

QUARTERLY BULLETIN 02/2026

# Clean Industrial Transition Monitor

- **Climate costs rise:** Costs of extreme weather events in 2026 have surged to an estimated 1% of the EU's GDP, increasing pressure on national budgets and the private sector.
- **Resilient manufacturing:** Despite high fossil fuel costs, supply uncertainty and climate shocks, the industry remains resilient, with manufacturing output increasing moderately in Q2 2026 by 0.7% compared to Q2 2025.
- **Employment in focus:** Despite a rise in manufacturing output, industrial employment declined again in Q2 2026; however, the overall scale of the drop remains limited so far. The automotive sector accounted for a large share of industrial job losses over the last two years, notably in Germany and Romania.
- **Policy proposals:** Both the EU ETS Review and Electrification Action Plan could provide new financial instruments in support of industrial decarbonisation – but risk weakening the carbon-price signal.

## High energy costs and climate shocks test EU industry's resilience

**VOLATILE FOSSIL FUEL PRICES:** Renewed escalation in the US–Iran conflict is driving up fossil fuel prices and prolonging supply uncertainty. In September, Brent crude prices again surpassed USD 100/bbl, following a brief decline in June. Commercial vessel traffic through the Strait of Hormuz in early September was over 90% lower than pre-war levels.

**EXTREME WEATHER EVENTS ADD PRESSURE:** This summer's extreme weather events have impacted industry through elevated input costs, supply disruptions and reduced operational capacity. Additional government costs placed particular strain on Member States with high debt-to-GDP ratios, such as Greece, France and Italy. The June heatwave alone is estimated to have reduced European GDP by around 0.3%. Lower crop yields contributed to pushing global food prices to a three-year high. The full economic impact of extreme heat and wildfires in 2026 is estimated to amount to EUR 180 billion, equivalent to 1% of the EU's GDP – almost as much as the European Commission's 1.1% 2026 GDP growth forecast.

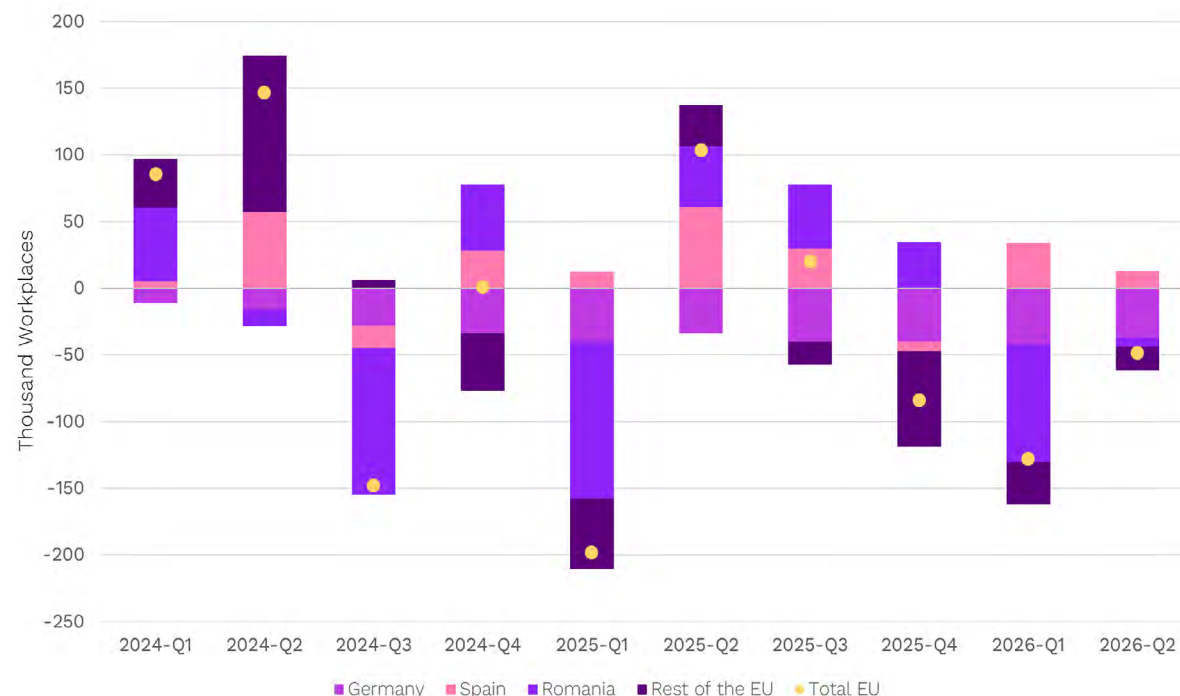
**RESILIENT MANUFACTURING:** Despite difficult conditions, Eurozone manufacturing output improved in July and August, with new orders strengthening in August as demand for AI-related technology, goods and defence equipment supported manufacturers, while precautionary stock-building also boosted demand amid supply-chain disruptions. Survey data suggests that manufacturing employment in the Eurozone likely edged up in August.

