Key findings:

- **The January-Sep 2021 data indicates that the chemical output is returning to the pre-COVID19 pandemic levels** due to the 10.7% increase in manufacturing output in EU27 during the first three quarters of 2021.

- **The ESI (Economic Sentiment Indicator) increased slightly and remains at a high level**: Coming down from an all-time high in July, the ESI indicator remained in October at a high level in the EU27. Confidence improved in services and construction but weakened among consumers.

- **Uncertainty still at a high level compared to pre-pandemic levels**: uncertainty increased among industry managers, potentially associated with growing bottlenecks due to the shortage of certain input components and raw materials. **Shortages of equipment continues to be a key factor having shot up recently and remaining at an elevated level.**

- **Higher prices are one of many latest challenges facing businesses.** Higher energy prices lead directly to increasing prices of energy-intensive chemicals products. Rising commodity prices (such as oil and metals) are increasing operating costs and reducing profit margins. Prices in the EU27 petrochemicals sector increased by about 28% in 2021 compared to the previous year’s level (Jan-Sep-2020).

- **Chemical output increased by 7.0% in 2021 compared to the previous year’s level (Jan-Sep-2020).** Following the COVID-19 outbreak EU27 chemical output was up 7.0% during the first three quarters of 2021, compared to the same period of 2020. Chemical output level was in 2021 about 3% above the pre-pandemic level (Jan-Sep-2019).

- **Chemical trade exports decreased for the second time in row since June 2021.** EU27 exports posted a value of €128.2 bn in the first eight months of 2021, 15% above 2020’s level and 8.4% above the pre-pandemic level.

- **Chemical output in China decreased for the seventh time in row since February 2021.** Output in the chemicals sector in China increased by 11.5% in 2021 compared to the previous year’s level (Jan-Sep-2020).

- **EU27 Chemical output is expected to grow by 5.0% in 2021 and 2.5% in 2022.** Recent spikes in energy prices and the persistency in the supply-chain disruptions pose a bigger downside risk in the near-term for growth for Q4 2021 and into early-2022. EU27 chemical output expected to grow by +5.0% in 2021 and +2.5% in 2022.
1. The ESI increased slightly and remains at a high level

According to EU Commission Business Survey, in October 2021, the Economic Sentiment Indicator (ESI) increased slightly from September’s value (117.6 vs 116.6). The ESI scores markedly above its long-term average and pre-pandemic level and remained at a high level.

According to EU Commission Business Survey, in October 2021: The new Economic Uncertainty Indicator (EUI) stayed virtually unchanged and still at a high level compared to pre-pandemic levels. Uncertainty increased among industry managers, potentially associated with growing bottlenecks due to the shortage of certain input components and raw materials. On the other hand, services managers reported the third consecutive decrease of perceived uncertainty. The readings for retail trade and construction remained virtually unchanged compared to the last month.

2. Uncertainty is still at a high level compared to pre-pandemic levels and associated with the shortage of certain input components

The ESI’s increase in October was driven by improving confidence in services, construction and, to a lesser extent, retail trade. Confidence remained virtually unchanged in industry, while it weakened among consumers.

3. Recent disruptions are impacting the sentiment of firms across industry in the eurozone

According to the latest Oxford Economic Monthly Report (Oct-2021), survey data for factors limiting production in the eurozone highlights the impact that recent disruptions have had on the sentiment of firms across industry.

Shortages of equipment continues to be a key factor having shot up recently and remaining at an elevated level. However, most of this is stemming from just a handful of sectors, including motor vehicles, electrical equipment, electronics and mechanical engineering”. Source Oxford Economic Monthly Report (Oct-2021)
4. Higher prices lead directly to increasing prices of energy-intensive products

Prices for naphtha, the most important raw material in the chemical industry, are following the crude oil price trend. Prices in the EU27 chemicals sector increased by 13.3% in 2021 compared to the previous year’s level (Jan-Sep-2020). Prices in September 2021 were 23% higher than in July 2020. **Chemical prices reached their highest reading.**

![EU27 Producer prices in the chemicals industry](image1)

Source: Eurostat and Cefic Analysis

**Prices in the EU27 petrochemicals sector increased by about 28% in 2021 compared to the previous year’s level (Jan-Sep-2020). Prices in the plastics sector increased by 21.3%, followed by synthetic rubber and fertilizers where prices increase were around 17% during the first three quarters of 2021.**

![EU27 Producer prices: changes (Jan-Sep, 2021 vs 2020)](image2)

Source: Eurostat and Cefic Analysis

5. Rising commodity prices (such as oil and metals) are increasing operating costs and reducing profit margins

According to the latest Oxford Economic Monthly Report (Oct-2021), higher prices are one of the latest of many challenges facing businesses, both on the manufacturing and services side of the economy. Rising commodity prices such as oil and metals are increasing operating costs and reducing profit margins, though more so for capital-intensive sectors.

