European competitiveness in light of rising energy prices: a less severe shock than in 2022, but some key sectors are vulnerable

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Confidential

Summary

Given the current tensions in the Middle East, concerns are growing over the deterioration of European companies' competitiveness. These concerns are reminiscent of those in 2022, when the outbreak of the war in Ukraine triggered a sharp rise in energy prices, particularly in Europe. However, as energy prices fell between 2022 and 2025, of the 22 sectors of activity in the European Union (EU) that we analysed, 15 had returned to, or were close to returning to, levels of energy expenditure relative to revenue equivalent to those observed before the war in Ukraine. Furthermore, these expenditure levels fell more sharply in Europe than in the United States across all sectors during this same period, with the exception of the chemicals sector.

This partial convergence can be explained, on the one hand, by a gradual normalisation of energy prices, particularly for European gas, which has a strong influence on electricity prices and whose price gap with US gas has narrowed significantly, reaching in 2025 its lowest level since May 2021. On the other hand, it stems from the different sectoral energy mixes between the two regions, which have enabled European industries to benefit more from this price fall over the past four years.

For 2026, we estimate that, even in an adverse scenario of a prolonged conflict in the Middle East keeping the price of a barrel of oil at $120, energy expenditure as a proportion of income would remain, in the EU, significantly lower than its 2022 levels, unlike in the United States.

Nevertheless, regardless of the scale of the energy shock, the productivity of US firms appears less affected than that of their European counterparts. For example, in a scenario with oil at $100 a barrel, 18 out of 22 industrial sectors would be less affected in the US than in Europe. Unsurprisingly, these differences in productivity losses would widen and affect a growing number of sectors as oil and gas prices rise.

In detail, a few sectors emblematic of European industry – notably chemicals, metallurgy and refining – account for a large part of this vulnerability. Next come textiles, agri-food and plastics. Indeed, these sectors would record the largest relative productivity losses compared to their US counterparts. Moreover, these are also the sectors for which energy expenditure in 2025 had not returned to pre-war levels in Ukraine.

Finally, within the EU, it should be noted that the French, Spanish, Polish and Swedish industrial sectors appear significantly less vulnerable to rising gas and oil prices than those of Italy, Romania, Belgium and the Netherlands, with Germany in an intermediate position.

1. European industries have seen their energy expenditure fall more sharply than those in the United States since the peak in 2022

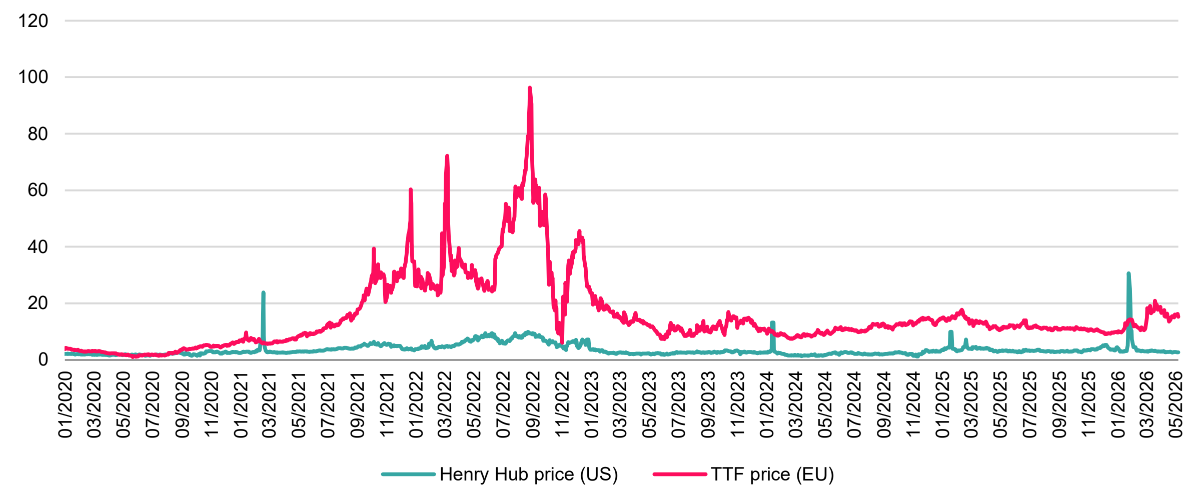
1.1. Although they remain above their pre-war in Ukraine levels, energy prices have fallen more in Europe than in the United States since 2023

The war in Ukraine had led to a sharp rise in energy prices, particularly for gas, oil and electricity. These increases had been much more pronounced in Europe than in the United States, thereby undermining the competitiveness of European industries at the time.

At the height of the energy crisis in August 2022, gas prices in the EU rose by an unprecedented amount, with **increases of up to 1,000% compared with the average level observed over previous decades[1]** (see Figure 1). This surge in prices had a negative impact on the European economy, **increasing energy bills** for businesses and households, thereby reducing the competitiveness of the former and the purchasing power of the latter. **High prices for gas and other energy sources thus contributed to rising inflation, which reached a high of 11.5% in the EU in October 2022**[2].

However, since that peak in 2022, gas prices have fallen significantly, whilst remaining above their pre-crisis levels. Indeed, from 2023 onwards, high storage levels and a fall in European demand had allowed prices to fall gradually over the course of the year, dropping below the €30/MWh mark at the start of 2024[3]. This trend then continued in 2024 **across all EU countries (-18% on average)**[4].

Figure 1 – Gas prices in the US and Europe since 2020 ($/mmbtu)



Source: LSEG, EIA, GSA calculations

In 2025, **the fall in gas prices in Europe continued, leading to a narrowing of the price gap between European and US natural gas,** despite a relatively early onset of winter and lower reserves in Europe compared with previous years[5]. In 2025, **this spread fell from around $12/mmbtu to just $4.8/mmbtu**, its lowest level since May 2021. **This price spread had reached nearly $90/mmbtu at the height of the 2022 energy crisis.**

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[1] A market-based mechanism to limit excessive spikes in gas prices, *Consilium*, 12 March 2025

[2] A market mechanism to limit excessive spikes in gas prices, *Consilium*, 12 March 2025

[3] Gas price trends over 20 years: history and trends, *Opéra Energie*, 09/03/2026