**CONFLICTING POLICY SIGNALS:** The Commission's July package places electrification at the centre of EU industrial decarbonisation, but the ETS review and Electrification Action Plan pull in different directions: while the Action Plan seeks to accelerate clean-electricity demand and raise its share of final energy consumption to 46% by 2040, the proposed ETS changes would slow emissions reductions and potentially weaken the carbon-price signal for long-term investment. At the same time, the package strengthens public financial support for industrial decarbonisation, notably through greater use of ETS revenues.



## Data highlights – Industrial employment declines remain limited, but regional gaps widen

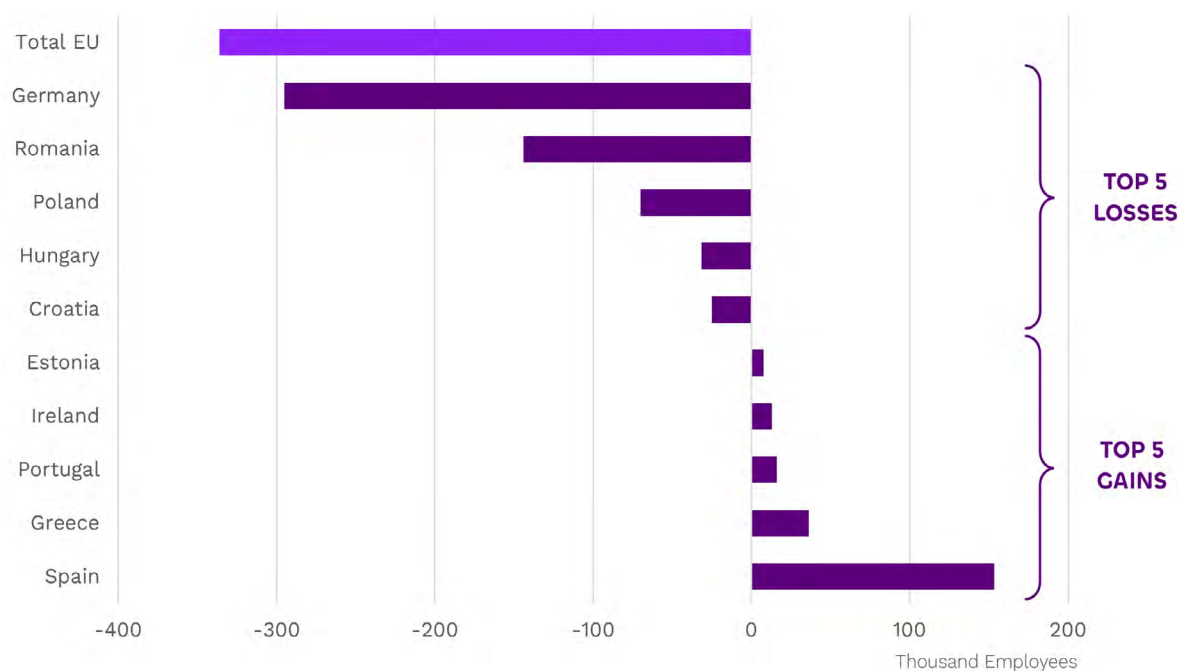
INDUSTRIAL EMPLOYMENT HAS DECLINED IN THE THREE MOST RECENT QUARTERS, BUT THE SCALE OF THE DECLINE REMAINS LIMITED RELATIVE TO THE EU'S INDUSTRIAL WORKFORCE AND DOES NOT YET POINT TO LARGE-SCALE LABOUR-MARKET ADJUSTMENT IN THE SECTOR.