6. Chemical output in 2021, 7.0% above 2020’s level

Output in the EU27 chemicals sector increased by 7.0% in 2021 compared to the previous year’s level (Jan-Sep-2020). In September 2021, output in the EU27 chemicals sector was about 6% above the level of September of 2020. Across Europe there are some concerns over how growth will hold up in Q4 in the face of the supply-chain disruptions, rising inflation, and risks of lingering covid restrictions.

![EU27 Chemicals Output](image3)

Source: Eurostat and Cefic Analysis

7. Chemical sales and consumption reached their highest reading

In 2020, total sales in the EU27 chemical business posted a value of €499.1 billion in 2020, 6.4% below the previous year’s level. EU27 chemicals sales posted a value of €411.6 billion in the first eight months of 2021, up from €344.6 billion during the same period of 2020 (+19.4%). In
2020, total consumption in the EU27 chemical business posted a value of €385.9 for the first eight months of 2021. **EU27 chemicals consumption was about 21% above the previous year’s level.**

![Graph showing EU27 chemicals sector: Key changes (2021 vs 2020)](image)

**Source: Eurostat and Cefic Analysis**

8. **Chemical exports decreased for the second time in row since June 2021**

Extra-EU27 exports posted a value of €128.2 billion in the first eight months of 2021, up from €111.7 billion during the same period of 2020 (+14.8%). Exports values decreased for the second time in row since June 2021. **Exports in 2021 were 8.4% above 2019’s level (Jan-Aug).**

9. **Chemical imports decreased for the second time in row since June 2021**

Extra-EU27 imports posted a value of €102.5 billion in the first eight months of 2021, up from €86.5 billion during the same period of 2020 (+18.4%). Imports values decreased for the second time in row since June 2021. **Imports in 2021 were 13.9% above 2019’s level (Jan-Aug).**

10. **Chemical output in China decreased for the seventh time in row since February 2021**

Output in the chemicals sector in China increased by 11.5% in 2021 compared to the previous year’s level (Jan-Sep-2020). However, production index in China declined for the seventh time in row since February 2021.

11. **Global Chemicals: Output decreased for the third time in row since June 2021**

Output in the chemicals sector in the globe increased by 8.5% in 2021 compared to the previous year’s level (Jan-Sep-2020). **However, chemicals production index in the world declined for the fourth time in row since May 2021. “The industrial recovery has stalled in recent months. Global industrial production posted a second consecutive decline in August and the JP Morgan Global Manufacturing PMI remained at 54.1 in September.”**

![World chemical production index (January 2019 — October 2021)](image)

**Source: Cefic Chemdata International and Cefic Analysis**

12. **Manufacturing output in 2021, 1.0% below 2019’s level**

A variety of wide-reaching disruptions to many industrial sectors is the main reason for this”. **Source Oxford Economic Monthly Report (Oct-2021).**
Output in the EU27 manufacturing sector increased by 10.7% in 2021 compared to the previous year’s level (Jan-Sep 2020). Sectors far below the pre-covid levels are automotive, printing, textile, basic metals, machinery and equipment (2021 vs 2019, Jan-Sep). Sectors far above the pre-covid levels are electrical equipment, electrical appliances and pharmaceuticals (2021 vs 2019, Jan-Sep). All in all, EU27 manufacturing output is 1.0% below the pre-covid level (Jan-Sep, y-o-y).

13. Systemic supply-chain disruptions, labour shortages and rising prices weighing on chemical industry outlook

Recent spikes in energy prices and the persistency in the supply-chain disruptions pose a bigger downside risk in the near-term for growth for Q4 2021 and into early-2022. Global GDP is expected to grow by +4.0% in 2022, from 5.4% in 2021. EU27 chemical output expected to grow by +5.0% in 2021 and +2.5% in 2022.

Source: Eurostat and Cefic Analysis