

ECONOMIC REPORT

# Economic and steel market outlook 2023-2024

First quarter report  
Data up to, and including, third quarter 2022

February 2023

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**EUROFER**  
THE EUROPEAN STEEL ASSOCIATION

# Introduction

The picture emerging from the data of the third quarter of 2022 confirms and deepens the negative trends observed in the second quarter of 2022. Ongoing war-related disruptions, poor demand outlook and severe rises in energy prices and production costs, impacted apparent steel consumption, ending the post-COVID positive dynamic. All these downside factors are expected to continue weighing heavily until the end of 2022 and up until the second quarter of 2023 included, as a result of the prolonged effects of Russia's war in Ukraine. Subsequently, in the third quarter of 2022 apparent steel consumption fell markedly (-11.2%, after a drop of -4.7% in the second quarter), totalling a volume of 32.2 million tonnes. This is the lowest level seen since the post-pandemic peak period.

In 2022, apparent steel consumption is going through its third annual recession over the last four years (-4.6%, revised downwards from -3.5%), mostly as a result of quarterly drops over the third and fourth quarters of 2022. Apparent steel consumption is set to decrease also in 2023, albeit at a lower rate (-1.9%), as demand from steel-using sectors is predicted to remain severely undermined, at least until the second quarter of 2023. In 2024, subject to more favourable developments in the industrial outlook and improvements in steel demand, apparent steel consumption is expected to recover, albeit modestly (+1.6%). These developments are conditional on the future evolution of energy prices and the Russia-Ukraine war – unforeseeable at the time of writing – and its impact on global supply chains.

## EU steel market overview

In the third quarter of 2022, apparent steel consumption fell (-11.2%, after a drop of -4.7% in the second quarter), totalling a volume of 32.2 million tonnes. This is the lowest level seen since the third quarter of 2020.

In 2021, apparent steel consumption had rebounded (+16.3%) after plummeting dramatically due to the COVID-19 pandemic in 2020 (-10.7%). The heavy consequences of the conflict in Ukraine on steel-using industries and the worsened overall economic outlook are set to take their toll on apparent steel consumption resulting in a deeper-than-expected recession (-4.6%, previously estimated at -3.5%), as a result of quarterly drops over the second, third and fourth quarters of 2022. Due to continued downside factors (war, energy prices, high inflation) and to a worsened economic outlook for 2023, apparent steel consumption is also set to drop in 2023, albeit slightly less than previously estimated (-1.6% vs. -1.9%). This would represent the fourth annual recession in the last five years. In 2024, subject to more favourable developments in the industrial outlook and improvements in steel demand, apparent steel consumption should experience a modest recovery (+1.6%).

The overall evolution of steel demand remains in any case subject to very high uncertainty, which is likely to continue to undermine demand from steel-using sectors at least for the first half of 2023.

Domestic deliveries mirrored weak demand over the third quarter of 2022 and saw a sharp decrease (-10.5%). This was the third consecutive drop (-7% in the second quarter, -0.1% in the first). In 2021, deliveries had significantly rebounded (+11.9%), following 2020's sharp drop (-9.6%) that marked the second consecutive decline in yearly terms after 2019 (-4.2%).

Paralleling the continued and quick deterioration in steel demand, imports into the EU – including semi-finished products – sharply decreased (-17.2%) over the third quarter, after an increase in the preceding quarter (+1.6%).

## EU steel-using sectors

Despite the persisting supply chain issues affecting the automotive sector in particular and the war in Ukraine, steel-using sectors have displayed resilience. In the third quarter of 2022, they marked the seventh consecutive year-on-year quarterly growth (+4.0%, after +3.1% in the second quarter). Having started in the third quarter of 2020 after the removal of the COVID-related lockdown measures, this positive trend has continued ever since,

despite the negative impact of increasing supply chain issues and rising energy prices on total production activity in steel-using sectors.

The war in Ukraine has had a limited impact on output so far, but a considerable worsening of the situation is expected for the fourth quarter of 2022. This is due to persistently high energy prices despite the recent sharp decline in the TTF gas price index, and to the steady deterioration of the general economic outlook.

In the first three quarters of 2022, the positive evolution of all sectors' output was a combination of very strong developments in the construction, mechanical engineering and transport sectors on one hand, and a drop in domestic appliances output on the other. Notably, output in the automotive sector recorded its second, remarkable rebound (+20.7%, after +1.8%), inverting the negative trend of the preceding quarters, which was due to supply chain disruptions and lack of components, among others.

Total output in steel-using sectors in 2021 rebounded (+6.8%) after the sharp drop recorded in 2020 due to the impact of the pandemic (-10.2%). Steel-using sectors' output is expected to continue to expand in 2022 at a slightly higher rate than previously predicted (+2.1% vs. +1.9%). On one hand, developments in the second and third quarters were stronger than expected, as output growth proved robust and resilient despite the war in Ukraine and its related disruptions. On the other hand, the rapid deterioration of the global industrial and economic outlook coupled with the long-lasting effects of the rise in energy costs is expected to yield a drop in output over the last quarter of 2022.

As a result of a likely continuation of these downside factors into the first two quarters of the current year, output is expected to contract in 2023 (-0.6%). This would be the second SWIP recession since 2013, after the one experienced in 2020 due to the pandemic. Output was flat in 2019. Based on the current scenario, the economic and industrial outlook is presupposed to gradually recover only starting from the second quarter of 2023, before achieving a moderate growth in 2024 (+1.8%) thanks to improved economic confidence and some recovery in the industrial cycle.

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# The EU steel market: supply

## Real steel consumption

### Real steel consumption in the third quarter of 2022

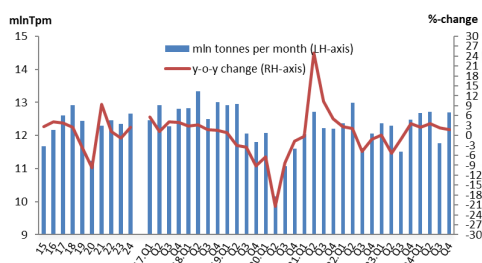
In the third quarter of 2022 real steel consumption dropped (-4.9%), after increasing over the second quarter (+2.2%).

Real steel consumption had rebounded strongly in 2021 (+9.5%, after -9.7% in 2020 and -3.7% in 2019) and growth is expected to continue, albeit at much lower rate, in 2022 (+1.3%, revised upwards from +0.7% in the previous outlook), before an expected decrease in 2023 (-0.8%, formerly set at -1.1%) as a result of the continued negative demand outlook. A rebound (+2.5%) is foreseen for 2024.

Two consecutive recessions occurred in 2019 and 2020, provoked by the considerable slowdown in the activity of steel-using sectors and the COVID crisis respectively. A counter-cyclical destocking trend from late 2019 continued throughout 2020 and only reversed starting from the first quarter of 2021, mirroring expectations of continued growth in steel demand. It was also visible in the first quarter of 2022, but over the second quarter it came to an end due to the rapidly worsening industrial outlook for the rest of 2022 due to Russia's invasion of Ukraine. This trend is expected to continue at least until the second quarter of 2023, due to the continued impact of the war, high inflation and energy prices, as well as the deterioration of the global outlook.

In line with SWIP developments (see page 11), real steel consumption is expected to increase in 2022 (+1.3%), to drop in 2023 (-0.8%) and to rebound in 2024 (+2.5%), mirroring an expected improvement in the industrial outlook and in steel demand.

**EU REAL STEEL CONSUMPTION**  
Forecast from Q4-2022



FORECAST FOR REAL CONSUMPTION - % CHANGE YEAR-ON-YEAR											
Period	Year 2022	Q1'23	Q2'23	Q3'23	Q4'23	Year 2023	Q1'24	Q2'24	Q3'24	Q4'24	Year 2024
% change	1.3	0.1	-5.4	-0.9	3.5	-0.8	2.4	3.5	2.3	1.8	2.5

## Apparent steel consumption

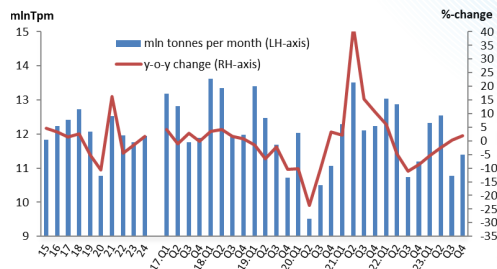
### Apparent steel consumption in the third quarter of 2022

The positive post-COVID trend seen in apparent steel consumption came to an end in the second quarter of 2022, impacted by ongoing war-related disruptions, a poor demand outlook and severe rises in energy prices and production costs. In particular, all these downside factors are expected to continue weighing heavily until the end of 2022 and up to the second quarter of 2023 included, as a result of the prolonged effects of the war in Ukraine. Subsequently, in the third quarter of 2022 apparent steel consumption fell markedly (-11.2%, after a drop of -4.7% in the second quarter), totalling a volume of 32.3 million tonnes.