Data source: Graph presents quarter-on-quarter changes in the number of industrial workplaces based on Eurostat data.

- So far, the size of recent quarterly changes remains within the range of fluctuations observed over the past two years. Periods of employment losses have been partly offset by gains in other quarters.
- However, the recent three consecutive quarterly declines are a cause for concern going forward, as they may indicate the emergence of a more persistent negative trend.
- In the three most recent quarters, industrial employment fell by 0.2% in Q4 2025, 0.4% in Q1 2026 and 0.2% in Q2 2026 compared with the previous quarter. Together, this corresponds to around 261,000 fewer industrial jobs, or a net decline of roughly 950 jobs per day over the nine-month period.
- In relative terms, the decline remains limited in scale. The 261,000 fewer jobs amount to around 0.8% of the EU's more than 33 million industrial jobs. Moreover, the preceding two quarters saw gains of around 110,000 jobs. In addition, early evidence from [business surveys](#) in July and August suggests that the negative trend is likely to improve in Q3 2026.

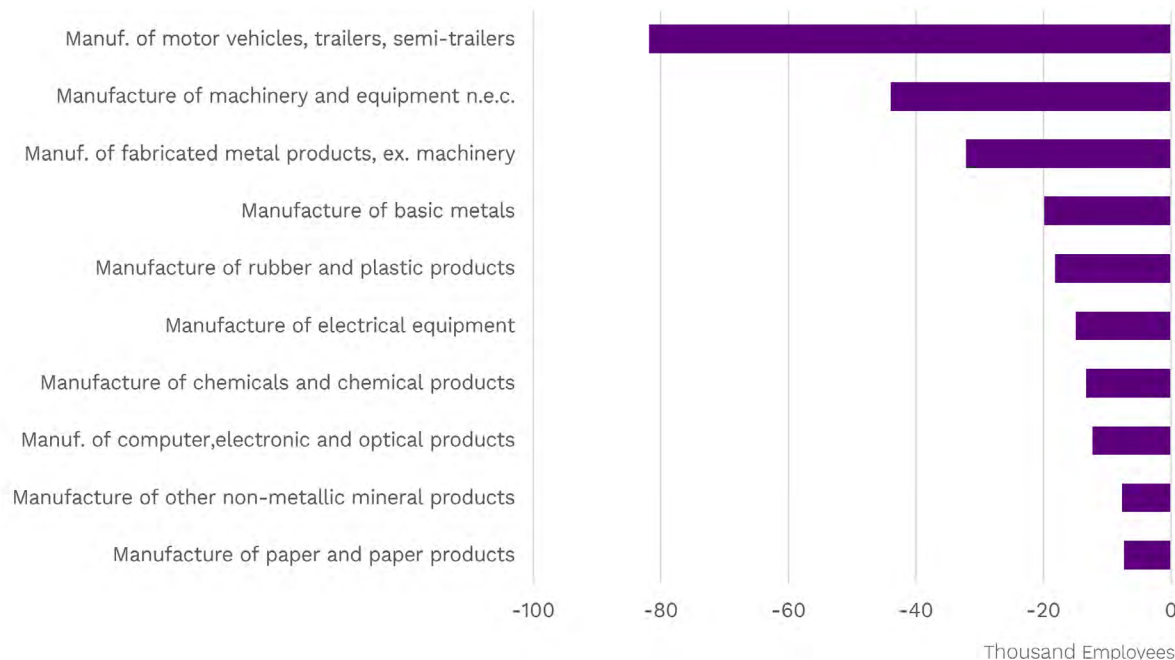
**OVER THE LAST TWO YEARS, EMPLOYMENT IN THE INDUSTRIAL SECTOR FOR THE WHOLE EU DECREASED BY 1.4%, BUT CONTRIBUTIONS TO THIS CHANGE WAS HEAVILY CONCENTRATED IN A FEW MEMBER STATES, WITH GERMANY, ROMANIA AND POLAND LEADING NET LOSSES, AND SPAIN DOMINATING OBSERVED GAINS.**