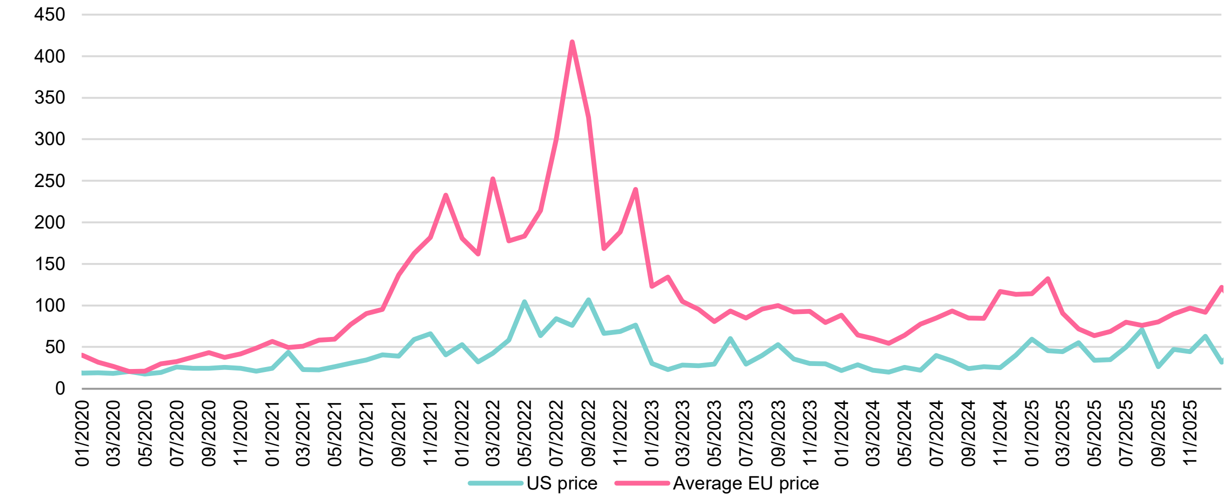
[4] Natural gas prices in France and the European Union in 2024, *Data and statistical studies on climate change, energy, the environment, housing and transport*, 7 September 2025

[5] Why are natural gas prices in Europe plummeting despite the cold winter?, *Euronews*, 4 December 2025

This narrowing of the gas price gap between the EU and the US is partly due to a return to normal levels for European prices, as well as an increase in liquefied natural gas (LNG) exports from the US to Europe: US LNG accounted for over 50% of European LNG imports in 2025[6].

This relative convergence between European and US gas prices is also due to **a rise in gas prices in the US**. Indeed, **particularly harsh winter conditions**, **significant gas injections into storage** during the second and third quarters of 2025, and an **increase in export volumes**, weighed on prices and put the sector under strain[7].

Figure 2 – Electricity prices in the US and Europe[8] since 2020 ($/MWh)



Source: LSEG, EIA, GSA calculations

This trend in the spread between gas prices in the US and the EU also has implications for electricity prices in both regions. Indeed, the wholesale price of electricity is determined by the cost of the last unit required to meet demand, known as the 'marginal unit price'. However, electricity generation from gas often constitutes this marginal unit in the European electricity mix: although gas-fired power stations accounted for less than 20% of total electricity generated in the EU in 2022, **they determined the price of electricity on average 55% of the time**. The price of gas therefore frequently influences the wholesale price of electricity within the EU[9].

In the United States, too, natural gas plays a central role in electricity generation. Consequently, in both regions, electricity prices remain closely linked to gas prices. **As a result, the difference in gas prices between Europe and the United States has a direct impact on electricity prices across the two continents.** As gas prices are significantly lower in the United States than in Europe, wholesale electricity prices there are **also structurally lower**[10].

However, **some European countries are exceptions:** Sweden, for example, has lower prices than those in northern California[11].

Regarding oil prices trends, following the peak in 2022 – a year in which the price of a barrel of Brent reached **$130** under the combined effects of Russia's invasion of Ukraine, the post-pandemic economic

[6] Why are natural gas prices in Europe plummeting despite the cold winter?, *Euronews*, 4 December 2025

[7] Downward trend in gas prices in Europe, *OMNEGY by EPSA*, 19/11/2025

[8] This is the average for the 23 EU countries for which data is available. Data is missing for Bulgaria, Cyprus, Luxembourg, Malta and Sweden.

[9] Decarbonising for competitiveness: four ways to reduce European energy prices, *Bruegel*, 05/12/2024

[10] Decarbonising for competitiveness: four ways to reduce European energy prices, *Bruegel*, 5 December 2024

[11] Decarbonising for competitiveness: four ways to reduce European energy prices, *Bruegel*, 05/12/2024

recovery and the easing of travel restrictions – **prices have gradually fallen to between $70 and $80 a barrel**. In 2025, the price per barrel averaged $69, a 33% drop from the average level observed in 2022. Over this period, this decline is explained by **an increase in production in the United States** as well as a **slowdown in consumption in Asia**, which offset the effects of conflicts in the Middle East and production cuts by OPEC+[12].

Finally, the global coal market has also seen a gradual normalisation since the peak of the 2022 energy crisis – when the price of thermal coal had risen to over $400 per tonne. Since then, market conditions have gradually normalised, with an improvement in the balance between supply and demand. **In spring 2025, coal prices continued to fall due to persistent stock surpluses in China and India and declining European demand**[13].

1.2. The share of energy expenditure in industrial revenues has fallen more sharply in the EU than in the US since 2022

Within the EU, on average, of the 22 sectors studied, 21 saw a greater decline in the share of their energy expenditure in their revenue than in the United States between 2022 and 2025 (see Table 1).

Table 1 – Change in the share of energy expenditure in income between 2022 and 2025 (in percentage points), by sector

Sector	European Union (%)	United States (%)	Difference between changes in Europe and the United States (pp)
Metallurgy	-2.88	-0.86	2.01
Non-metallic minerals	-3.26	-1.45	1.81
Paper & Cardboard	-1.88	-0.98	0.90
Textiles	-0.96	-0.13	0.83
Rubber & Plastics	-0.69	0.03	0.72
Food	-0.89	-0.20	0.69
Printing	-0.66	-0.02	0.64
Beverages	-0.61	-0.12	0.49
Metal products	-0.57	-0.20	0.36
Furniture	-0.19	0.10	0.30
Pharmacy	-0.33	-0.06	0.28
Clothing	-0.23	0.00	0.23
Electrical equipment	-0.26	-0.05	0.21
Machinery & Equipment	-0.24	-0.03	0.21
Other industries	-0.21	-0.01	0.20
Tobacco	-0.21	-0.02	0.19
Refining	-0.71	-0.54	0.17
Electronics & Optics	-0.11	0.02	0.14
Transport equipment	-0.14	-0.02	0.12
Wood & Cork	-0.26	-0.15	0.11
Leather & Footwear	-0.13	-0.12	0.01
Chemicals	-2.25	-3.17	-0.92

Source: Eurostat, EIA, Bloomberg, GSA calculations

12 Report on energy prices and costs in Europe, *European Commission*, 26/02/2025
13 Prices – Coal Mid-Year Update 2025 – Analysis - IEA, *IEA*, 13/05/2026