This is the lowest level seen since the third quarter of 2020. In 2021, apparent steel consumption had rebounded (+16.3%) after plummeting dramatically due to the COVID-19 pandemic in 2020 (-10.7%). The heavy consequences of the conflict in Ukraine on steel-using industries and the worsened overall economic outlook are set to take their toll on apparent steel consumption, resulting in deeper-than-expected recession (-4.6%, previous forecasts -3.5%), as a result of quarterly drops over the second, third and fourth quarters of 2022. Due to continued downside factors (war, energy prices, high inflation) and to a worsened economic outlook for 2023, apparent steel consumption is also set to drop in 2023, albeit slightly less than previously estimated (-1.6% vs. -1.9%). This would represent the fourth annual recession over the last five years. In 2024, conditional on more favourable developments in the industrial outlook and improvements in steel demand, apparent steel consumption should experience a modest recovery (+1.6%).

**EU APPARENT STEEL CONSUMPTION**  
Forecast from Q4-2022



The overall evolution of steel demand remains in any case subject to very high uncertainty, which is likely to continue to undermine demand from steel-using sectors at least for the first half of 2023.

**EU domestic and foreign supply**

Domestic deliveries mirrored weak demand over the third quarter of 2022 and saw a sharp decrease (-10.5%). This was the third consecutive drop (-7.0% in the second quarter, -0.1% in the first). In 2021, deliveries had sharply rebounded (+11.9%), following 2020's sharp drop (-9.6%) that marked the second consecutive decline in yearly terms after 2019 (-4.2%).

Paralleling the continued and quick deterioration in steel demand, imports into the EU – including semi-finished products – sharply decreased (-17.2%) over the third quarter, after increasing in the preceding quarter (+1.6%).

EU APPARENT STEEL CONSUMPTION - IN MILLION TONNES PER YEAR											
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022 (f)	2023 (f)	2024 (f)
Million tonnes	136	142	147	149	153	145	129	150	144	141	143

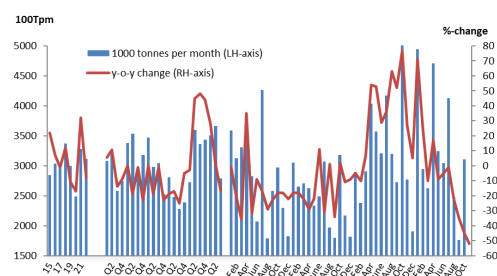
FORECAST FOR EU APPARENT STEEL CONSUMPTION - % CHANGE YEAR-ON-YEAR											
Period	Year 2022	Q1'23	Q2'23	Q3'23	Q4'23	Year 2023	Q1'24	Q2'24	Q3'24	Q4'24	Year 2024
% change	-4.6	-5.4	-2.5	0.3	1.9	-1.6	1.7	0.3	1.4	3.1	1.6

**Imports**

Total steel imports (including semis) into the EU decreased (-17% year-on-year) over the third quarter of 2022, after a modest increase (+1.6%) in the second quarter.

Imports of finished products equally fell (-12%), after a similar increase (+2%) in the preceding quarter. Over the same period, imports of flat products fell (-15%), whereas imports of long products increased very moderately (+1%).

**EU TOTAL STEEL IMPORTS, FINISHED PRODUCTS**

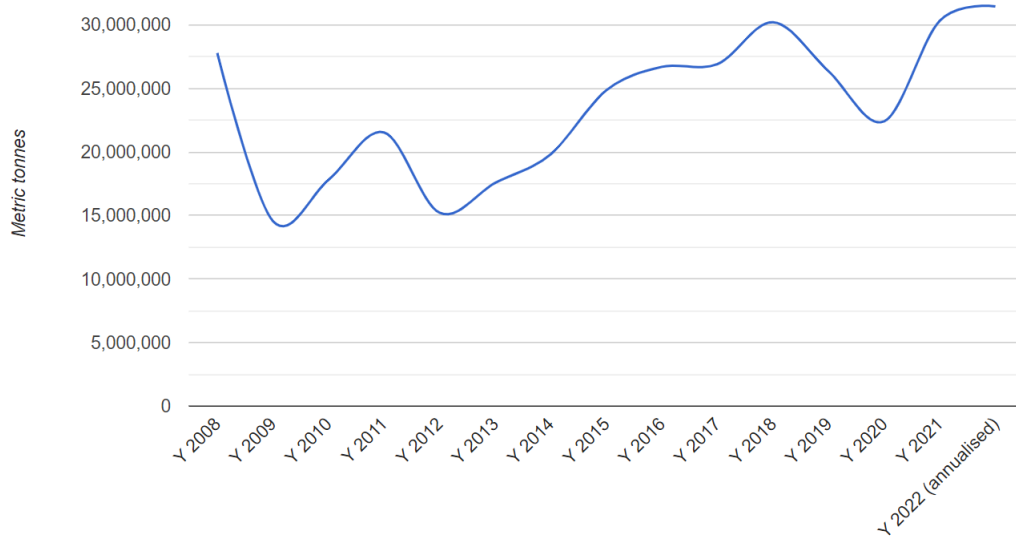


## The EU steel market: supply

In the first eleven months of 2022, imports of finished products dropped (-5%) compared to the same period of the previous year, while in 2021 a significant rise (+35%) was recorded. From January to November 2022, imports of flat products decreased (-9%), while imports of long products rose (+10%).

Imports were volatile across 2020, 2021 and the first eleven months of 2022, continuing a trend seen since 2019. After the outbreak of COVID-19, imports surged again for certain products and showed some volatility in the second half of 2020, but the increase became much more pronounced during 2021, particularly in the second and third quarters, up to high levels in historical terms. This development mirrored buoyant steel demand conditions until the end of 2021, while volatility continued throughout the fourth quarter of 2021 and the first eleven months of 2022. Reflecting weaker demand from the first quarter of 2022, imports have constantly been declining in volumes throughout 2022.

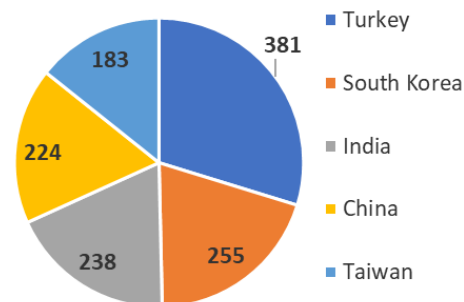
### TOTAL IMPORTS FROM THIRD COUNTRIES, FINISHED STEEL PRODUCTS 2008-2022 (YTD)



### Imports by country of origin

In the first eleven months of 2022, the main countries of origin for finished steel imports into the EU market were Turkey, India, South Korea, China and Taiwan. As a consequence of EU sanctions and war disruptions respectively, the Russian Federation and Ukraine were no longer among the top five exporting countries to the EU, as imports from these two countries dropped considerably (-68% and -49% respectively). The top five exporting countries together represented 51% of total EU finished steel imports. Turkey continued to be the largest exporter of finished steel products to the EU (with a share of 15.2%), followed by South Korea (with 10.2%), which has replaced India (9.5%) as the second largest exporter. China is the fourth largest exporter to the EU (8.9%), and Taiwan the fifth (7.3%).

### EU FINISHED STEEL IMPORTS BY COUNTRY 11M-2022, monthly '000 metric tonnes



Over the first eleven months of 2022, imports of finished products from third countries decreased overall (-5%). This resulted from diverging developments in imports from major exporting countries: imports of finished products from India and Turkey sharply dropped (-25% and -7% respectively), whereas imports from China, South Korea and Taiwan increased markedly (+85%, +31% and +25% respectively).