Data source: Eurostat. The graph shows the 5 EU countries with the largest industrial employment losses and gains, respectively, between Q2 2024 and Q2 2026.

- Over the medium term – last two years – net change in the number of industrial workplaces was equal to -1.4% (-482,000 workers). Both losses and gains were heavily concentrated regionally.
- Largest losses were observed in Germany (-295,000 workers), Romania (-144,000 workers) and Poland (-70,000 workers).
- Over the same timeframe, Spain added the most industrial workplaces in the whole EU (+153,000 workers), with the most significant contributions between Q4 2023 and Q2 2026 from manufacturing of food products, fabricated metal products, leather products and manufacturing of machinery and equipment.
- In relative terms, the Member States with largest increases between Q2 2024 and Q2 2026 included Greece (+7.5%), Estonia (+6.1%), and Spain (+6.1%), while Romania (-8.2%), Croatia (-7.3%), Bulgaria (-3.7%) and Germany (-3.6%) lost the highest share of employees in the sector.

**JOB LOSSES IN GERMAN INDUSTRY WERE LARGELY DRIVEN BY THE AUTOMOTIVE SECTOR, WHICH ACCOUNTED FOR 30% OF ALL INDUSTRIAL JOBS LOST BETWEEN JUNE 2024 AND JUNE 2026.**



Data source: Destatis

- Among the 10 industries with the largest job losses in Germany between June 2024 and June 2026, there is a notable representation of energy-intensive industries (including manufacturing of paper, chemicals, non-metallic mineral products, basic metals, and rubber and plastic products). which together lost 66,500 industrial workplaces.

- The automotive sector was the largest contributor to industrial job losses in Germany over the past two years, accounting for 30% of total losses, followed by machinery and equipment manufacturing (16%) and fabricated metal products manufacturing (12%).
- Decline in employment in the German automotive industry contributed to job losses in the Romanian automotive industry (which lost 27,000 workers between December 2023 and December 2025<sup>1</sup>), as the latter is strongly embedded in the supply chains of European car manufacturers.
- Studies have shown that German car-makers displayed initial resistance and strategically delayed the transition to electric engines to protect their established combustion-engine-based business model. The recent decline in sales volumes (amid a rise in demand for electric vehicles on the primary market) is linked to the manufacturers' strategy to focus on increasing operating margins by expanding premium vehicle production.

<sup>1</sup> There are some discrepancies between the employment data available through the Romanian statistical office (database: FOM105E) and values provided for Romania by Eurostat; however, Romanian data point to automotive sector as the one with the largest loss of workplaces in Romanian industry between 12.2023 and 12.2025.