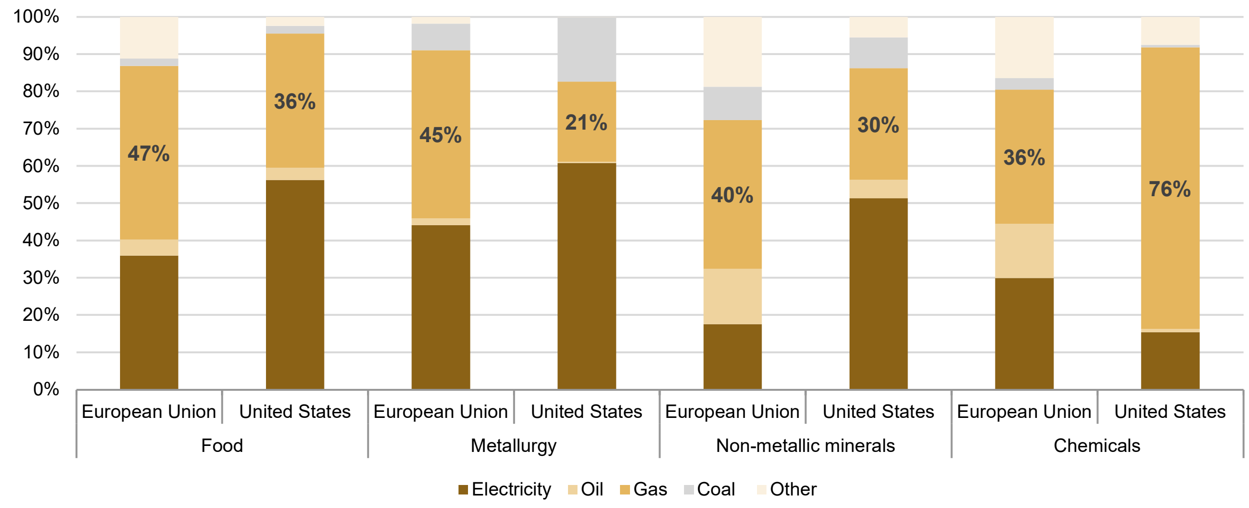
Among the sectors where energy expenditure as a proportion of revenue fell most sharply in Europe were **metallurgy**, **the manufacture of non-metallic minerals**, and **the paper and paperboard industry**, with **decreases of 2.9%**, **3.3%** and **1.9%** respectively. These sectors were among those that had been most affected by the rise in energy prices in 2022. This trend therefore reflects a relative return to normality.

The declines in energy expenditure by European industries, which were more pronounced than those recorded in the United States over the same period, can also be explained by differences in energy mixes within the same sector across the two continents. For example, in the **metallurgy** and **non-metallic minerals** sectors, gas accounts for a larger share of the energy mix in European industries – 45% and 40% respectively, compared with 21% and 30% in the United States (see Figure 3) – which **allowed them to benefit more from the price drops that followed the stabilization of the situation after the 2022 energy crisis**.

The chemicals sector is the only one, out of the 22 we studied, **in which the decline in energy expenditure as a proportion of revenue was greater in the United States than in the EU**, although the European chemicals industry also recorded a significant decrease of **2.3**%. This sharper fall in energy costs in the US is **due to the chemical sector's greater reliance on gas**, which accounts for 76% of its energy mix compared with 'only' 36% in the EU (see Figure 3). This much greater exposure to gas offsets the fact that gas prices fell less between 2022 and 2025 in the US than in Europe.

This greater exposure to gas can be explained by the difference in the structure of **these chemical sectors on each side of the Atlantic**. In the US, the chemical industry **focuses mainly on petrochemicals and polymers**, which have benefited from much cheaper inputs since the boom in shale gas extraction. In Europe, the sector **tends to specialise more in so-called 'fine' chemicals, such as cosmetics, perfumes and soaps, which are less energy-intensive in their production processes**.

Figure 3 – Energy mix for selected sectors in the United States and the European Union in 2022



Source: Eurostat, EIA

1.3. However, energy expenditure in Europe remains above pre-2022 levels in some sectors

While the declines in energy expenditure relative to revenue between 2022 and 2025 in European industries are significant, they do not, however, allow these expenditures to be reduced to their pre-war levels in Ukraine in some sectors.

Indeed, among the 22 sectors we studied, **7 still had energy expenditure-to-income ratios in 2025 that were significantly higher than their 2018 levels**. For certain industries, such as **chemicals**, **metallurgy**,

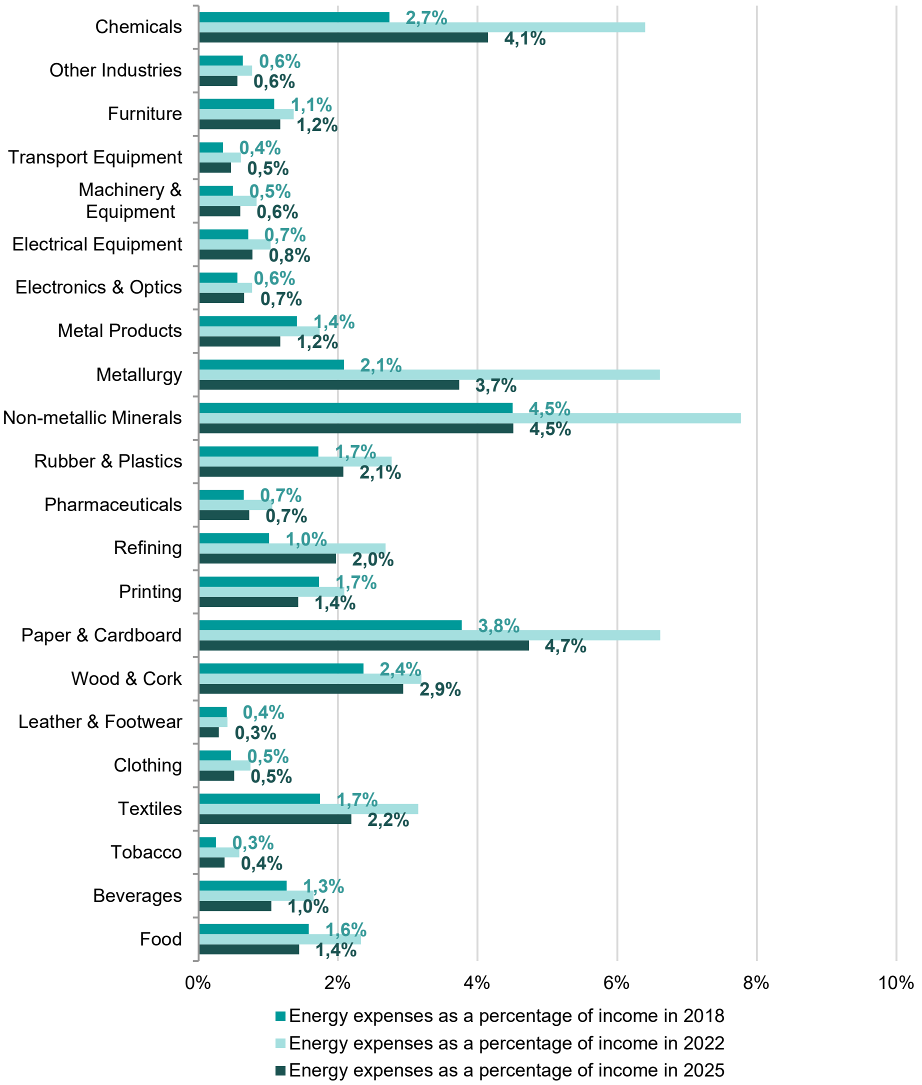
refining, and the **paper and paperboard** sector, the gap remains significantly high: **+1.4 percentage points**, **+1.7 pp**, **+1 pp** and **+0.9 pp** respectively compared to pre-crisis levels.