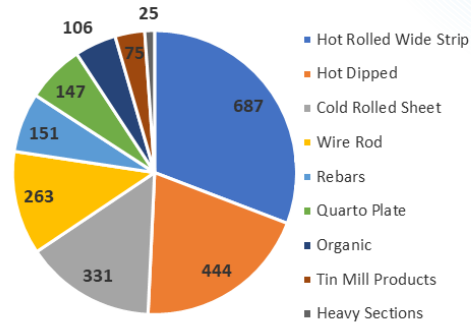
Imports by product category

Customs data show that over the first eleven months of 2022 imports of flat products dropped (-9%), while imports of long products increased (+10%). The share of long products out of total finished steel product imports was 24%. In the same period, imports of flat products decreased (-15%), while imports of long products rose very moderately (+1%). Overall, imports of finished products dropped (-12%).

Within the flat product market segment, over the first eleven months of 2022 imports of all flat products decreased compared to the same period of 2021. The only exceptions were imports of tin mill products (+43%), organic coated sheets (+22%), and cold-rolled sheets (+2%). By contrast, imports of all other flat products dropped, notably hot-rolled wide strip (-19%), quarto plate (-17%), hot dipped (-16%) and coated sheets (-10%).

Meanwhile, all long product imports rose in the first eleven months of 2022. In detail, imports increased particularly for rebars (+22%). More moderate increases were recorded for merchant bars (+11%), wire rod (+4%) and heavy sections (+1%).

EU FINISHED STEEL IMPORTS BY PRODUCT  
11M-2022, monthly '000 metric tonnes

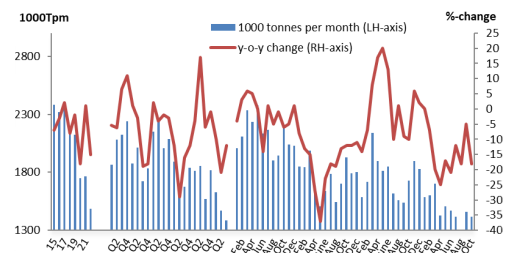


Exports

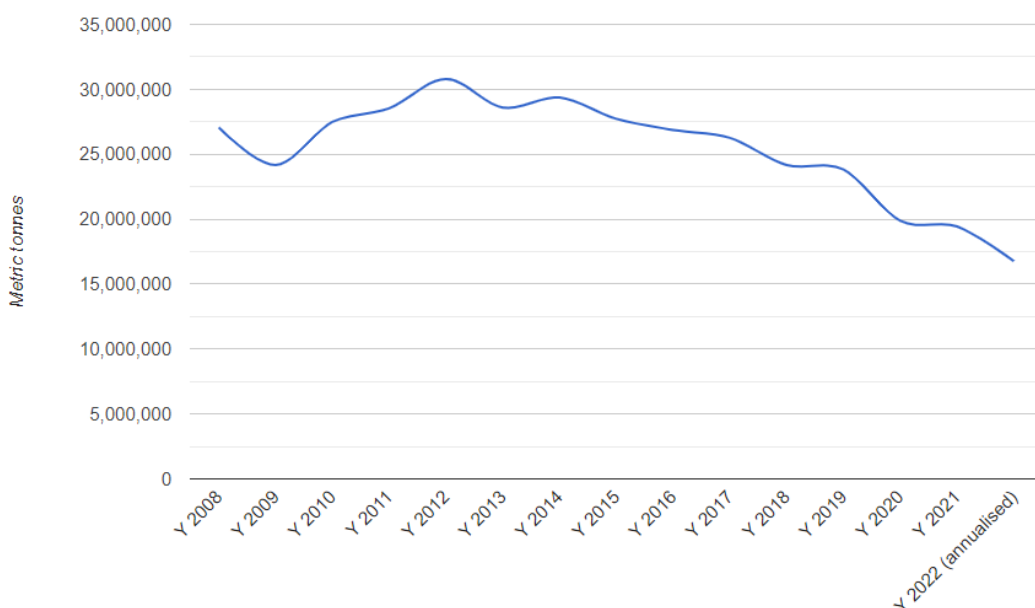
In the first eleven months of 2022 total EU exports of steel products to third countries considerably decreased (-15%), as well as exports of finished steel products (-12%). In particular, exports of flat and long products both dropped (-8% and -21% respectively).

Over the third quarter of 2022, exports of finished products dropped (-9%), as a result of declining exports both of flat and long products (-6% and -15% respectively).

EU TOTAL STEEL EXPORTS



EU TOTAL STEEL EXPORTS – FINISHED PRODUCTS  
2008-2022 (YTD)





## The EU steel market: supply

### Exports by country

The main destinations for EU steel exports over the first eleven months of 2022 were the United Kingdom, Turkey, the United States, Switzerland and China, followed by Norway, Egypt, Brazil and India. The first five destinations together accounted for 58% of total EU finished product exports.

Among major export destinations over the first eleven months of 2022, exports of finished products to Brazil increased (+49%), as well as to the United States (+9%) and to Egypt (+5%). By contrast, exports to China and the United Kingdom recorded a double-digit decrease (-35% and -16%, respectively), while exports to India, Switzerland and Norway decreased more moderately (-7%, -6% and -4% respectively).

### Exports by product category

In the first eleven months of 2022, exports of both flat and long products dropped (-8% and -21% respectively). Over the third quarter of 2022, exports of both flat and long products dropped as well (-6% and -15% respectively).

In the first eleven months of 2022, flat products accounted for 69% of finished product exports overall.

Exports of most individual flat products decreased compared to the same period of the previous year. Notably, a decline was recorded for organic coated sheets (-26%), hot dipped (-16%), tin mill products (-16%) as well as cold rolled sheets (-9%). By contrast, exports of hot rolled wide strip and quarto plate increased, albeit moderately (+6% and +3% respectively).

Among long products, exports of all products dropped (merchant bar -24%, wire rod -22%, heavy sections -19%, and rebars -16%).

### Trade balance

The EU's total steel product trade deficit (finished plus semis) amounted to 1.8 million tonnes per month over the first eleven months of 2022. In 2021, total trade deficit amounted to 1.5 million tonnes per month.

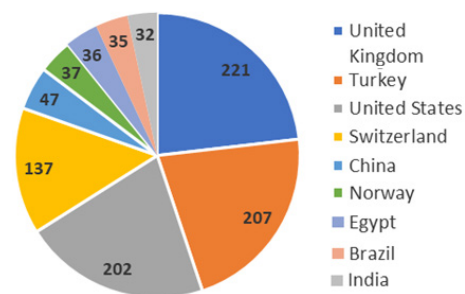
For finished products, the trade deficit over the first eleven months of 2022 amounted to 1.2 million tonnes per month. Over the entire year 2021, trade deficit amounted to 908 kilotonnes.

Over the first eight months of 2022, flat products recorded a deficit of 1 million tonnes per month (1,023 kilotonnes; 924 kilotonnes in 2021). Long products also recorded a deficit (201 kilotonnes), whereas a surplus (17 kilotonnes) was recorded in 2021.

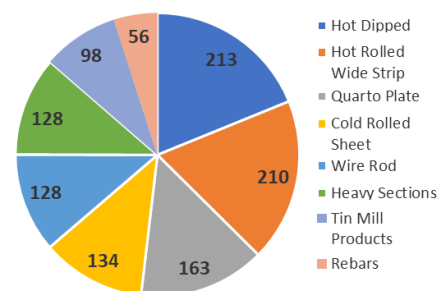
The biggest trade deficits - including semis - with individual trade partners over the first eleven months of 2022 were with Russia (449 kilotonnes), India (273 kilotonnes), South Korea (256 kilotonnes), Turkey (204 kilotonnes), Ukraine (197 kilotonnes) and Taiwan (187 kilotonnes).

The major destination countries for EU finished steel exports with a trade surplus eleven months into 2022 were the United States (235 kilotonnes), Switzerland (87 kilotonnes) and the United Kingdom (52 kilotonnes).

**EU FINISHED STEEL EXPORTS BY DESTINATION**  
11M-2022, monthly '000 metric tonnes



**EU FINISHED STEEL EXPORTS BY PRODUCT**  
11M-2022, monthly '000 metric tonnes



# The EU steel market: final use

## Outlook for steel-using sectors

### Total steel-using sector activity in the third quarter of 2022

Despite the persisting supply chain issues affecting the automotive sector in particular, the war in Ukraine, steel-using sectors have proved quite resilient. In third quarter of 2022, they marked the seventh consecutive year-on-year growth (+4.0%, after +3.1% in the second quarter). This positive trend, started in the third quarter of 2020 after the removal of the COVID-related lockdown measures, has continued despite the negative impact of increasing supply chain issues and rising energy prices on total production activity in steel-using sectors.

