent 5-7% of EU manufacturing turnover and include around 31,000 companies, 97% of which are small and medium-sized enterprises (SMEs).
- **Chemicals are among the leading manufacturing exporting sectors in Europe.**
- **Chemicals are an important contributor to European innovation & differentiation**: Europe is the second region in terms of chemical patents filed worldwide.
- **Chemicals are essential to meeting Europe's climate neutrality and circular economy goals**, by finding solutions to reduce the carbon footprint of materials.

2. 2023-2024, the European Chemical Industry at a breaking point

- **Europe's chemical industry, which has long been a cornerstone of Europe's prosperity, is at a "breaking point, [...] jeopardising its future on the continent".** Plant closures representing over 11 million tons of capacity have already been announced for 2023-2024, affecting 21 major sites. **The European chemical industry is experiencing a weak demand**: annual average production volumes in 2023 have decreased by around -14% percent since 2021 in 2023 and recovery remained weak in 2024.
- **The sector faces a global supply capacity surplus**: utilisation rates are currently (especially in Europe) around 75%. Despite the expected global increase in demand in the coming years, this is being offset by additional supply from further investment outside Europe. This makes it difficult to achieve better utilisation rates unless capacities are closed.

- **The competitiveness of the European chemical industry is under pressure. Europe is at a disadvantage in energy prices:** Gas and electricity prices have declined since the 2021-23 crises. However, the gas price currently remains 4-5 times higher compared to the US. A decline is expected in the medium term, yet remaining 2-3 times higher. Due to the current energy framework, this implies a competitive disadvantage in producing energy-intensive basic chemicals in Europe. When it comes to energy from crude oil naphtha and ethane used in organic chemicals, the US also has a competitive edge in ethane. Meanwhile, China and India have gained an advantage by getting discounted crude oil (naphtha) from Russia by circumventing sanctions.
- **Adding to this competitive pressure are more complex, more costly, and more changing administrative and environmental regulations, which lead to additional costs and create uncertainty for future investments.**
- **In this context, an urgent change of EU (industrial) policy is needed:** The current policy: 1) is mainly focused on regulation rather than incentives, 2) does not create a competitive environment in terms of operating costs, and 3) is too complex compared to other major regions.

3. Over the past 15 years, Europe has lost ground

The European chemicals sector lost 11 points market share between 2008 and 2023, driven by 3 factors:

1. **European chemical demand has been structurally weaker:** the European economy is more mature, and its industrial production grew by +3% per year over the period 2008-2023 versus global growth of 5-6% per year.
2. **European chemical exports underperformed:** exports captured a lower share of international growth compared to their historical level.
3. **Moreover, the European chemical industry lacked investment and competitiveness in the domestic market.**

4. The Competitiveness Gap, in Depth

- **The chemical industry is structured into upstream, polymers & intermediates, and downstream segments,** starting with raw feedstocks, production of base chemicals and progressing towards specialty chemicals, which are used in various end-markets.
- **The upstream sector manufactures large volumes of organic and inorganic chemicals:** this segment was the most directly impacted by the increased energy costs and low global utilisation rates due to its high fixed cost base. **It is at the forefront of low carbon technology development.**
- **The polymers & intermediates sector starts from upstream chemicals to manufacture polymers (used in plastics and composites especially) and intermediates for downstream products:** this segment was impacted by feedstock costs and increased competition. **It is at the forefront of circular economy.**
- **The downstream sector manufactures smaller volumes, often tailored to customer needs, providing in many cases complex ingredients and unique combinations of ingredients:** it has been less impacted and has maintained its relative competitiveness. **It is at the forefront of new performance-oriented ingredients and materials.**

5. Next steps : A call for action

- **The European chemical industry is at a crossroads:** the European chemical industry has faced a sharp slowdown, stronger than the general economy, driven by lower demand, increasing supply, downgraded competitiveness and increased competition. **The downturn is unprecedented in its depth and length.**
- **There are risks ahead, but also significant opportunities to be seized in low carbon technologies and innovative technology developments.**
- **The chemical industry creates jobs and wealth, is crucial for all industrial value chains, is indispensable for the green transition to achieve climate neutrality and adds to Europe's strategic autonomy.**
- **Urgent and concrete actions are required to create a business environment that allows business to leverage their strengths and enables Europe to achieve its objectives.** The Antwerp Declaration and the Draghi report show the way forward.

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About Cefic

Cefic, the European Chemical Industry Council, is the forum of large, medium and small chemical companies across Europe, accounting for 1.2 million jobs and 14% of world chemicals production. On behalf of its members, Cefic's experts share industry insights and trends, and offer views and input to the EU agenda. Cefic also provides members with services, like guidance and trainings on regulatory and technical matters, while also contributing to the advancement of scientific knowledge.