For six sectors, such as **furniture**, **electrical equipment**, and **electronics and optics**, energy expenditure as a percentage of revenue remains above 2018 levels, **but to a limited extent.**

In **4** out of 22 sectors – **non-metallic minerals, pharmaceuticals, clothing and other manufacturing industries** – energy expenditure **has returned to its pre-crisis level**, which is significantly lower than that reached in 2022.

Finally, in **5** out of 22 sectors, **energy expenditure accounted for a smaller share of revenue in 2025 than in 2018**. However, these differences remain modest, ranging from **-0.1 percentage points** for the **leather and footwear** sector to **-0.3 percentage points** for the **printing** and **beverages** sectors, and **-0.2 percentage points** for **the food** and **metal products sectors**.

Figure 4 – Energy expenditure as a percentage of income in 2018, 2022 and 2025, by sector of activity in the European Union



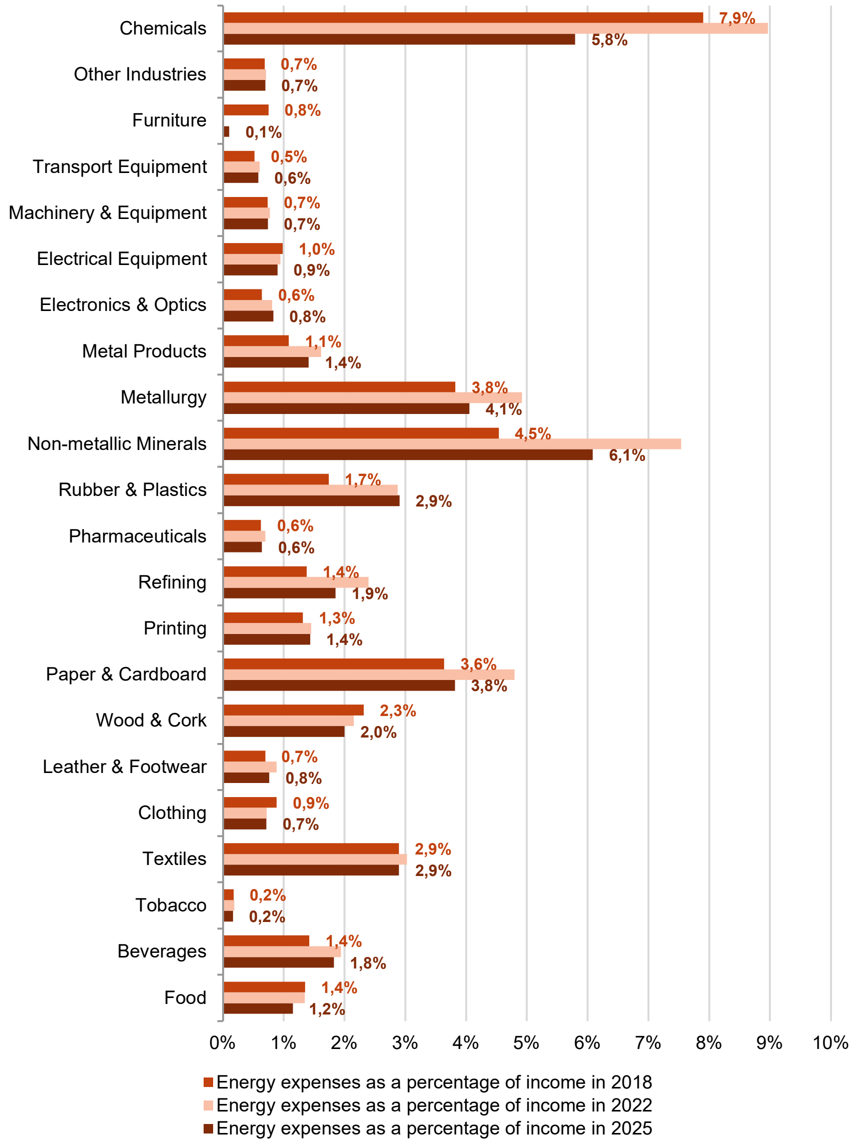
Source: Eurostat, EIA, Bloomberg, GSA calculations

In the United States, **'only' 11 out of 22 sectors still have energy expenditure levels above their pre-2022 levels**. Among the largest increases are the **non-metallic minerals** sector (+1.5 percentage points) and **the rubber and plastics sector** (+1.2 percentage points). However, for many sectors, the differences compared with pre-crisis energy expenditure levels **remain very small**: **+0.1 pp for the leather, printing and transport equipment sectors, and +0.2 pp for the paper, metallurgy, and electronics and optics sectors**.

Five out of 22 sectors **have returned to their pre-2022 energy expenditure levels**: **machinery and equipment, pharmaceuticals, textiles, tobacco and other manufacturing industries**.

Finally, **six** sectors recorded **lower energy expenditure relative to income in 2025 than in 2018**. Among these, the **chemicals** sector **saw the sharpest decline, down 2.1 percentage points compared with 2018**, ahead of the **furniture** sector (down 0.6 percentage points). The other sectors also showed lower energy expenditure, **but this remained close to their 2018 levels**: **-0.1 pp** for **electrical equipment**, **-0.2 pp** for **clothing and food**, and **-0.3 pp** for **wood**.

Figure 5 – Energy expenditure as a percentage of income in 2018, 2022 and 2025, by sector of activity in the United States



Source: Eurostat, EIA, Bloomberg, GSA calculations

2. What are the potential effects of the current rise in energy prices on the competitiveness of European and American businesses?

In order to assess the varying effects across sectors and countries of the rise in global energy prices resulting from the conflict in the Middle East and the near-closure of the Strait of Hormuz since the beginning of March, we quantify **the impact of this rise in energy prices on the operating profitability of 22 industrial sectors across the 27 EU countries and the United States**.