## Policy insights

### EU RISKS WEAKENING CARBON PRICE SIGNAL AS CLIMATE PRESSURES RISE

- **The Commission's July package sets electrification as a central route to industrial decarbonisation, but weakens the carbon-market signal intended to support it.** Published together on 17 July, the review of the EU Emissions Trading System (ETS) and the Electrification Action Plan frame the political rentrée around a common objective: reducing fossil-fuel dependence while strengthening Europe's industrial competitiveness. Yet they rely on different, and not entirely aligned, logics. The Electrification Action Plan seeks to accelerate demand for clean electricity, while the ETS review would provide greater short-term flexibility to industry at the cost of a slower emissions-reduction trajectory and a potentially weaker incentive to invest. The central question for the next phase is whether additional public support for industrial decarbonisation can compensate for a weaker carbon-price signal.
- **The EU ETS review trades short-term relief for a weaker medium-term carbon signal.** The proposal would slow the pace of emissions reductions during 2031-2040 through a lower Linear Reduction Factor (= higher cap, more emission allowances) and a less restrictive Market Stability Reserve. Together, these changes could increase the risk of allowance oversupply and weaken the carbon-price signal on which long-term industrial investment depends even as the EAP calls for rapid investment in decarbonisation (as outlined by e.g., Öko-Institute, [Bellona](#) and [Agora Energiewende](#)). **The proposal nevertheless strengthens the public-finance instruments for industrial decarbonisation.** Member States would be expected to dedicate at least half of their national ETS auctioning revenues to industrial decarbonisation, while continued free allocation would be linked more closely to clean investment. The main new EU-level instrument is the Industrial Decarbonisation Bank, which could mobilise up to EUR 100 billion, beginning with an 'Investment Booster' of around EUR 30 billion for the deployment of mature technologies. In this new architecture, the Industrial Decarbonisation Bank draws from the same pool of allowances as the Innovation Fund, thereby effectively shrinking the latter's size. At the same time, however, the Innovation Fund can refocus on innovation, as the Bank takes over the funding for deployment.
- **The Electrification Action Plan gives the clean industrial transition a clearer demand-side direction, but its headline target will matter only if backed by implementation.** The plan aims to increase electricity's share of final energy consumption from 23% today to an indicative 46% by 2040. The target will need to be centred in the post-2030 Energy Union package, making its integration with energy efficiency, renewable energy and grid policies critical. The Commission also frames electrification as an energy-security and competitiveness strategy: reaching the target could reduce the EU's fossil-fuel import bill by EUR 260 billion annually by 2040.

- **The Electrification Action Plan's success will depend on whether EU and national policy can address the practical barriers to switching from fossil fuels to clean electricity.** While the Commission seeks to lower upfront cost by mobilising existing EU funding and ETS revenues, including through the Industrial Decarbonisation Bank and its 'Investment Booster', financial support alone will not overcome high electricity prices or limited grid capacity. Reform of electricity bills and network charges, the European Grids Package now under negotiation, and effective national implementation will therefore be equally critical to reduce electricity prices relative to gas and accelerate the expansion of grid infrastructure and connections. The Plan and the ETS review will ultimately be judged by whether they work together to make clean electricity both investable and affordable.



## Entering the legislative phase

**EU Emissions Trading System.** The Commission's ETS revision, tabled on 17 July alongside the Electrification Action Plan, is now moving into the co-legislative process. Key issues to watch are the proposed emissions reduction trajectory, free allocation conditionality and the use of ETS revenues, including through the Industrial Decarbonisation Bank.

**Electrification Action Plan.** The EAP establishes an indicative objective of raising electricity's share in final energy consumption from 23% to 46% by 2040, effectively doubling the target. This stands against ECNO data showing that electrification has been essentially flat for the past decade, with no structural trend yet pointing in that direction. Therefore, its feasibility will depend on the ambition and integrity of the post-2030 Energy Union framework, particularly the rules governing renewable deployment, energy efficiency and grid capacity.

## Approaching trilogues

**European Grids Package.** The Council adopted its General Approach on 26 June, while Parliament adopted its position on the permitting directive in July. The TEN-E Regulation remains pending a committee vote in September; if Parliament confirms both positions in plenary, trilogue negotiations could begin before the end of the year.

