Chemical Monthly Report (CMR)¹

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Re-Stocking brings some relief but no serious growth in demand

√ Summary

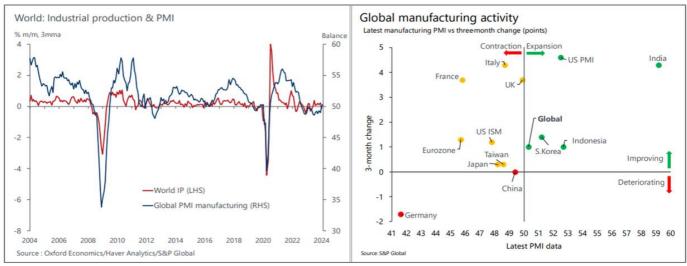
- Economic data are not painting a rosy picture. The EU27 manufacturing output for the first two months of 2024, is even 6% lower than the same period last year. Changes for the better remain bleak, with gas prices at least 50% above the pre-crisis level (2014-2019), high feedstock costs, and high trade dependency levels. Recent analysis shows that 31% of EU27 chemicals consumption in 2023 is attributable to imports from non-EU27 suppliers. In 2013, this number was at 22%.
- While the EU27 chemicals production grew by less than 0.5% during the first two months of 2024 compared to Jan-Feb 2023, China's share in the global chemicals market continues to grow. With 44% of the world market share, China will continue to hold the top ranking in sales, a position in bygone decades firmly held by Europe.
- Europe needs to change this trend, and we need to do so fast. Our <u>Antwerp Declaration for a European Industrial Deal provides a list of solutions.</u>

√ Global sentiment is slightly improving, but production growth will take time

The Oxford Economics Monthly Report (March 2024) shows that the latest global manufacturing Purchasing Managers Index (PMI) has continued to improve. A muted present situation coupled with slowly improving sentiment is also in line with the latest quarterly forecast of Oxford Economics, which predicts that global industrial production remains weak for now but will gradually pick up momentum over the course of the year. US production stagnated in January 2023, growing by a mere 0.1% compared to December 2023. The manufacturing PMI continued to climb. In the Asia-Pacific region, China and India continue to display the most industrial momentum (source: Oxford Economics Monthly Report, March 2024).

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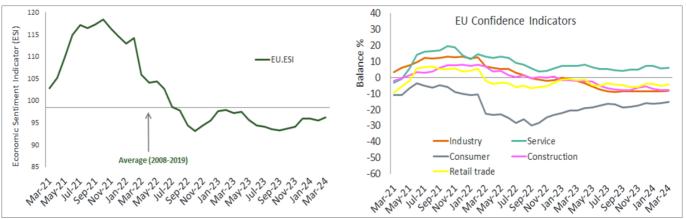
¹ Unless specified, chemical industry excludes pharmaceuticals.



Source: Oxford Economics Monthly Industry Briefing

✓ EU27 economic sentiment slightly up in March 2024

In March 2024, the Economic Sentiment Indicator (ESI) picked up in both the EU and the euro area. In the EU, the uptick in the ESI was driven by improved confidence among retailers, consumers and, to a lesser extent, services and industry managers, while confidence remained stable in construction. Amongst the largest EU economies, the ESI improved markedly in France, and to a lesser extent in Italy and Germany. It deteriorated in the Netherlands and Spain and remained broadly stable in Poland.



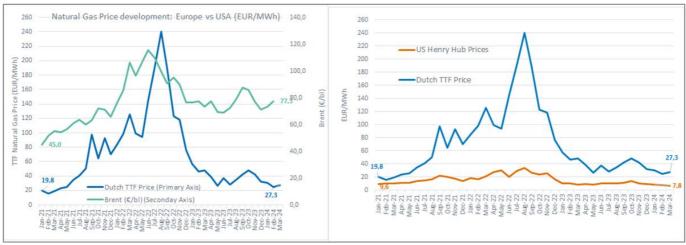
Source: EU27 commission business and consumer survey and Cefic analysis (2024)

The European Commission's Economic Uncertainty Indicator decreased again in March, driven by lower uncertainty among consumers about their future financial situation, as well as among construction, industry, and services managers about their future business situation. By contrast, uncertainty among retail trade managers increased (source: EU27 business and consumer survey, March 2023).

