



THE FUTURE OF THE EU CHEMICAL INDUSTRY

Cefic launches 2050 vision for EU chemicals.



The European Chemical Industry Council (Cefic) is a partner to EU policymakers, facilitating dialogue with the industry and sharing its broad-based experience. Since its founding in 1972, the organisation has been representing chemical companies across Europe and cooperating with international and European institutions, NGOs and international media on behalf of its members. SIBUR has been a member of Cefic since 2017.

Cefic has published its vision for Europe's chemical industry in 2050, in a report entitled *Molecule Managers*. The association has developed an eight-point plan for the chemical industry in Europe to be successful in 2050, based on key themes. These include geopolitics, economics, circularity, climate, environment, industry, digitalization, and the United Nations strategic development goals.

The report launches a dialogue about the future of the chemical industry and its role in building a prosperous, more sustainable Europe by 2050, Cefic says. "We want not only to continue to thrive for the next 30 years and beyond but also to lead the transition for our industry globally by offering European solutions to global challenges," it says.

The next 10 years will be decisive for the future of the EU chemical industry, Cefic says. During this time, it will need to develop its own competitive place in the global economy while adapting to new challenges. These challenges include a decline in globalization and free trade, the EU goal of a climate-neutral economy, a talent crunch, and increasing transparency of supply chains due to digitalization and blockchain, Cefic says.

It is impossible to build a better future for Europe without a successful chemical industry in the region, according to Cefic. Greenhouse gas (GHG) emissions by the EU chemical industry fell by almost 61% between 1990 and 2016, from about 320 to about 120 million metric tons of CO₂-equivalent, even though production increased 83% during that period. The EU chemical industry invests more than

15% of its value added in new and improved manufacturing plants and processes, despite a doubling in the cost of complying with EU regulations in the last 10 years. The sector invests about €10 billion (\$11 billion) annually in R&D, about €25 million/day, Cefic says.



Europe is the second largest chemical producer in the world Photo: BASF plant.

GREENHOUSE GAS (GHG) EMISSIONS BY THE EU CHEMICAL INDUSTRY FELL BY ALMOST 61% BETWEEN 1990 AND 2016.

Europe is the second-largest, chemical-producing region with output of €542 billion, behind only China with €1.29 trillion of chemical production. Where the US and China have focused on their domestic markets, Europe has become a successful exporter, with a trade surplus of €48 billion in 2017, Cefic says.

Demographic, economic, environmental, technological, and geopolitical megatrends will have the biggest impact on the world and the European chemical industry in 2050, according to Cefic.

In terms of demographics, the worldwide gap between "haves and have-nots" will continue to grow, Cefic says. Europe will have the world's oldest population in 2050, with more than 25% of that population aged over 65. Demographic trends will drive increased competition for talent, making it more difficult for the EU chemical industry to attract and retain talent. "The talent crunch will begin in Europe in 2020, and last until at least 2030," Cefic says.



By 2050, the number of people aged over 65 will exceed a quarter of Europe's total population.

WHERE THE US AND CHINA HAVE FOCUSED ON THEIR DOMESTIC MARKETS, EUROPE HAS BECOME A SUCCESSFUL EXPORTER.

There will be a gradual but bumpy shift in power to emerging economies. Europe will lead in sustainability, and other regions will follow, Cefic says. Europe's economy will grow at a moderate rate of about 1%/year through 2050, and the region's chemical industry will at least match that, according to Cefic. The major emerging economies such as Brazil, India, and Russia will see much higher annual growth of 4–6% to 2050, it says.

Cefic expects to see a continued push toward lower GHG emissions and a higher share of renewable energy in the overall energy mix, which will lower the chemical industry's carbon footprint. Europe will move toward net-zero carbon emissions by the middle of this century, it says. Fossil fuels will nevertheless remain the most important source of feedstock, enabled by a sustainable and circular management of carbon cycles, with carbon-pricing mechanisms, according to Cefic.



Wind turbines at the Danish coast near Copenhagen.

EUROPE'S ECONOMY WILL GROW AT A MODERATE RATE OF ABOUT 1%/YEAR THROUGH 2050, AND THE REGION'S CHEMICAL INDUSTRY WILL AT LEAST MATCH THAT.

New and disruptive technology will drive exponential innovation. New technology creates new opportunities, new markets, and new business models, Cefic says. It expects the biggest impact on the chemical industry to come from technologies such as digitalization, renewable energy, recycling, and low-carbon synthesis processes from circular feedstocks.

"A more extensive use of artificial intelligence and blockchain technologies will make chemicals production and chemical risk assessment more efficient and transparent," Cefic says. "It will also help better track substances of concern in supply chains and further improve the safety of chemicals in the EU. Applying all these technologies will require a workforce with a completely different skills set."

A more multi-polar world will be less dependent on trade, especially in energy, Cefic says. The dominance of the North Atlantic over international relations will continue to decline with China and India possibly overtaking the US and Europe in economic importance and playing an increasingly influential role in regional and global politics, Cefic says.

Source (<https://chemweek.com/CW/Document/104273/Cefic-launches-2050-vision-for-EU-chemicals>goBackToHome)