2.1. Methodology and assumptions

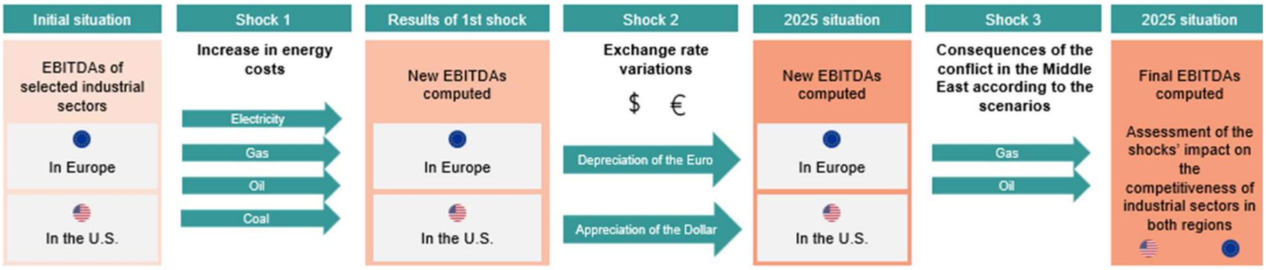
Firstly, **we simulate the impact of an increase in energy costs for companies on their operating profitability, measured by EBITDA, for 22 industrial sectors in each country (the US and the 27 EU member states)**.

The available data[14] on sector-level energy mixes indicates the share of each source in the total energy costs of the various sectors. Indeed, **the magnitude of the shock depends in part on the types of energy consumed across sectors and countries (oil, gas, coal, electricity and others).**

The magnitude of the shocks applied to each price is calibrated according to IMF forecasts and the consensus forecasts available on Bloomberg and LSEG for the price of each type of energy. Changes in energy costs are calculated relative to the base year 2025. As the initial data on energy costs and gross operating surpluses from the US Census for the United States is only available up to 2022, we first reconstructed the situation for 2025 based on historical trends in energy prices between 2022 and 2025.

We also take into account changes in **nominal effective exchange rates in the United States and in each of the 27 European Union countries**. We assume that **an appreciation (depreciation) of the exchange rate will have a negative (positive) impact on the export revenue of each industrial sector (non-EU only for European countries) and therefore on its total revenue.** In addition to the magnitude of the exchange rate change, the impact on export revenue depends on the price elasticity of exports. We use a single coefficient of 0.46[15] (applying only to the export portion of revenue). The reference year for exchange rate changes is 2022.

Diagram 1 – Diagram illustrating the methodology used



Source: GSA

In summary, **the magnitude of the shock taken into account varies by country and sector depending on the composition of the sector's energy mix and the variation in prices of each energy source in a given country, as well as that of nominal effective exchange rates**.

[14] *US Census Bureau* for the United States, *Eurostat* for the European Union.

[15] Source: IMF

For the year 2026, in the context of almost complete closure of the Strait of Hormuz, we have modelled three different scenarios regarding energy prices. In Scenario 1, energy input prices (oil, gas, coal, electricity and others) **follow the current consensus of Bloomberg forecasters**.

In this Scenario 1, the price of a barrel of oil (Brent) stabilises at **$80 in 2026**, representing a **17.6%** increase **compared to 2025**; the price of gas rises by **22% in Europe** and by **8% in the United States**; the price of coal increases by **20% in both regions**. Finally, the price of other energy inputs remains unchanged. Regarding **the price of electricity, this is expected to rise by 4% in 2026 in the United States**, according to figures from the Energy Information Administration, whilst trends vary across European countries: +1.9% in Germany, +18% in Italy, +7% in the Netherlands, -2.4% in Spain and -17% in France[16].

In the other two scenarios (2 and 3), **we vary the price of oil and gas, with other inputs remaining unchanged**. **In scenario 2,** we set **the price of a barrel of Brent at $100 in 2026, and in scenario 3, at $120 per barrel**. To vary gas prices in proportion to these increases, we used an elasticity derived from the academic literature, according to which a permanent 20% rise in the price of oil leads to a 16% increase in the price of gas one year later[17]. With this elasticity, the price of gas rises by 38% in the second scenario and by 61% in the third[18].

Table 2 presents the detailed evolution of the cost shocks applied under the different scenarios.

Table 2 – Summary of price changes in the different scenarios

	Scenario 1 (consensus)		Scenario 2 ($100/bbl)		Scenario 2 ($120/bbl)	
	USA	**EU**	**USA**	**EU**	**USA**	**EU**
Oil	17%	18%	47%	47%	77%	77%
Gas	8%	22%	38%	38%	61%	61%
Coal	20%	20%	20%	20%	20%	20%
Electricity	4%	6.2%*	4%	6.2%*	4%	6.2%*
Other	0%	0%	0%	0%	0%	0%

** For EU countries for which no forecasts are available, we have used an average of the available forecasts for Germany, Italy, Spain and the Netherlands.*
Source: Bloomberg, IMF, GSA calculations

Finally, after calculating the new EBITDA for each industrial sector, we determine:

- The sectors whose operational profitability has been most affected.

- The sectors for which the difference in impact between Europe and the United States varies most across the different scenarios. This difference constitutes our indicator of the gain (or loss) in price competitiveness by sector between the two regions.

The results of the energy cost increase simulation are presented in Table 3 below.

[16] In France, forecasters anticipate a fall in electricity prices in 2026, despite the crisis in the Middle East, driven by the recovery of the nuclear fleet (with the Flamanville EPR now fully operational again) and the ramp-up of renewable energy. This structural improvement in supply, coupled with a new regulatory framework, is allowing forward prices to show some resilience. However, forecasts have been revised upwards compared with the prices anticipated at the start of the year.

[17] The Relationship Between Crude Oil and Natural Gas Prices, *JA Villar, FL Joutz*, 2006

[18] Whilst recent literature shows that gas and oil prices have become decoupled since the mid-2000s, particularly in the United States with the emergence of shale gas, it also shows that in times of crisis, the prices of these commodities tend to become strongly correlated once again. As 2026 can be regarded as a commodity shock, we therefore assumed that, over this period, gas and oil prices would be correlated and would evolve in line with the elasticity described above.

2.2. In the event of a sustained rise in oil and gas prices, the scale of the shock for European firms would be less than that observed in 2022, but again greater than that experienced by their US counterparts

For the EU as a whole, the manufacture of non-metallic minerals, as well as the chemical and metallurgical sectors, would be by far the most exposed to a further sustained rise in energy prices. These are followed by the paper, food, refining and textile sectors.

US firms appear less affected by these shocks than their European counterparts. For example, in Scenario 2 (oil at $100 a barrel), **18 out of 22 industrial sectors are less affected in the US than in Europe**.