**Industrial Accelerator Act.** Negotiations are advancing in parallel in the Council and Parliament. The joint ITRE-IMCO-INTA draft report, tabled early September, seeks to raise the ‘Made in Europe’ and low-carbon threshold in strategic sectors, expand the scope of strategic materials, and tighten FDI screening by lowering the Commission’s proposed EUR 100 million threshold to EUR 50 million for investors from countries holding >40% of global market share in a given sector. In Council, the Irish Presidency is targeting a possible General Approach at the 24 September Competitiveness Council. Key Council discussions are on a changed headline target (from 20% of GDP by 2035 to a 30% growth target for the manufacturing sector’s economic value by 2034) and a new “partner origin” label to determine which countries retain preferential treatment under Made in Europe procurement rules.

**Corporate Fleets Act.** Technical negotiations resumed in Parliament in early September, with shadow rapporteur meetings scheduled for late September and October ahead of the joint committee vote. The S&D co-rapporteur’s ENVI-TRAN draft report, which would raise ambition and focus the targets more strongly on zero-emission vehicles, has met broad pushback from other political groups, with Renew’s shadow rapporteur saying there is “no opening” for compromise so far; in Council, a coalition of nine Member States continues to resist the file. The joint committee vote is scheduled for early November, with a first-reading plenary vote provisionally expected later that month.

**Public Procurement Act.** The Commission proposal tabled early September, after being delayed from before the summer break, consolidates three existing procurement directives into a single Regulation that will apply directly across Member States. The text is another building block of Europe’s more assertive industrial policy, introducing a European-preference mechanism closely aligned with the Industrial Accelerator Act (IAA). The Industrial Accelerator Act negotiations may shape the political space for ‘Made in Europe’ provisions, while the Procurement Act will provide the legal framework for implementing them.

## Implementation and renewed dynamics

**Clean Industrial State Aid Framework.** The CISAF remains the only file in the tracker already in full implementation, with national schemes continuing to be approved, including a EUR 1 billion Slovak scheme in June. A July open letter from cleantech manufacturers, project developers and investors renewed calls to allow output-based production support under Article 6.2. As this was not addressed in the EAP, the outstanding revision of the General Block Exemption Regulation (GBER) now appears as the next window of opportunity.

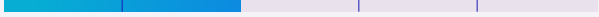
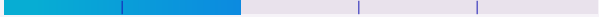
## On the horizon

**Circular Economy Act.** The Commission is preparing a package expected to combine legislative and non-legislative measures, with a proposal delayed to the fourth quarter. A central issue will be whether the Act goes beyond recycling requirements to create demand for secondary raw materials, support investment and establish a functioning market for circular products.



## At a glance – tabular overviews

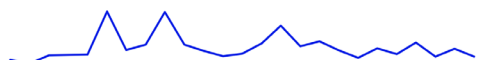
### Key CID files tracker

| Name of the file                                                                                                                         | Expected impact                                                                      | Analysis                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Industrial Accelerator Act</b> Stage 2<br>           |    | Council and Parliament are forming positions ahead of trilogues.                                                       |
| <b>European Grids Package</b> Stage 2<br>               |    | Council has adopted its General Approach, Parliament's position pending plenary confirmation.                          |
| <b>Corporate Fleets Act</b> Stage 2<br>                 |    | Council and Parliament are forming their positions ahead of trilogues.                                                 |
| <b>Clean Industrial State Aid Framework</b> Stage 6<br> |    | National schemes continue to be notified and approved. Push to open file to allow for output-based production support. |
| <b>EU Emissions Trading System</b> Stage 2<br>        |   | Council and Parliament begin to form positions.                                                                        |
| <b>Public Procurement Act</b> Stage 2<br>             |  | Council and Parliament begin to form positions.                                                                        |
| <b>Circular Economy Act</b> Stage 1<br>               | Not yet assessed                                                                     | Commission preparing legislative proposal, expected in Q3–Q4 2026.                                                     |

Note: Stage 1 = Announced; 2 = Proposal; 3 = Council/EP position; 4 = Trilogue; 5 = Adopted; 6 = Implementation.