The war in Ukraine has had a limited impact on output so far, but a considerable worsening of the situation is awaited in the fourth quarter of 2022. This is due to persistently high energy prices despite the recent sharp decline in the TTF gas price index, and to the steady deterioration of the general economic outlook.

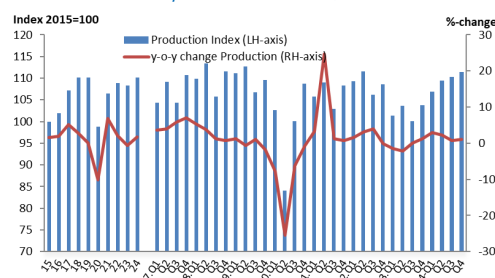
In the first three quarters of 2022, the positive evolution of all sectors' output was a combination of very strong developments in the construction, mechanical engineering and transport sectors on one hand, and a drop in domestic appliances output on the other. Notably, output in the automotive sector recorded its second, remarkable rebound (+20.7%, after +1.8%), inverting the negative trend of the preceding quarters, which was due to supply chain disruptions and lack of components, among others.

### Total steel-using sectors forecast 2023-2024

Total output in steel-using sectors in 2021 rebounded (+6.8%) after the sharp drop recorded in 2020 due to impact of the pandemic (-10.2%). Steel-using sectors' output is expected to continue to expand in 2022 at a slightly higher rate than previously predicted (+2.1% vs. +1.9%). On one hand, developments in the second and third quarters were stronger than expected, as output growth proved robust and resilient despite the outbreak of the war in Ukraine and its related disruptions. On the other hand, the rapid deterioration of the global industrial and economic outlook coupled with the long-lasting effects of the rise in energy costs is expected to yield a drop in output over the last quarter of 2022.

### EU STEEL USING SECTORS

#### Production Activity - forecast from Q4-2022



## The EU steel market: final use

As a result of a likely continuation of these downside factors into the first two quarters of the current year, output is expected to contract in 2023 (-0.6%). This would be the second SWIP recession since 2013, after the one experienced in 2020 due to the pandemic. Output was flat in 2019. Based on the current scenario, the economic and industrial outlook is supposed to gradually improve only starting from the second quarter of 2023, before achieving a moderate growth in 2024 (+1.8%) thanks to improved economic confidence and some recovery in the industrial cycle.

YEAR-ON-YEAR %-CHANGE IN EU STEEL WEIGHTED INDUSTRIAL PRODUCTION (SWIP) INDEX												
	% Share in total Consumption	Year 2022	Q1'23	Q2'23	Q3'23	Q4'23	Year 2023	Q1'24	Q2'24	Q3'24	Q4'24	Year 2024
Construction	35	4.4	-3.3	-2.5	0.2	-0.8	-1.6	1.5	1.5	0.6	2.9	1.6
Mechanical engineering	14	6.5	-0.3	-1.0	0.0	0.4	-0.2	2.3	2.4	3.0	4.4	3.1
Automotive	18	2.7	3.9	0.6	-0.2	0.2	1.1	-0.4	-1.5	-2.1	1.7	-0.6
Domestic appliances	3	-4.3	-1.2	1.0	2.3	2.2	1.0	2.8	2.5	2.4	2.5	2.6
Other Transport	2	6.6	-1.1	-4.1	-1.6	1.3	-1.4	-4.5	10.6	-2.1	4.9	2.0
Tubes	13	1.9	-2.9	-5.5	1.1	0.5	-1.9	0.9	1.1	0.8	3.2	1.5
Metal goods	14	3.8	-7.0	-5.9	-0.3	1.5	-3.1	2.9	1.9	1.1	1.5	1.9
Miscellaneous	2	4.8	-1.9	-6.5	1.8	2.0	-1.2	3.3	3.0	-2.9	0.3	0.9
TOTAL	100	2.1	-1.4	-2.2	0.0	1.2	-0.6	3.0	2.3	0.8	1.1	1.8

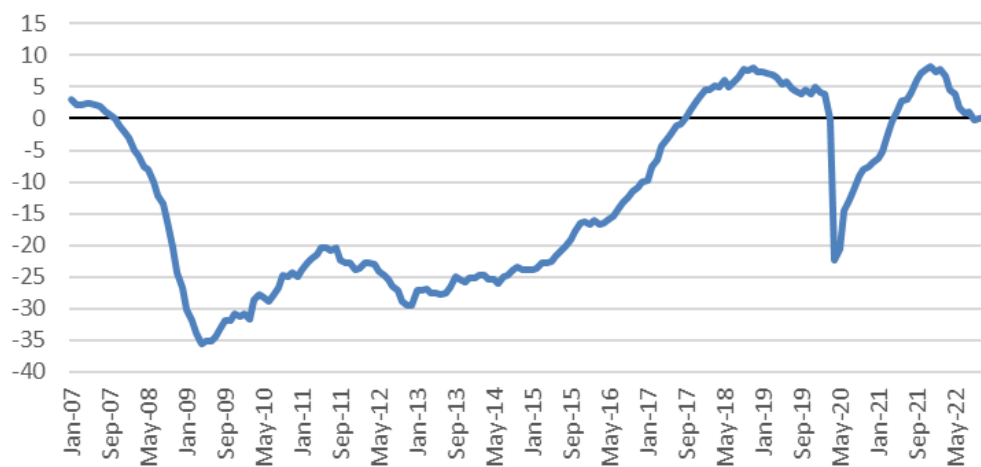
## Construction industry

### Construction industry activity in the third quarter of 2022

Despite the continued rise in the prices of construction materials and overall increasing economic uncertainty, the positive trend in construction output seen throughout 2021 continued also in the third quarter of 2022, albeit at a slower pace than the previous quarter (+2.0%, after +6.5% in the second quarter). Since the first quarter of 2021, data have been reflecting the constant quarter-on-quarter improvement in the construction activity across the EU boosted by governmental support schemes. This has especially benefitted the private residential and civil engineering sub-sectors.

### CONSTRUCTION CONFIDENCE INDICATOR

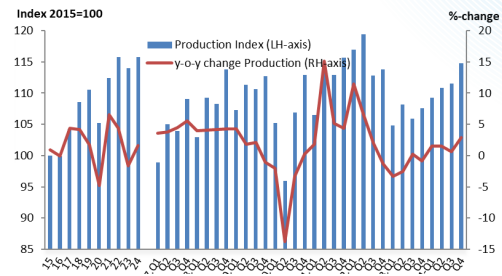
BALANCE OF POSITIVE AND NEGATIVE ANSWERS



In line with real production volumes, in the third quarter of 2022 gross fixed investment in construction increased (+1.8% on a yearly basis). This was the seventh consecutive quarterly increase (+2.2% in the preceding quarter).

Growth was fuelled by residential investment (+1.5%, after +2.2% in the preceding quarter), regardless of the expectation of future higher mortgage rates due to monetary policy tightening to curb inflation. Growth continued to be boosted also by generous housing and renovation supporting schemes in place in many member states. Positive developments were recorded also in 'other construction' investment (+2%, after +3.2% in the second quarter), particularly in civil engineering. Its expansion should continue during 2023, but at a moderate pace. Governments have been using public construction spending since the COVID-led recession of 2020 as a countercyclical tool (thanks also to NextGenerationEU programmes) to bolster recovery. However, the impact of these publicly-funded construction schemes is expected to ease considerably due to multiple downside factors, including the shortage of construction materials as well as their rising prices.

**EU CONSTRUCTION SECTOR**  
Production Activity - forecast from Q4-2022



**Construction industry analysis forecast for 2023-2024**

Construction output fell in 2020 (-4.8%) due to the pandemic, then rebounded in 2021 (+6.5%). The outlook for 2022 forecasts lower growth than previously estimated (+4.4% vs. +5.6%), reflecting a combination of bullish developments in the first half of the year and a considerable slowdown in the second. This negative trend is expected to worsen over the next three quarters, due to the long-lasting impact of rising prices, increasing scarcity of construction materials, and a shortage of construction workers. The overall economic slowdown due to the ongoing war in Ukraine is also expected to weigh on the construction sector, with drops between the fourth quarter of 2022 and the second quarter of 2023.