The **wood** sector is **the only one in which the competitiveness of European firms improves relative to that of US firms, regardless of the scenario considered**. This is partly explained by the fact that, in the US, gas and oil account for 30% of the sector's total energy expenditure, compared with just 7% in Europe. European industries in **the electronics and optics** sector also record a relative gain in competitiveness in the consensus scenario as well as in the scenario with oil at $100 a barrel. Finally, the **leather** and **paper and paperboard** sectors are the two others in which the competitiveness of European industries is less affected than that of their US counterparts in scenarios 2 and 3.

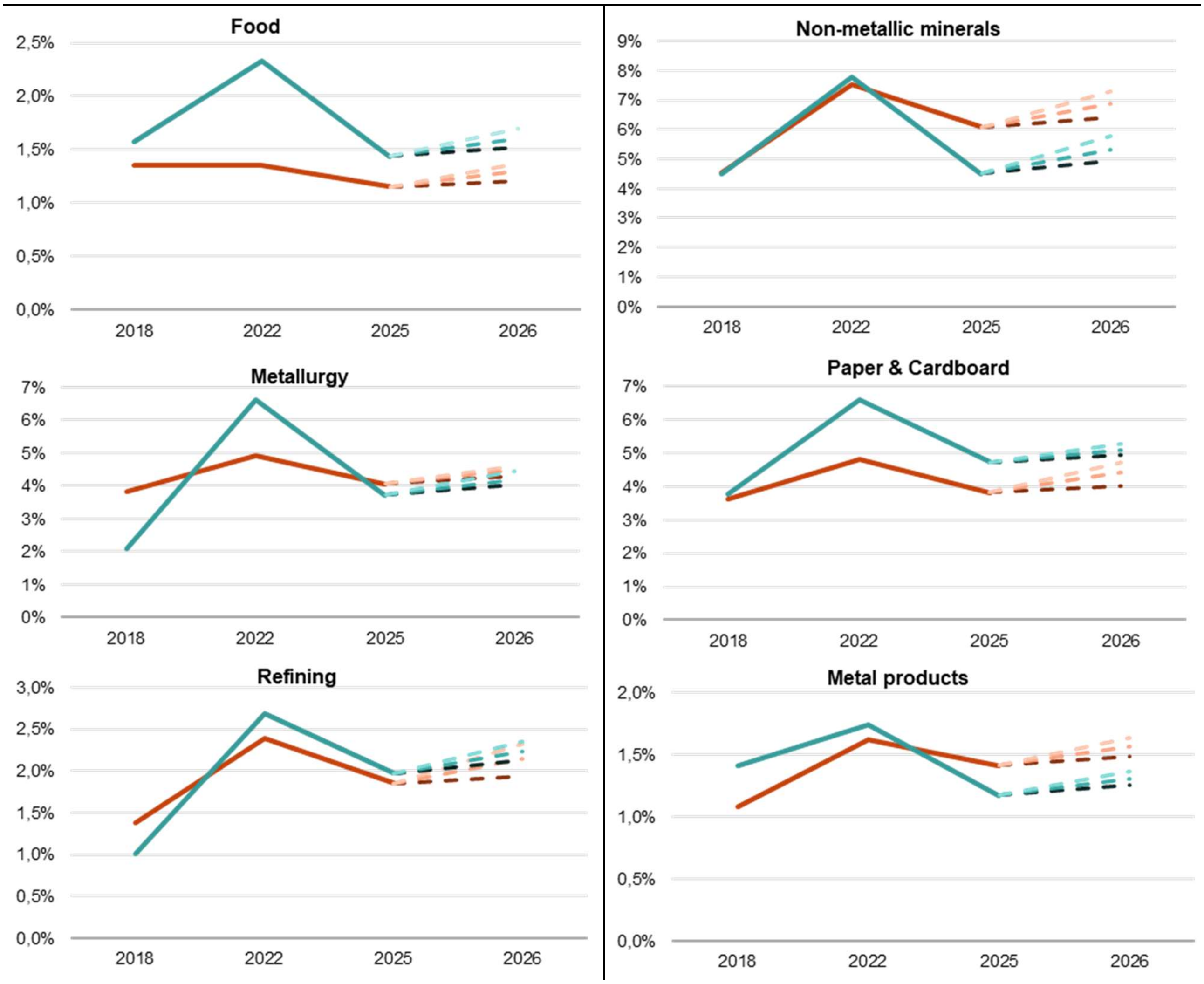
Table 3 – Change in EBITDA by sector in the US and the EU under different scenarios