✓ European gas prices: There is no return to 'old normal'

The chemical industry is highly impacted by gas prices. The current gas prices (Q1-2024) are at <u>least 50% above the pre-crisis level (2014-2019)</u>. Compared to the USA, the gas price in <u>Europe remains 3.9 times higher</u>. This leaves Europe at a competitive disadvantage with the USA (among others). 2022 gas prices were more than spectacular. Consequently, EU27 chemical production was immediately

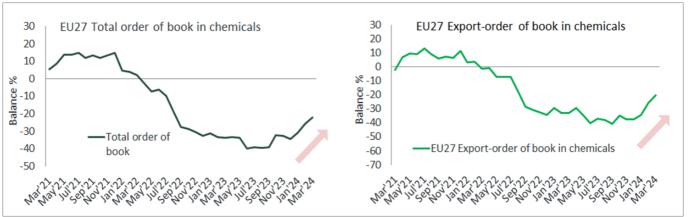
impacted by the high energy costs. The figures speak for themselves: 2022 and 2023 reported a severe output decline of more than 6%, and 2024 is still showing a weak start, and has not yet shown strong signs of a recovery. In 2024 the European chemicals production grew by less than 0.5% during the first two months compared to Jan-Feb 2023. <u>Europe must act urgently</u> and find solutions to its structural energy problem. Policies adding costs on top intended to boost transformation could <u>speed up EU</u> deindustrialisation and boost import dependencies.



Source: : ICE Dutch TTF Natural Gas Futures Historical Prices - Investing.com and INSEE Oil Prices

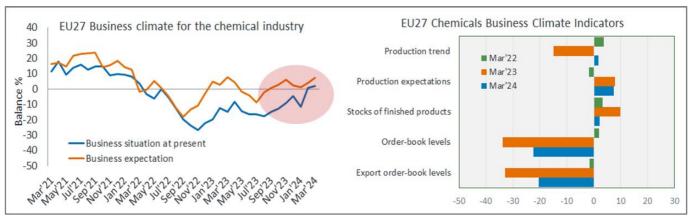
✓ Assessment of EU27 chemical overall order books showed gradual improvement

The latest EU economic survey shows a <u>significant increase in confidence</u> in the EU27 chemical industry. In March 2024, chemicals production expectations went up for the second time in row. It is certainly weak compared to the pre-crisis level but it remains in the positive digits. The assessments of the stocks of finished products decreased for the sixth consecutive month in row.



Source: EU27 commission business and consumer survey and Cefic analysis (2024)

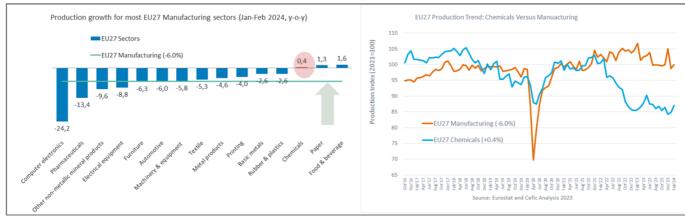
The managers' opinion on the current level of <u>overall order books continued to move into the right direction</u>, and showed a gradual improvement. The indicator on export-order of books is still showing some encouraging signs. It is too early to say that demand is gradually back to the normal level. The chemicals confidence indicator improved further in March 2024, yet is still at a low level.



Source: EU27 commission business and consumer survey and Cefic analysis (2024)

✓ 2024 shows a weak start for most EU27 sectors

Output of the entire EU27 manufacturing sector was significantly lower during the first two months of 2024 compared to the same period in 2023 (-6.0%). The year 2024 started with a strong output decline of January 2024 compared to December 2023 (-5.9%), followed by a slight upturn of 1.1% in February versus January of the same year. Focusing on Jan-Feb 2024, and with (+0.4%), the EU27 chemical industry reported the third-highest output increase among the EU27 manufacturing sectors, behind the paper (+1.3%) and food and beverage (1.6%).



Source: Eurostat and Cefic analysis (2024)

Production volumes are still not recovering due to lack of demand growth, coupled with high regional energy and feedstock costs. The slight increase in chemical volumes throughout the first two months of 2024 (+0.4%, y-o-y) must be <u>analysed with a lot of caution</u>, it could be <u>probably</u> linked to a short-term restocking. It must not be perceived as good start of stabilised demand and ongoing recovery. Time will tell if production increases in Jan-Feb 2024 will continue over the coming months.