## Data trends tracker

| Indicator                                                                                                                                                              | Last datapoint      | Recent developments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Industrial production index</b><br>                                                | June 2026           | <b>POSITIVE</b><br>Output gradually improved in the first half of 2026, and the level of output is higher than a year ago. Positive signals from survey data suggest output <u>improved further in July and August</u> . The US-Iran conflict continues to pose downside risk for the second half of 2026.                                                                                                                                                                                                                                                          |
| <b>Industrial production index – for energy and emission intensive industries</b><br> | June 2026           | <b>MIXED</b><br>Output hardly changed over Q2 2026, and is now higher than a year ago. The re-escalation of US-Iran conflict significantly increased downside risks for the second half of 2026 by impacting input costs and increasing uncertainty.                                                                                                                                                                                                                                                                                                                |
| <b>Share of fossil fuel-fired power generation</b><br>                                | July 2026           | <b>MIXED</b><br>The EU Member States generated on average 27% of their electricity using fossil fuels in May–Jul 2026 – that is moderately less than in the same period in 2025 (by 1 percentage point). The negative development was caused mainly by <u>weak wind during heatwaves</u> and reduced hydropower potential, amid <u>increased electricity demand</u> .                                                                                                                                                                                               |
| <b>Fossil fuel import expenditure</b><br>                                             | June 2026           | <b>NEGATIVE</b><br>Higher prices continue to translate to significantly elevated fossil fuel import expenditure – they were 42% higher in Q2 2026 than in Q2 2026. Outlook remains uncertain and depends on progress in normalising trade through the Strait of Hormuz. Future expenses may be driven even higher due to relatively <u>low gas storage levels</u> in the EU compared to previous years ahead of the storage filling period.                                                                                                                         |
| <b>Electricity-to-gas price ratio for industrial consumers</b><br>                  | Second half of 2025 | <b>NEGATIVE</b><br>The cost of electricity relative to gas increased notably in the second half of 2025 – by 9.6% compared to the previous 6 months. Outlook remains highly uncertain, dependent on developments in US-Iran conflict, and their impact on fossil fuel prices, as well as the degree to which gas prices will continue to impact electricity prices in the EU in the months to come.                                                                                                                                                                 |
| <b>Wholesale electricity price ratio – EU to US comparison</b><br>                  | Q2 2026             | <b>NEGATIVE</b><br>Wholesale electricity price in the EU relative to the US increased sharply in Q2 2026, both on quarter-on-quarter and on year-on-year basis. Prices in both markets dropped in Q2 2026 compared to previous quarter, but quarterly reductions in the US were much bigger. However, compared to the same period in previous year, prices in the US hardly changed, while prices in the EU increased due to higher exposure to trade disruptions caused by US-Iran conflict. Outlook for the future is uncertain, but dominated by downside risks. |