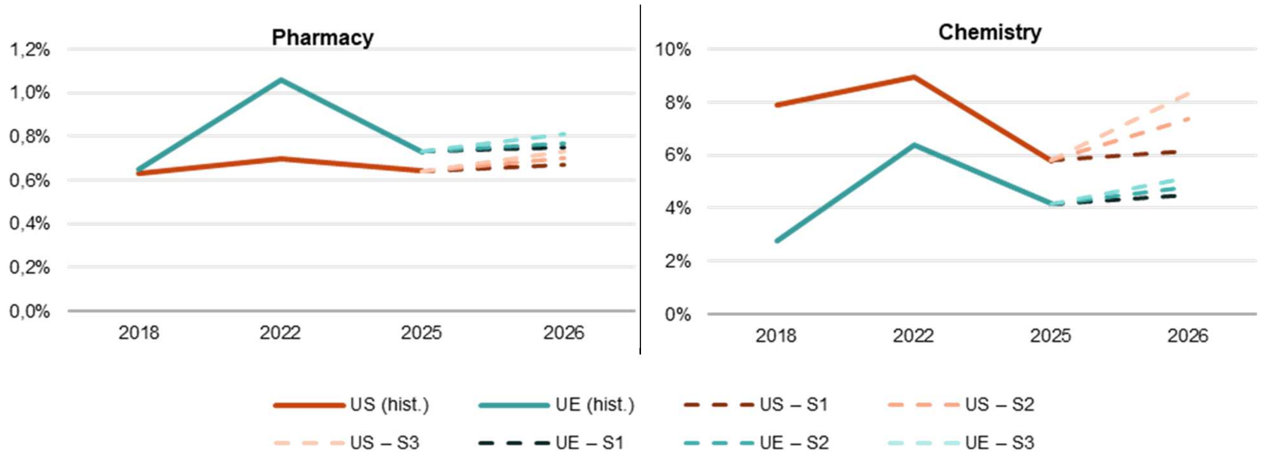
	Scenario 1 (consensus)			Scenario 2 ($100/bbl)			Scenario 2 ($120/bbl)		
	EBITDA loss		Difference between the US and the EU	Loss of EBITDA		Difference between the US and the EU	Loss of EBITDA		Difference between the US and the EU
Sector	**EU**	**US**		**EU**	**US**		**EU**	**US**	
Non-metallic minerals	-2.6%	-1.4%	**1.3%**	-5.0%	-3.2%	**1.8%**	-7.9%	-4.7%	**3.2%**
Chemicals	-3.0%	-0.9%	**2.0%**	-5.8%	-3.9%	**1.9%**	-9.1%	-6.2%	**2.8%**
Metallurgy	-2.7%	-1.6%	**1.1%**	-4.3%	-2.8%	**1.5%**	-6.6%	-3.9%	**2.8%**
Food	-1.2%	-0.3%	**0.9%**	-2.2%	-0.7%	**1.5%**	-3.5%	-1.0%	**2.5%**
Textiles	-1.4%	-0.7%	**0.6%**	-2.4%	-1.4%	**0.9%**	-3.5%	-1.9%	**1.6%**
Refining	-1.8%	-0.5%	**1.3%**	-3.1%	-1.9%	**1.1%**	-4.5%	-3.0%	**1.4%**
Rubber & Plastics	-0.9%	-0.5%	**0.4%**	-1.3%	-0.8%	**0.6%**	-2.0%	-1.0%	**1.0%**
Other industries	-0.3%	-0.1%	**0.2%**	-0.7%	-0.2%	**0.5%**	-1.2%	-0.3%	**0.9%**
Printing	-0.7%	-0.4%	**0.4%**	-1.1%	-0.6%	**0.5%**	-1.6%	-0.8%	**0.8%**
Beverages	-0.5%	-0.3%	**0.2%**	-0.9%	-0.5%	**0.4%**	-1.4%	-0.7%	**0.7%**
Electrical equipment	-0.5%	-0.2%	**0.3%**	-0.7%	-0.4%	**0.3%**	-1.0%	-0.5%	**0.5%**
Furniture	-0.5%	-0.1%	**0.5%**	-0.7%	-0.2%	**0.4%**	-0.9%	-0.4%	**0.5%**
Clothing	-0.4%	-0.2%	**0.2%**	-0.6%	-0.3%	**0.3%**	-0.9%	-0.4%	**0.5%**
Machinery & Equipment	-0.4%	-0.2%	**0.2%**	-0.6%	-0.4%	**0.3%**	-0.9%	-0.5%	**0.4%**
Pharmacy	-0.2%	-0.1%	**0.1%**	-0.3%	-0.1%	**0.2%**	-0.6%	-0.2%	**0.4%**
Tobacco	-0.2%	0.0%	**0.2%**	-0.3%	0.0%	**0.3%**	-0.4%	0.0%	**0.4%**
Metal products	-0.6%	-0.3%	**0.3%**	-1.0%	-0.8%	**0.2%**	-1.5%	-1.2%	**0.4%**
Transport equipment	-0.2%	-0.2%	**0.0%**	-0.4%	-0.4%	**0.0%**	-0.7%	-0.6%	**0.1%**
Electronics & Optics	-0.1%	-0.2%	**-0.1%**	-0.2%	-0.3%	**-0.1%**	-0.3%	-0.3%	**0.0%**
Paper & Cardboard	-1.5%	-0.9%	**0.6%**	-2.4%	-2.7%	**-0.3%**	-3.8%	-4.1%	**-0.3%**
Leather & Footwear	-0.2%	-0.3%	**0.0%**	-0.4%	-0.6%	**-0.3%**	-0.5%	-0.9%	**-0.4%**
Wood & Cork	-0.3%	-0.4%	**-0.1%**	-0.4%	-0.9%	**-0.4%**	-0.6%	-1.3%	**-0.6%**

Although in the first scenario, the gap in the negative impact on profitability to the detriment of the EU remains significant in only a limited number of sectors – chemicals, metallurgy, non-metallic minerals, refining – this gap widens and extends to more sectors as oil and gas prices rise. Indeed, in the third scenario, **seven European sectors show profitability loss gaps of more than 1 percentage point compared with US firms in the same sector** (compared with 4 in the 'optimistic' scenario): **rubber and plastics**, **textiles**, and **food**, in addition to the four sectors mentioned above.

To put these losses of competitiveness into perspective with the previous energy crisis of 2022, **it is interesting to observe the trend in the ratio of energy expenditure to income by sector in the United States and Europe**. In **the United States**, it is noted that in many sectors (see Figure 6), scenario 3 – with oil at $120 a barrel – **would bring energy expenditure as a percentage of income back to levels equivalent to, or even higher than, those observed during the 2022 crisis**. In contrast, in **the European Union**, energy expenditure as a proportion of income in each sector **remains significantly lower than its 2022 levels**.

Figure 6 – Change in the share of energy expenditure in income by sector in the United States and the European Union





Source: US Census Bureau, Eurostat, Bloomberg, IMF, GSA calculations

2.3. Within the EU, the French and Swedish industrial sectors are less vulnerable to rising gas and oil prices than those in Italy, Romania, Belgium and the Netherlands

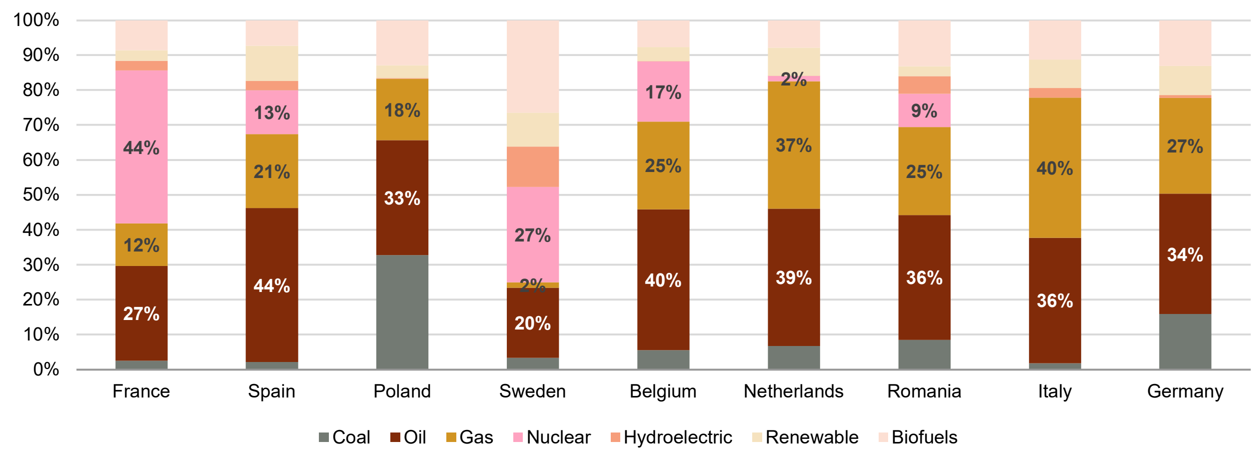
When examining sectoral exposure at the level of EU countries, there is a significant disparity in vulnerability to oil and gas price shocks (see Table 4 in the appendix).