Construction confidence in the EU improved substantially after the lows experienced during pandemic, almost reaching 2018 levels in the course of 2021. However, since February 2022 supply chain issues and the overall deterioration of the economic and industrial outlook have been starting to impact the sector. Confidence has also been declining from then on, as confirmed by latest available data (December 2022). Nonetheless, overall construction activity should continue to benefit – albeit at rather low rates – from governmental housing supporting schemes, as well as from public construction schemes. Their impact is expected to ease substantially in the course of 2023.

Looking at construction sub-sectors, the expected rise in interest rates – as a consequence of policy rate hikes by the ECB and other central banks – is set to affect residential construction demand. Civil engineering is expected to continue to provide the strongest contribution to the construction sector’s performance, but to a lower extent. This segment will continue to be supported by EU-wide public policies (NextGenerationEU, etc.), but their effects have become increasingly uncertain and difficult to quantify in light of the recent deterioration of the economic outlook. The suspension of the EU Stability and Growth Pact until the end of 2023 will leave room for government spending in infrastructure, but its visible effects will be lagged over time.

The private non-residential construction subsector (offices, commercial buildings, etc.) has paid the highest toll to the pandemic in 2020 and partly in 2021 with increasing vacancy rates, and has recovered only partially since then. The subdued business investment outlook remains unfavourable to investment in non-residential projects in the near future.

**Automotive industry**

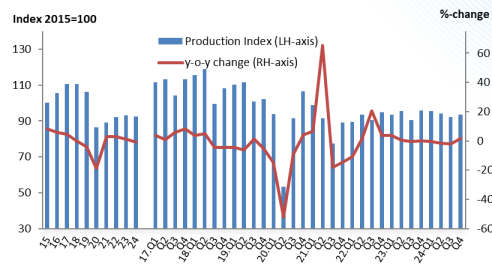
**Automotive activity in the third quarter of 2022**

In the third quarter of 2022 the automotive sector’s output rose again for the second consecutive quarter, recording a remarkable increase (+20.7%), after a moderate rise in the previous quarter (+1.6%). The sector experienced a rebound after the removal of lockdown measures, culminating in an exceptional increase

(+66%) in the second quarter of 2021. However, severe supply chain issues coupled with the overall uncertain outlook of the sector also on the demand side progressively took their heavy toll on the sector's output. Despite the increases recorded over the second and the third quarter of 2022, output in the sector remains well below the pre-pandemic levels, and even below the pre-2019 recession levels. Output has been on a downward path since the third quarter of 2018: sluggish domestic and export demand, trade-related uncertainties, new emissions rules, shifting patterns in ownership and model ranges had been felt all over 2019 before the onset of the pandemic. The continued supply chain issues that materialised in the summer of 2021 increasingly resulted in shortage of components and semiconductors, rise in energy prices and in production costs, and in a slowdown of global trade (automotive is a largely export-oriented sector). Russia's invasion of Ukraine – whose additional disruptive effects on the sector are already visible – has further worsened an already subdued outlook.

**EU AUTOMOTIVE SECTOR**

Production Activity - forecast from Q4-2022



**EU passenger car and commercial vehicle demand**

Ongoing disruptions on the supply side, in particular the shortage of semiconductors, as well as the unprecedented hike in energy prices, went on taking a considerable toll on the automotive industry during 2022. This situation also contributed to continued depressed demand and consumer uncertainty. Supply chain issues and war-related disruptions, coupled with low consumer confidence and squeezed incomes due to high inflation and war-related economic uncertainty, have continued to weigh on vehicle output.

The latest monthly passenger car registrations data show that in December 2022 new car registrations in the EU expanded (+12.8%), marking the fifth consecutive month of growth in 2022. However, despite this positive result, only two of the region's four major markets recorded growth. The German and Italian car markets experienced extremely strong end-2022, recording double-digit increases (+38.1% and +21.0%, respectively). Spain, on the other hand, suffered a substantial decline (-14.1%), whereas France remained stable (-0.1%).

Overall, in 2022 the number of newly-registered passenger cars dropped (-4.6%), mainly due to the impact of component shortages in the first half of the year. Although the market improved from August to December 2022, cumulative volumes stand at 9.3 million units, the EU's lowest level since 1993. Commercial vehicle registrations dropped as well (-15.5%) in the first eleven months of 2022 compared to the same period of the previous year, recording also a year-on-year drop in November (-0.6%).

**Automotive industry forecast 2023-2024**

After a severe slump (-18.7%) in 2020 due to the impact of the pandemic, in 2021 automotive output modestly rebounded (+3.3%). The sector is expected to experience growth again, albeit moderately, in 2022 (+2.7%, revised upwards at -1.7%), mostly as a result of the rebound from the very low output levels seen for several quarters since 2021. Major downside factors are expected to persist at least until the second quarter of 2023. In addition, subdued consumer confidence, due to modest disposable income developments, has continued to impact car demand since the second half of 2018.

Consumer confidence is expected to remain weak until both the macroeconomic picture and consumer disposable income substantially improve. However, this scenario has become less likely, given the worsening economic outlook and more subdued economic growth perspectives. Uncertainties around the implementation of EVs, delays in the launch of new models preparing the ground for the ban of petrol cars– and lack of facilities (recharging points, etc.), have proven unsupportive factors of consumer demand and have also delayed investment decisions by carmakers. Full recovery in global trade and external demand from major markets such as the United States, China, and Turkey will remain a key factor for EU car exporters. However, this is not likely to materialise as long as the current war-related uncertainty continues together with global supply chains issues and very high energy and fuel prices. In the longer-term, political commitment at EU level towards the full adoption of EVs by 2035 should prove somewhat supportive, despite the fact that general car demand appears to be dependent on fragile consumer confidence throughout 2023 and possibly 2024.



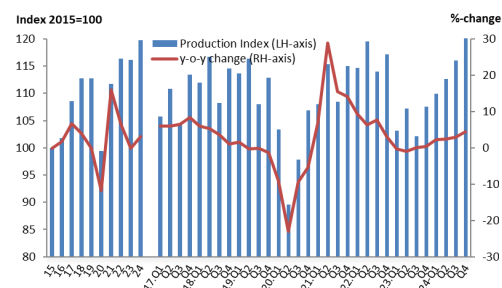
Overall, in 2022 the automotive sector will see growth in output (+2.7%, while the previous outlook foresaw a drop of -1.7%) thanks to positive developments from the second to the fourth quarter. Growth is expected to continue, albeit more moderately, also in 2023 (+1.1%), provided that war-related disruptions and uncertainty will ease substantially as a result of an improved economic and industrial outlook. However, output levels will remain rather low in historical terms, and the sector will continue to be exposed to external factors, with a drop in output – albeit modest – foreseen for 2024 (-0.6%).

## Mechanical engineering

### Mechanical engineering activity in the third quarter of 2022

Output in the mechanical engineering sector continued to grow (+7.6%) in the third quarter of 2022, recording the seventh consecutive quarterly increase (+6.3% in the second quarter). Driven by the overall post-COVID industrial recovery, the rebound recorded since the third quarter of 2020 brought back output to absolute high levels, even above those recorded before 2019. However, the output growth of the sector has been exposed to continued downside risks and the even more disruptive impact of Russia’s invasion of Ukraine. The latter has not yet been reflected in the data to a considerable extent, although output is expected to slow down in the last quarter of 2022 and then to shrink over the first two quarters of 2023. The persisting downside factors affecting the industrial outlook, particularly the unprecedented rise in energy prices and production costs since the summer of 2022, are set to take their toll on the sector’s output over the course of 2023, at least over the first two quarters of the year when output is expected to contract for two consecutive quarters. Eventually, the sector is expected to return to positive territory in the second half of 2023.

**EU MECHANICAL ENGINEERING**  
Production Activity - forecast from Q4-2022



### Mechanical engineering forecast 2023-2024

After a sharp fall (-11.8%) in 2020 due to the pandemic, which had followed a tiny drop (-0.1%) in 2019 due to global trade tensions and the downturn in manufacturing sectors, mechanical engineering output rebounded robustly (+16.0%) in 2021, thanks to the sharp recovery of industrial sectors in the EU, particularly over the first half of the year.