		n growth in		on index =100)	Production growth (2024) in %	
EU27 output growth by sector	2022	2023	Jan-Feb-	Jan-Feb-	Jan-Feb 2024 (y-o-y)	
Computer electronics	-0.8	-9,9	123,8	93,8	-24,2	Ł
Pharmaceuticals	-4,2	3,4	139,9	121,2	-13,4	I
Other non-metallic mineral products	-1,5	-11,7	94,5	85,4	-9,6	l
Electrical equipment	1,0	0,6	108,8	99,3	-8,8	1
Furniture	-2,6	-7,8	94,1	88,2	-6,3	1
Automotive	5,1	11,3	118,3	111,2	-6,0	١
Machinery & equipment	2,3	-1,4	108,9	102,6	-5,8	١
Textile	0,1	-7,0	94,1	89,1	-5,3	1
Metal products	-0,6	-2,3	99,9	95,3	-4,6	1
Printing	-1,3	-9,5	90,8	87,2	-4,0	1
Basic metals	4,9	-4,9	91,3	88,9	-2,6	1
Rubber & plastics	4,2	-4,3	95,4	93,0	-2,6	ļ,
Chemicals	-6,2	-8,0	85,6	85,9	0,4	1
Paper	-1,2	-9,8	90,9	92,1	1,3	
Food & beverage	16,6	-1,3	101,1	102,7	1,6	
Manufacturing	2,2	-1,4	105,7	99,4	-6,0	4
Construction	2,7	-0,2	105,3	104,1	-1,2	ŀ

The weak global demand is not helping the European manufacturing sectors. The business environment climate is modest and needs strong improvement to come back to the pre-crisis level. Data shows no sign of rapid and noticeable recovery in 2024.

Source: Eurostat and Cefic analysis (2024)

The chemical industry in <u>Europe is under cost and demand pressures</u>, and certainly more than in the other competing countries in the world. Chemicals production in Europe faces more structural challenges rather than business cycle issues. The latest announcements on <u>closure of crackers</u> units in Europe underpin this.

✓ China became the largest EU27 chemical import country

The chemical industry business is based on <u>free, fair trade and open markets</u>, both for its raw materials and as outlets for its products. EU's framework conditions in a global business environment provide that Europe depends more and more on imports from non-EU27 countries. Recent analysis shows that 31% of EU27 chemicals consumption in 2023 is attributable to imports from non-EU27 suppliers. In 2013, our import intensity (imports as % of EU27 consumption) was 22%, which is far lower.

Top 10 EU27 Import Markets by sector (Year 2023, €bn)												
	Basic Inorganics			Petrochemicals		Polymers			Chemicals			
eh	Largest Import	25.0	Chara in 0/	Largest Import	74.5	Share in	Largest Import	20.2	Charain 0/	Largest Import	100.1	Share in
€bn	Markets	25,8	Share in %	Markets	74,5		Markets	30,2	Share in %		189,1	%
1	Russia	3,1	12,0%	China	19,1	25,6%	USA	6,5	21,5%	China	34,7	18,3%
2	South Korea	2,9	11,1%	Switzerland	12,4	16,6%	South Korea	3,8	12,6%	USA	31,0	16,4%
3	China	2,6	9,9%	USA	10,4	13,9%	China	3,8	12,6%	UK	21,4	11,3%
4	USA	1,9	7,4%	UK	7,0	9,3%	UK	2,7	8,8%	Switzerland	18,3	9,7%
5	UK	1,8	6,9%	India	5,1	6,8%	Japan	1,9	6,3%	South Korea	13,0	6,9%
6	Egypt	1,4	5,3%	Singapore	2,7	3,7%	Saudi Arabia	1,7	5,7%	Japan	8,0	4,2%
7	Norway	1,3	4,9%	Japan	2,1	2,8%	Turkey	1,7	5,5%	India	7,0	3,7%
8	Japan	1,1	4,3%	Saudi Arabia	1,9	2,6%	Switzerland	1,3	4,3%	Turkey	4,8	2,5%
9	Morocco	1,1	4,2%	South Korea	1,8	2,5%	Taiwan	0,8	2,7%	Saudi Arabia	3,9	2,1%
10	Turkey	1,1	4,1%	Indonesia	1,7	2,3%	Egypt	0,6	2,0%	Singapore	3,8	2,0%
	Top 20	23	89%	Top 20	70	94%	Top 20	29	95%	Top 20	170	90%

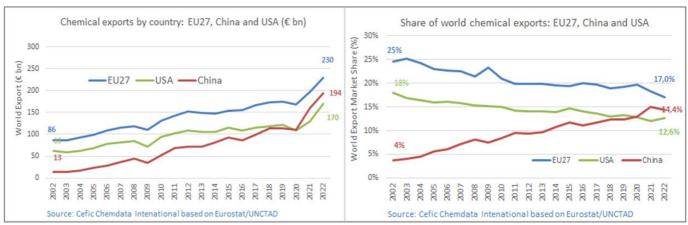
Source: Eurostat (Comext) and Cefic analysis (2024)

The table above shows that with €34.7 bn, China is the largest EU27 chemical import country contributing to 18.3% of extra-EU27 chemicals imports, followed by USA (16.4%) and UK (11.3%). Combined, China and the USA account for more than 1/3 of extra-EU chemicals imports in 2023. More than half of EU27-China chemicals imports is attributable to Petrochemicals (19.1 bn vs €34.7 bn,

55%). <u>China is dominating our EU27 chemicals trade activity</u>, and the chemicals sector in Europe will be more exposed to such trend during the coming years.