Certain countries, such as **Italy**, **Belgium**, the **Netherlands**, **Romania** and, to a lesser extent, **Croatia**, appear particularly vulnerable to a rise in oil and gas prices. They are experiencing more pronounced increases in their energy expenditure relative to income across all sectors. In the scenario of oil at $100 a barrel (scenario 2), the average increase in energy expenditure relative to income reaches **22%**, **16%**, **16%**, **17%** and **15%** respectively for these countries.

Conversely, countries such as France (-1.6%)**, Poland** (8.6%)**, Spain** (8.8%) **and Sweden** (9.6%) **experience more moderate increases in this same scenario**. In **Germany**, the average increase in energy expenditure is slightly higher (10.8%), but remains lower than that observed in the most exposed countries.

These differences in energy expenditure trends across EU countries are largely due to differences in energy mix structures. Indeed, countries such as **France**, where **39%** of the energy mix depends on oil and gas, or **Sweden** (**22%**), are relatively less exposed to these energy sources and therefore to their price fluctuations. Conversely, countries such as **Italy** (**76%**), **Romania** (**61%**), the **Netherlands** (**76%**) and **Belgium** (**66%**) are much more sensitive to fluctuations in gas and oil prices.

Figure 7 – Energy mix for selected countries within the European Union



Source: International Energy Agency

Finally, **Poland** is a special case, as a significant proportion of its energy mix relies on coal (33%). However, in our scenarios, the price of coal is not affected by the conflict and therefore does not experience any shock. The strong performance of Polish sectors in our scenarios can thus be explained by this greater reliance on coal.

Finally, **regarding inflationary risk**, the 2022 energy crisis highlighted that **oil and gas shocks do not have the same impact on inflation.** Indeed, oil generates rapid but short-lived effects, mainly concentrated on transport fuels, with limited pass-through to non-energy prices, as it is not a major direct input for most sectors. Gas, on the other hand, operates more slowly but in a far more persistent and widespread manner: its effects spread gradually via energy bills, regulated tariffs and electricity prices, while having a broad impact on non-energy prices, as gas and electricity are essential inputs for a large number of sectors[19].

However, whilst the recent rise in oil prices is having an immediate impact on fuel costs and could partially feed through to food prices, **its indirect effects are expected to remain limited and temporary**. As gas prices have risen much less sharply than in 2022, the impact on energy bills remains contained. **A wider spillover to core inflation appears unlikely in the short term, as firms only adjust their prices in the event of a prolonged rise in energy costs[20]**.

[19] The different effects of oil and gas supply shocks on euro area inflation, *CEPR*, 13 May 2026
[20] The different effects of oil and gas supply shocks on euro area inflation, *CEPR*, 13 May 2026

3. Appendix

Table 4 – Change in the share of energy expenditure in income by sector and by EU country under the intermediate scenario (oil at $100 per barrel) [21]

	DEU	AUT	BEL	BGR	HRV	EST	FIN	FRA	GRC	HUN	IRL	ITA	LTU	LUX	MLT	NLD	POL	PRT	ROU	SVK	SWE	CZE	ESP
Food	15%	17%	16%	16%	20%	17%	7%	-1%	6%	13%	0%	24%	16%	14%	21%	19%	13%	16%	21%	17%	9%	15%	11%
Drinks	16%	15%	18%	7%	24%	27%	3%	-3%	11%	14%		19%	14%	14%	47%	20%	9%	12%	22%	23%	6%	15%	7%
Tobacco	14%		14%					39%	21%	11%						19%	11%	14%			5%		5%
Textiles	11%	14%	15%	15%	15%	15%	16%	-2%	14%	15%	14%	21%	16%		6%	15%	11%	14%	16%	15%	15%	7%	12%
Clothing	11%	14%	14%	9%	15%	15%	16%	-2%	14%	14%	14%	21%	15%			17%	10%	14%	16%	15%	15%	6%	8%
Leather & Footwear	11%	14%	15%			15%	16%	-2%	14%	14%	14%	21%	15%			14%		14%	16%	14%	15%	6%	
Wood & Cork	1%	3%	3%	3%	2%	11%	2%	-4%	2%	6%	2%	10%	4%		8%	7%	2%	6%	6%	4%	3%	3%	1%
Paper & Cardboard	8%	6%	14%	16%	24%	12%	3%	0%	11%	7%	17%	28%	6%		27%	19%	4%	4%	14%	2%	2%	5%	8%
Printing	9%	11%	15%	9%	16%	5%	6%	-9%	13%	11%		25%	11%		6%	12%	8%	8%	32%	13%	5%	27%	1%
Refining	11%					15%				14%						15%		14%			15%		
Pharmacy	7%		16%			6%		-9%		11%		18%			19%	14%	9%	12%	27%		3%	14%	8%
Rubber & Plastics	7%	10%	16%	10%	13%	13%	21%	-10%	7%	12%	13%	20%	10%		7%	11%	9%	10%	15%	14%	8%	9%	3%
Non-metallic minerals	14%	14%	16%	21%	26%	14%	24%	13%	11%	15%		31%	18%	10%	42%	26%	10%	26%	20%	13%	28%	12%	28%
Metallurgy	15%	19%	17%	13%	15%	38%	11%	-11%	14%	15%		23%	7%		33%	20%	14%	12%	20%	20%	15%	17%	12%
Metal products	10%	12%	19%	15%	15%	5%	8%	-5%	11%	14%	11%	24%	13%	14%	26%	14%	11%	14%	19%	12%	7%	11%	14%
Electronics & Optics	5%	6%		7%	7%	5%	4%	-15%	6%	9%		21%	6%			11%	8%	7%	15%	12%		5%	4%
Electrical equipment	7%	10%	20%	12%	13%	5%	5%	-9%	6%	12%		22%	10%	16%	10%	14%	9%	10%	13%	10%		9%	7%
Machinery & Equipment	10%	10%	12%	13%	16%	11%	6%	-5%	7%	13%	18%	26%	10%	14%	8%	12%	8%	11%	14%	10%	8%	10%	10%
Transport equipment	11%	13%		17%	15%	15%	16%	-2%	14%	14%	14%	21%	15%			13%	7%	14%	16%	15%		6%	3%
Furniture	5%	5%	19%	8%	5%	6%	3%	-4%	6%	9%		18%	5%	14%	7%	13%	4%	8%	5%	5%	6%	9%	1%
Other industries	30%	8%	20%	9%	13%	5%	3%	5%	6%	12%		16%	11%	14%		16%	9%	12%	9%	16%	5%	10%	10%
Chemistry	11%	10%	25%	38%	15%	5%	15%	1%	26%	18%	16%	28%	10%	16%	11%	26%	7%	9%	33%	36%	14%	16%	22%

[21] Cyprus, Denmark, Latvia and Slovenia are not included in this table due to a lack of available data.