Output in mechanical engineering is set to grow also in 2022 (+6.5%, revised upwards from +5.8%), but in 2023 it is expected to experience a mild recession (-0.2%) as a result of the continued disruptions due to the ongoing war and high energy costs. Their negative effects on the sector’s output will be particularly visible in the first two quarters of 2023. Conditional on overall positive developments in the economic cycle in the second half of 2023, the sector is expected to achieve growth again in 2024 (+3.1%).

## Steel tube industry

### Steel tube industry activity in the third quarter of 2022

Due to war-related disruptions and supply chain issues, the third quarter of 2022 recorded the abrupt end of the positive trend of the tube sector. After six consecutive quarters of growth, output dropped (-0.5%) after an increase (+3.8%) in the preceding quarter.

### Steel tube industry forecast 2023-2024

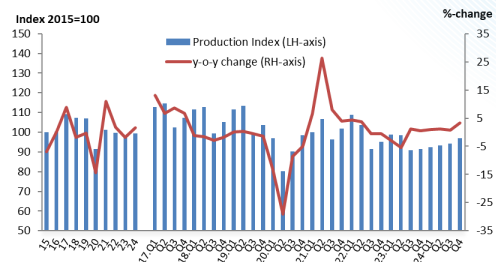
After a rebound in 2021 (+10.9%), output in the tube sector is expected to grow only moderately in 2022 (+1.9%) and to drop, albeit marginally, in 2023 (-1.9%). Moderate growth (+1.5%) is foreseen again in 2024.

During 2020, output in the EU steel tube industry was heavily impacted by the industrial stoppages due to the pandemic. Likewise for other steel-using sectors, the rebound seen over the first three quarters of 2021 eased in the fourth quarter as a result of severe global supply chain issues.

The disruptions linked to Russia’s war in Ukraine have further delayed ongoing projects and impacted the availability of materials. In the longer term, demand for large welded tubes from the oil and gas sector should not improve substantially.

The recent recovery of global oil demand is not expected to boost the launch or the implementation of new pipelines in the short-term, due to high geopolitical uncertainty. Oil demand is likely to ease over 2023 and 2024 in the EU also as a consequence of low economic growth. On the other hand, demand from the construction sector is set to continue contributing to a moderate growth in output, whereas tube demand from the automotive and engineering sectors is forecast to remain relatively weak.

**EU STEEL TUBE SECTOR**  
Production Activity - forecast from Q4-2022

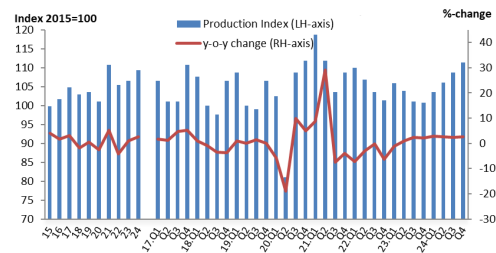


## Electrical domestic appliances industry

### Electrical domestic appliances industry activity in the third quarter of 2022

In the third quarter of 2022, output in the electrical domestic appliances sector dropped for the fifth time in a row (-0.3%), albeit at a slower pace than the second quarter (-3.0%). The post-COVID positive trend started in the third quarter of 2020 came to an end already in the second quarter of 2021, when the sector experienced a bigger-than-expected recovery in output. Widespread remote working across the EU boosted demand for home appliances and other related goods over the second half of 2020 and the first half of 2021, but since then the output cycle for the sector has considerably eased. This was due to the impact of multiple downside factors such as supply chain issues, gradual return to offices and the rise in energy costs. On an annual basis, in 2020 output fell more moderately (-2.5%) compared to other EU steel-using sectors and rebounded (+5.1%) in 2021, thanks to very positive performances recorded over the first half of the year, before slowing down considerably over the second half.

**ELECTRICAL DOMESTIC APPLIANCE SECTOR**  
Production Activity - forecast from Q4-2022



### Electrical domestic appliances industry forecast 2023-2024

Output in domestic appliances is set to drop in 2022 (-4.3%), but will recover moderately in 2023 (+1.0%) and a bit more robustly in 2024 (+2.6%). In particular, growth in output is expected to remain negative until the first quarter of 2023 as a result of the disruptions linked to the war in Ukraine and global supply chains issues.

These downside factors will be partly offset by some supportive factors that will provide positive contribution to growth. Remote working will remain a common practice in the EU over the next years, albeit to a much lower extent than during the COVID-19 pandemic. In the longer term, developments linked to the so-called ‘Internet of Things’ (i.e., smart applications that enable to connect home appliances, devices, etc.) should also benefit the sector, but their impact is not likely to be visible before 2024.

# EU economic outlook 2023-2024

## GDP growth

Due to the expected impact of Russia's war in Ukraine, ongoing supply chain issues and rising energy and commodity prices coupled with very high inflationary pressures, EUROFER's GDP forecasts for the EU in 2023 have been further lowered compared to the previous outlook, casting a shadow of uncertainty also over 2024. Thanks to the resilience of the economy, buoyant contribution from the service sector and overall positive developments over the first half of the year, economic recession is ruled out for 2022. However, the outlook for 2023 has been markedly revised downwards due to the energy, which is expected to have persisting effects on the EU economy and industry at least up to the second quarter of 2023. As a result, GDP growth estimates for 2022 are set at +3.3% (revised upwards from +2.7%), while for 2023 they barely reach +0.1%. Two major EU individual economies, Germany and Sweden, are expected to experience recession, albeit mildly. In 2024, EU economic growth is set to gain some ground again (+1.9%). Economic recession in 2020 in the EU – essentially due to the COVID-19 outbreak – reached -6.0%, marking the first recession since 2013 and the sharpest on record. In 2021, real GDP in the EU recovered (+5.3%), as a result of the robust rebound in the economy and the industry further to the removal of most COVID-related restrictive measures, and of a more limited contribution to growth from services.

Thanks to a resilient performance of the industrial sector in the first half of the year and a vigorous performance of the services sector returned to full activity after the pandemic, 2022 GDP growth will be positive in the EU and in all its individual economies, as well as in all other advanced economies (United States, United Kingdom).

As a continuation of the post-COVID positive economic trend, over the third quarter of 2022 real GDP growth in the EU proved to be quite resilient and recorded a growth of +0.4% quarter-on-quarter (+0.7% in the second quarter) and +2.5% year-on-year (+4.2% in the second quarter). However, the economic outlook has deteriorated considerably due to the energy prices shock, particularly in relation to natural gas prices which reached all-time highs in August (€300/MWh), before cooling off remarkably to pre-war levels in January 2023. Q4 2022 and Q1 2023 are very likely to both result in negative quarter-on-quarter growth, signalling a technical recession (i.e., two consecutive quarter-on-quarter drops) due to the continuation of the war in Ukraine and its repercussions on energy and commodity prices. This is what has already happened in the United States, which entered economic recession in Q2 2022. Among the biggest EU economies, over the third quarter of 2022 Germany unexpectedly recorded +0.4% GDP growth (+1.3% year-on-year) despite worsening problems affecting its industrial sector, automotive in particular. France, Italy and Spain all recorded positive GDP growth (+0.2%, +0.5% and +0.1% respectively), although growth lost ground compared to the second quarter (except for Italy). On a year-on-year basis, these countries recorded lower growth compared to the second quarter (+0.1%, +2.6% and +4.4%, respectively) but overall proved resilient.

The impact of the energy crisis will be relatively higher for Germany and Italy (whose reliance on Russian gas was particularly high before the outbreak of the war). A full rationing of Russian gas supply appears to be unlikely, but EUROFER foresees that Germany and Sweden will be the only EU countries that will experience recession in 2023 (for Germany: -0.7%, before rebounding by +2.2% in 2024; for Sweden, -1.1% in 2023 and +1.3% in 2024). German GDP growth will reflect the impact of the energy price crisis on industrial sectors (automotive in particular), continued war-related uncertainty and also monetary tightening. On the contrary, Italy should avoid recession but see a tiny GDP growth of +0.2% in 2023 (+1.0% in 2024).

Leading indicators have been continuously worsening since August 2021, as a result of skyrocketing energy prices, material and component shortages, and high shipping costs that have resulted in major global supply chain disruptions. Growing uncertainty, primarily linked to Russia's invasion of Ukraine, has cast a shadow on the whole year 2022 and partly also on 2023. Global trade, the industrial supply chain, commodity prices as well as the impact of the economic sanctions to Russia are set to take their toll also on economic growth of EU countries. This context has induced major forecasters to review their global GDP outlook for 2023 and 2024, now expected to be considerably impacted by the consequences of the war and energy-related uncertainty. If technical recession is very likely for the EU economy between Q4 2022 and Q1 2023 - albeit not yet leading to annual GDP recession in 2023 - a possible rebound of the economic cycle is on sight only from Q2 2023, but subject to very high uncertainty and unpredictability.