✓ China continues to gain share in the global chemical export

Long-term analysis shows that overall growth of chemicals demand and production as well as faster growth in emerging regions is a trend that is expected to continue in the future. With 44% of the world market share, China will continue to hold the top ranking in sales, a position once firmly held by Europe. Although competition in China's chemical market is currently intensifying and demand growth is weaker than in the past.



Source: Eurostat (Comext) and Cefic analysis (2024)

A deeper trade analysis is carried out in order to <u>capture the loss of EU27 chemicals exports market share</u> during the years (2002-2022). As shown in the chart above, with 17% in 2022, Europe is still the leader in the global chemicals export market, followed by China (14.4%) and the USA (12.6%). China is really dominating chemicals exports, and <u>gaining intensively export market share at the expense of Europe and the USA</u>. China's global share went up from 4% in 2022 to 14.4% in 2022, while the EU27's share dropped significantly from 25% to 17% during the same period.

Chinese chemical exports to high-cost Europe continued to increase over 2023/4 (primarily due to overcapacity in China with a favourable cost position). Europe is still reliant on imports of chemicals from China for several products. <u>Petrochemicals</u> is more concerned than the other chemicals sectors.

✓ EU27 import dependency analysis of Petrochemicals (2022)

All countries in the world constantly need to import from abroad to satisfy domestic demand and stimulate the economy. If imports continue to grow more steeply than domestic production, the EU27 simply further increases its dependency on non-EU countries, a trend we have already seen since 2013. We made a detailed trade analysis of EU27 Petrochemicals industry using Eurostat Prodcom data, which covers more than 160 products. For each product, we calculated both trade deficit in volume terms (Million Tonnes), and imports intensity (expressed as imports as % of EU27 consumption).

	PRCCODE (Codes)	Petrochemicals (Nace 2014, Year 2022)	EU27 Production (MT)	Extra-EU27 Imports (MT)	EU27 Trade Balance (MT)	EU27 Imports (% of EU27 Consumption)
1	20142210	Methanol	1,60	6,14	-5,8	
2	20143197	Industrial monocarboxylic fatty acids (excluding stearic, oleic, tall oil, distilled)	0,13	1,89	-1,8	
3	20141120	Saturated acyclic hydrocarbons	1,02	1,79	-1,7	
4	20147340	Naphthalene and other aromatic hydrocarbon mixtures	4,20	1,78	-1,0	
5	20147400	Undenatured ethyl alcohol of an alcoholic strength by volume >= 80%	5,10	1,53	-1,1	
6	20142310	Ethylene glycol (ethanediol)	1,00	0,77	-0,7	
7	20143219	Esters of acetic acid (excluding ethyl acetate)	0,53	0,77	-0,6	
8	20146310	Acyclic ethers and their halogenated, sulphonated, nitrated or nitrosated derivatives	1,80	0,75	-0,2	
9	20143271	Acetic acid	0,15	0,74	-0,7	
10	20143430	Phthalic anhydride; terephthalic acid and its salts	1,80	0,69	-0,1	
11	20141245	p-Xylene	0,55	0,64	-0,5	
12	20147200	Wood charcoal whether or not agglomerated (including shell or nut charcoal)	0,30	0,58	-0,5	
13	20147500	Denatured ethyl alcohol and other denatured spirits; of any strength	1,02	0,56	-0,5	
14	20141213	Cyclohexane	0,24	0,44	-0,4	
15	20141190	Unsaturated acyclic hydrocarbons (excluding ethylene, propene, butene, buta-1,3-dien	0,81	0,42	-0,3	

Below average
Significantly above average
Excessively above average

Source: Eurostat (Prodcom, Comext) and Cefic analysis (2024

The results show that some petrochemical products <u>present a severe import dependency</u> via-à-vis the non-EU27 suppliers. Methanol is a concrete example where more than 80% of EU27 home consumption is provided by non-EU27 suppliers. Other products shows the same exposure such as "Saturated acyclic hydrocarbons", "Acetic acid", and "p-Xylene".