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| <b>Production index in capital goods</b><br>                      | June 2026   | <b>POSITIVE</b><br><p>Production of capital goods was on average marginally higher in Q2 2026 than in Q1 2026, and notably 2.5% higher than a year ago. Survey data showing <u>increase in new manufacturing orders</u> in August suggest the positive trend was carried into Q3 2026. Production of capital goods is a proxy indicator for investment demand in industrial sector. The results suggest companies are still eager to invest, which implies their positive demand outlook in the long term.</p> |
| <b>Cleantech scale-up finance</b><br>                             | Q1 2026     | <b>NEGATIVE</b><br><p>Investments in cleantech scale up (for Series B and Growth rounds) are unstable on quarter-to-quarter basis. Year-on-year, they were 17% lower in Q1 2026, and the trend over the last two years is negative. Outlook is supported by increase in incentives to scale up cleantech solutions due to increased cost of fossil fuels.</p>                                                                                                                                                  |
| <b>Employment in industry</b><br>                                 | Q2 2026     | <b>MIXED</b><br><p>Employment in industry was somewhat lower in Q2 2026 when compared to the previous quarter (-0.1%), but the drop is bigger when compared to the year before (-0.7%). The Q2 2026 data update was the third reading in a row with quarterly drop in industrial employment. <u>Preliminary survey data</u> for July and August suggest possible trend reversal in Q3 2026.</p>                                                                                                                |
| <b>Job vacancy rate in manufacturing</b><br>                      | Q2 2026     | <b>NEGATIVE</b><br><p>Job vacancy rate in manufacturing has not changed since Q2 2026 and continues to stand at 1.5%. However, that result indicates that job openings in industry are at the lowest level since COVID-19 pandemic.</p>                                                                                                                                                                                                                                                                        |
| <b>Economic sentiment indicator – industrial confidence</b><br> | August 2026 | <b>POSITIVE</b><br><p>Industrial confidence improved in each of the last three months amid <u>stronger production expectations</u> and <u>lower levels of stocks of finished products</u>. The index reached its highest level since April 2023.</p>                                                                                                                                                                                                                                                           |
| <b>New BEV car registrations</b><br>                            | Q2 2026     | <b>POSITIVE</b><br><p>The share of BEVs in new car registrations stood at 21.9% in Q2 2026, following a quarterly increase of 2.5 percentage points, reaching an all-time high value. <u>July EV sales data</u> from 16 European markets suggest the positive trend remained strong at the beginning of Q3 2026.</p>                                                                                                                                                                                           |
| <b>Trade balance in chemicals</b><br>                           | June 2026   | <b>NEGATIVE</b><br><p>Trade balance in organic chemicals is negative and has been highly unstable over the last year through June 2026. However, the balance worsened in Q2 2026, and the average over the last 6 months was close to the lowest levels on record.</p>                                                                                                                                                                                                                                         |

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| <b>Trade balance in EVs</b><br>            | June 2026 | <b>NEGATIVE</b><br>Trade balance in EVs is negative and it worsened significantly in Q2 2026, dropping notably below values in Q2 2025. The change was linked to higher EV demand following rising and volatile fossil fuel prices, and stronger cost competitiveness of imported EVs.                                                                                                                                                                                                      |
| <b>Trade balance in PV components</b><br>  | June 2026 | <b>NEGATIVE</b><br>Trade balance in PV components is negative and it deteriorated in Q2 2026, both on quarter-on-quarter and year-on-year basis, as demand for solar power generation grew amid favourable weather conditions and <u>rising fossil fuel electricity prices</u> .                                                                                                                                                                                                            |
| <b>Trade balance in wind turbines</b><br>  | June 2026 | <b>POSITIVE</b><br>Trade balance in wind turbines is positive and has been improving each month of Q2 2026, reaching its highest quarterly value on record. Long term trend remains positive.                                                                                                                                                                                                                                                                                               |
| <b>Trade balance in iron and steel</b><br> | June 2026 | <b>NEGATIVE</b><br>Three month moving average of trade balance in iron and steel is negative and it deteriorated each month of Q2 2026. The results are marginally worse than in the same period of 2025.                                                                                                                                                                                                                                                                                   |
| <b>GHG emissions in manufacturing</b><br>  | Q4 2025   | <b>NEGATIVE</b><br>GHG emissions in the manufacturing sector hardly changed in Q4 2025 compared to the previous quarter. The results in the last two quarters of 2025 were the highest since Q1 2023. It is important to take into account that the rise in emissions in the second half of 2025 was associated with a modest recovery from a 2023-2024 slump in manufacturing output; however, the improvement in output was not commensurate with the scale of increase in GHG emissions. |

Note: Sparklines show dynamics over the 10 years preceding the latest data point, except for cleantech scale-up finance (available since Q1 2020), new BEV registrations (since Q1 2019), and the EU–US wholesale electricity price ratio (since Q1 2018).

Further details on the methodology used in the policy and data analysis are available at <https://climateobservatory.eu/approach>.

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Date: **SEPTEMBER 2026**