In any case, the consequences of Russia's invasion of Ukraine will persist over time. Economic sanctions to Russia as well as other war-related disruptions, high energy prices and record-high inflation, are also expected to stay. The TTF Natural Gas Price Index reached €342/MWh in August 2022 - this is 20 times the average value seen in 2021 -, before starting to ease and go down to €52/MWh in January 2023. Among the reasons, a lower gas demand outlook due to the economic slowdown and a mild winter, the EU's price cap and the successful switch from Russian pipeline gas to shipborne liquefied natural gas (LNG) from other suppliers. However, the index remains around high levels compared to the long-term average (€20-30/MWh).

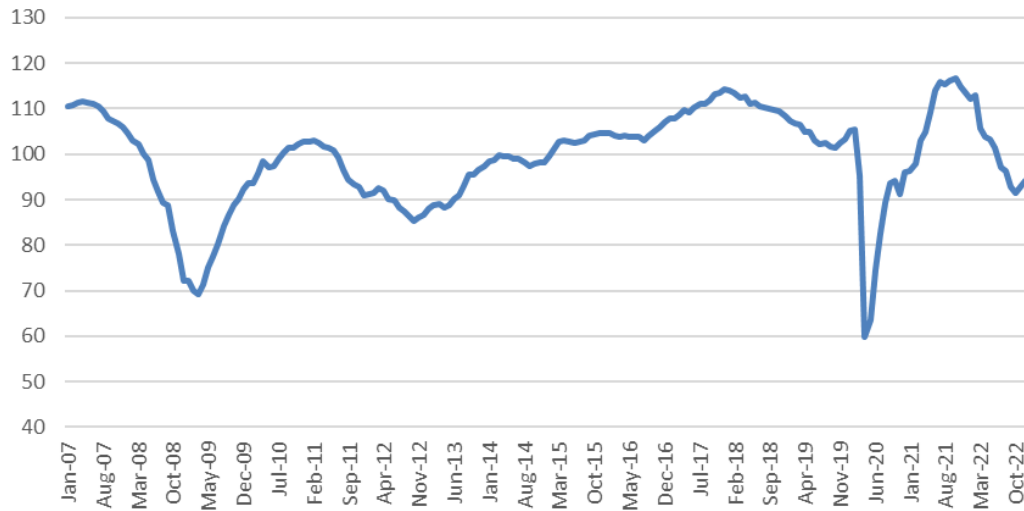
Inflation - at first perceived as temporary - has become a growing concern and reached highs unseen since 1985 in the EU. Inflationary pressures initially stemmed from the persisting bottlenecks affecting supply chains and scarcity of components, but they have continued to intensify and, as a result, inflation rate peaked at 11.5% in the EU in October. It was just 1.3% in February 2021. December 2022 data (10.5%) showed some signs of easing, consistently with EU and ECB predictions for 2023 (7% according to the European Commission, 6.3% according to the European Central Bank). EUROFER foresees an inflation rate in the EU of 8.3% for 2022, easing to 5.8% in 2023 and cooling off further to 2.2% in 2024. Thus, despite an expected moderation over the coming months, inflation is set to remain around historically very high levels in 2023. Inflation was initially fuelled by the continued shortage of critical commodities - worsened by the conflict in Ukraine - and supply chain issues coupled with skyrocketing energy prices. In particular, energy inflation in September 2022, spurred by the unprecedented rise in energy prices over the summer, reached 42% in the euro area (from 12.2% in June 2021), but then has eased considerably - albeit remaining at high levels - in recent months due to the considerable decrease in natural gas prices, i.e. down to 25.7% in December.

Due to the highest inflation rate over the last 35 years, central banks in advanced economies were bound to quickly reverse their hyper-accommodative monetary policy stance that had been extremely supportive of economic recovery in the previous years. Facing the highest inflation rate since 1981, the U.S. Federal Reserve raised its policy rate seven times during 2022 up to 4.50%. Equally, the ECB raised its policy rate by 50 bps in July - for the first time since 2011 - and did a two consecutive 75 bps hikes in September and November, plus another 50bps hike in December, leading its key policy rate at 2.50%. However, real interest rates remain widely negative. In addition, the ECB terminated its PEPP (the COVID-led exceptional Asset Purchase Programme), which helped keep government bond yields low for highly-indebted countries. On the other hand, the ECB also approved its new Transmission Protection Instrument (TPI) to ensure continuity with the former PEPP and help stabilise government bond secondary markets. Due to the impact of Russia's invasion of Ukraine and the need to continue to provide public support to the economy, the Stability and Growth Pact has been suspended until the end of 2023.

However, policy rates in the euro area are expected to rise further due to the ECB's determination to bring inflation closer to its inflation target of 2%. Therefore, at least two more half-point hikes are foreseen in 2023. This will inevitably reduce the room for manoeuvre for EU member states' supportive fiscal policies (i.e. government spending) as the cost of borrowing money on financial markets will be higher due to monetary tightening, particularly for highly-indebted economies.

## Confidence and leading indicators

### ECONOMIC SENTIMENT INDICATOR (ESI), EU (long-term average=100)



After the restart of the industry and along with the post-pandemic economic recovery, a spectacular improvement in confidence was recorded until the end of the second quarter of 2021. This led to well above pre-pandemic levels peaking at 118 in July, a fourteen-year high, before it started easing in August following widespread concerns over supply chain issues and inflation. This downward trend has continued since then. In July 2022 the indicator reached the lowest level (92.6) seen since October 2013. Subsequently, it marginally improved again in December.

The latest S&P composite PMI for the euro area (January 2023) showed that business activity in the euro area improved marginally, showing a tentative return to growth after six successive months of decline. Business confidence jumped higher to hint at markedly improving prospects for the year ahead, with order books meanwhile showing reduced rates of contraction. The index rose for a third consecutive month in January, up from 49.3 in December to 50.2 in January, breaking above the 50.0 no-change level to thereby indicate the first expansion of business activity – albeit only marginal – since last June.

### S&P GLOBAL EUROZONE COMPOSITE PMI OUTPUT INDEX



Global supply chain issues weighing on economic and industrial activity since late 2020 have continued to show some signs of easing, as demand conditions are quickly softening due to inflationary pressures squeezing demand from consumers. Fewer and less strict lockdowns in China have contributed to alleviate global supply chain issues.

The December 2022 Global Supply Chain Pressure Index (GSCPI) showed that - while supply chain disruptions have significantly diminished over the course of 2022 – the trend of the index towards normal historical values has paused over the past three months, largely due to the pandemic in China amid an easing of “Zero COVID” policies. The index reached 0.29 points in both October and November before declining by 0.05 points in December, but still around its highest level since 2010.

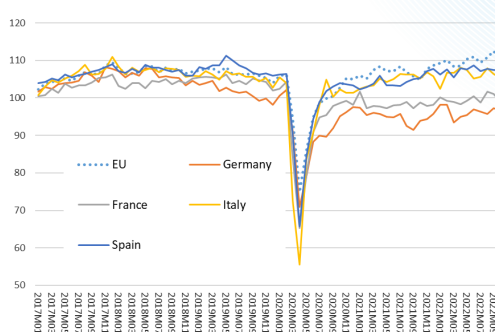
On a quarterly basis, the positive trend in EU industrial production continued, marking the ninth consecutive year-on-year increase. In the third quarter of 2022 industrial production in the EU increased even at a faster pace than in the preceding quarter (+3.1% vs. +1.7%). Also Germany returned to growth (+2.2%), after three consecutive drops in industrial production (-1.3% in the second quarter) due to the growing impact of the war in Ukraine and of supply



chain disruptions on its automotive sector. Industrial output continued to rise in other major euro area economies, notably in France (+2.6% after +1.7% in the second quarter), Italy (+0.4% after +2.0%) and Spain (+3.1% after +4.0%)

The latest available monthly data (up to November 2022) show that industrial output volumes in the EU – albeit with national disparities – have recovered from the exceptional losses due to the pandemic, but they still remain below the all-time highs recorded during the strong cycle of 2017. In particular, industrial output has recovered up to pre-pandemic levels in Italy and Spain but not in France and, to an even larger extent, in Germany. As industrial output has been increasingly impacted by Russia’s war in Ukraine and high energy prices, in November 2022 industrial production grew by +3.6% in the EU and by +4.2% in France but increased very modestly in Germany (+0.4%), while abruptly dropping in Italy (-2.1%) and remaining flat in Spain. In the fourth quarter of 2022 and the first quarter of 2023, it is likely to be impacted more strongly, as a result of uncertainty linked to the war and high energy costs.

**INDUSTRIAL PRODUCTION INDEX, S.A., MONTHLY DATA (2015=100)**



As a consequence, EUROFER foresees modest but resilient growth in 2022 (+1.3%) followed by a tiny contraction in 2023 (-0.1%, previously +1.1%). This downward trend should be followed by a rebound (+3.5%) in 2024.

## Other economic fundamentals

Despite the long-lasting impact of the COVID-19 pandemic on the economy, labour market fundamentals have continued to prove resilient in most EU countries. However, job creation continued to be affected by lower levels of production activity in industry and by persistent uncertainty about short-term business conditions.

The EU unemployment rate, which had remained around late-2019 levels, peaked at 7.8% in September 2020 to gradually ease to 6.8% in August 2021, 6.2% in February 2022 and 6% in August 2022. It has remained unchanged in November (latest available data), as labour market proved quite resilient to the deterioration of the macroeconomic environment. However, unemployment levels have continued to conceal considerable differences across member states (e.g., still at 12.4% in Spain) as well as across economic sectors. Consumers have been suffering from substantial decreases in their disposable income due to inflation rates at their 30-year highs.

This dynamic has slashed consumption growth. Despite government support and increased social expenditure to mitigate first the impact of the pandemic and then of the energy crisis for households and industries, uncertainty will continue to weigh down on consumer confidence at least until the second half of 2023. In this scenario, persistently high energy prices – coupled with accelerating inflation – are due to continue to impact household energy costs and limit considerably their purchasing power, while increasing their savings propensity.

Government investment and public expenditure are expected to continue to play a countercyclical role and could provide a strong contribution to the growth of domestic demand, although room for manoeuvre is now reduced due to the end of the ECB’s asset purchase programme. The NextGeneration EU package will continue to be implemented (until 2026), but its most noticeable effects will only become visible from the second half of 2023.

EUROFER MACROECONOMIC DATA, EU ANNUAL % CHANGE, UNLESS OTHERWISE INDICATED					
	2020	2021	2022	2023	2024
GDP	-5.9	5.2	3.3	0.1	1.9
Private consumption	-7.3	4.0	4.0	0.4	1.9
Government consumption	0.7	4.1	1.2	0.6	0.8
Investment	-6.3	6.7	3.1	0.3	2.8
Investment in mach. equip.	-11.8	8.2	3.3	-0.5	2.5
Investment in construction	-4.7	6.0	2.5	-0.2	1.6
Exports	-10.1	10.7	6.9	2.1	4.0
Imports	-9.0	10.6	7.2	2.3	3.7
Unemployment rate (level)	8.1	7.7	6.9	7.2	7.1
Inflation	0.5	2.5	8.3	5.8	2.2
Industrial production	-8.1	7.5	1.3	-0.1	3.5

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## Glossary of terms

Sector definitions according to NACE Rev.2

### Building & Civil Engineering

- 41 \_\_\_\_\_ Construction of buildings
- 42 \_\_\_\_\_ Civil engineering
- 43 \_\_\_\_\_ Specialised construction activities
- 25.1 \_\_\_\_\_ Manufacture of metal structures and part of structures
- 25.2 \_\_\_\_\_ Manufacture of tanks, generators, radiators, boilers

### Mechanical Engineering

- 28 \_\_\_\_\_ Manufacture of machinery and equipment
- 27.1 \_\_\_\_\_ Manufacture of electric motors, generators, transformers
- 25.3 \_\_\_\_\_ Manufacture of steam generators, except central heating hot water boilers

### Automotive

- 29 \_\_\_\_\_ Manufacture of motor vehicles and trailers

### Domestic Appliances

- 27.51 \_\_\_\_\_ Manufacture of electric domestic appliances

### Other Transport Equipment

- 30 \_\_\_\_\_ Manufacture of other transport equipment
- 30.1 \_\_\_\_\_ Building and repair of ships
- 30.2 \_\_\_\_\_ Manufacture of railway locomotives and rolling stock
- 30.91 \_\_\_\_\_ Manufacture of motorcycles

### Steel Tubes

- 24.2 \_\_\_\_\_ Manufacture of steel tubes

### Metal Goods

- 25 \_\_\_\_\_ Manufacture of fabricated metal products excluding 25.1-25.2-25.3

### Other sectors

- 26 \_\_\_\_\_ Manufacture of computer, electronic and optical products
- 27 \_\_\_\_\_ Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus excluding 27.1 and 27.5

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## EU steel market definitions

**SWIP:** abbreviation for Steel Weighted Industrial Production index. It is used as a proxy for real steel consumption. Activity in the steel-using sectors is weighted with the relative share of each sector in total steel consumed by all sectors.

**Real steel consumption:** Real consumption is the use of all steel products used by steel-using sectors in their production processes, also referred to as the 'final use' of steel products, adjusted for the stock cycle.

**Apparent steel consumption:** Apparent consumption is also referred to as 'steel demand'. It is total deliveries of all steel products and qualities by EU producers plus imports less 'receipts' into the EU, minus exports to third countries. In other words, apparent consumption is deliveries by EU producers plus imports minus receipts (that is, imports by EU producers themselves of material that is further processed), minus exports to third countries. EUROFER's definition of apparent consumption includes all qualities, including stainless, and all finished products and semi-finished products.

If apparent consumption exceeds real steel consumption, the surplus is stocked in the distribution chain. If apparent consumption is less than real steel consumption, inventories are being withdrawn.

**Steel industry receipts:** In both the apparent consumption and market supply statistics, the imports component of the calculation is written, in the EUROFER definition, as 'imports less receipts'.

The 'receipts' in this instance mean imports by EU producers themselves of finished or semi-finished steel products that are further processed by the producer and transformed into other products. In the publicly available EUROFER figures, only finished products are shown and thus impacted by the receipts calculation.

This correction is important because it prevents double-counting that would artificially inflate the size of the market. If an EU producer imports a tonne of hot rolled strip that it further processes into a tonne of cold rolled which it then delivers to the EU market - in an uncorrected calculation the import of one tonne would then become one imported tonne plus one EU-processed and delivered tonne. The imported tonne is thus corrected out in the import side of the market supply and apparent consumption figures.

**Narrow definition:** EUROFER applies the so-called "narrow definition" which excludes steel tubes and first transformation products from the product scope used for calculating steel consumption. Hence, the steel tube sector is a steel-using sector under this definition.

**Steel intensity:** The ratio of real steel consumption to steel weighted production in the steel-using sectors. This reflects the usually slightly negative impact on consumption of innovation in steel products, inter-material substitution, improvements in process efficiency and design, etc.

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## **About the European Steel Association (EUROFER)**

EUROFER AISBL is located in Brussels and was founded in 1976. It represents the entirety of steel production in the European Union. EUROFER members are steel companies and national steel federations throughout the EU. The major steel companies and national steel federations in the United Kingdom and Turkey are associate members.

The European Steel Association is recorded in the EU transparency register: 93038071152-83.

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## **About the European steel industry**

The European steel industry is a world leader in innovation and environmental sustainability. It has a turnover of around €125 billion and directly employs around 310,000 highly-skilled people, producing on average 153 million tonnes of steel per year. More than 500 steel production sites across 22 EU Member States provide direct and indirect employment to millions more European citizens. Closely integrated with Europe's manufacturing and construction industries, steel is the backbone for development, growth and employment in Europe.

Steel is the most versatile industrial material in the world. The thousands of different grades and types of steel developed by the industry make the modern world possible. Steel is 100% recyclable and therefore is a fundamental part of the circular economy. As a basic engineering material, steel is also an essential factor in the development and deployment of innovative, CO<sub>2</sub>-mitigating technologies, improving resource efficiency and fostering sustainable development in Europe.



**EUROFER**  
THE EUROPEAN STEEL ASSOCIATION

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