Statistical bulletin

Producer price inflation, UK: December 2022 including services, October to December 2022

Changes in the prices of goods bought and sold by UK manufacturers including price indices of materials and fuels purchased (input prices) and factory gate prices (output prices).

Contact:
Andrew Carey
business.prices@ons.gov.uk
+44 1633 456907

Release date:
25 January 2023

Next release:
15 February 2023

Notice

25 January 2023

This Office for National Statistics (ONS) publication of Producer Price Indices (PPI) data was delayed by a week to ensure that quality assurance was completed on the corrections to data from January 2021 to October 2022. Details of this are included in Section 2. This publication covers the first release of both November and December 2022 PPI data.

Table of contents

1. Main points

2. Correction to producer price inflation (PPI) weights

3. Producer price inflation (PPI) annual growth rates

4. Producer price inflation (PPI) input prices

5. Producer price inflation (PPI) output prices

6. Services producer price inflation (SPPI)

7. Producer price inflation data

8. Glossary

9. Measuring the data

10. Strengths and limitations

11. Related links

12. Cite this statistical bulletin

1 . Main points

- Producer Price Index (PPI) weights for 2021 and 2022 have been corrected, which has resulted in a small number of revisions within the previously published data back to January 2021; there has been no change applied to SPPI weights, see Section 2 for more information.
- Producer input prices rose by 16.5% in the year to December 2022, down from 18.0% in the year to November 2022, and down from 20.2% in the year to October 2022.
- Producer output (factory gate) prices rose by 14.7% in the year to December 2022, down from 16.2% in the year to November 2022 and down from 17.5% in the year to October 2022.
- Inputs of other parts and equipment, and petroleum products provided the largest downward contributions to the change in the annual rates of input and output inflation, respectively.
- On a monthly basis, input prices decreased by 1.1% and output prices decreased by 0.8% in December 2022.
- Services producer prices rose by 5.2% in the year to Quarter 4 (Oct to Dec) 2022, down from a record high of 6.2% in the year to Quarter 3 (July to Sept) 2022.

2 . Correction to producer price inflation (PPI) weights

As a result of the quality assurance preparing the PPI weights data for 2023, an error was identified in the 2022 weights whereby the price index for diesel fuel had not been correctly weighted within PPI for the whole of 2022. A Producer Price Index correction notice was published after the October release detailing the revisions made to PPI data for January to October 2022.

A further review was conducted of the data mapping systems used to align all data sources to the PPI. This identified additional, smaller errors in the PPI weights for both 2021 and 2022. As a result, the PPI was suspended to allow for a full investigation and quality assurance of the production process to take place. This quality assurance has now been completed and data source checks have been extended to ensure that all data is aligned correctly and fully audited at the time of use in calculating PPI weights. These additional steps to the production process will ensure that these errors are not repeated in other areas.

The errors identified in aligning the data sources to PPI for the purpose of calculating index weights affected five product groups within input and output PPI. These are listed below:

- products of agriculture
- printing and reproduction services
- fabricated metal products
- repair and installation services of machinery and equipment
- other transport equipment

The change in weights resulting from these corrections has been minor and this is reflected in the scale of revisions to headline input and output PPI indices (Table 1). The scale of revisions is greater within input PPI because one affected category - products of agriculture - is not included in the output PPI. While revisions affected weights back to January 2021, the revisions to annual growth rates are less than 0.1 percentage point in many periods.

Table 1: Revisions to the annual percentage change
Input and output producer price inflation (PPI), January 2021 to October 2022

	Input PPI (GHIP)			Output PPI (GB7S)		
	Uncorrected rate	Revised rate	Difference	Uncorrected rate	Revised rate	Difference
2021 Jan	1.9	1.9	-	0.2	0.2	-
Feb	3.2	3.2	-	1.1	1.1	-
Mar	6.1	6.3	0.2	1.9	1.9	-
Apr	9.6	9.7	0.1	3.5	3.5	-
May	10.3	10.2	-0.1	4.3	4.3	-
June	9.7	9.6	-0.1	4.6	4.6	-
July	10.5	10.5	-	5.4	5.4	-
Aug	11.3	11.3	-	6.2	6.2	-
Sept	12.2	12.3	0.1	7.0	7.0	-
Oct	13.8	13.9	0.1	8.7	8.7	-
Nov	15.1	15.4	0.3	9.3	9.3	-
Dec	13.7	14.0	0.3	9.4	9.4	-
2022 Jan	14.4	14.7	0.3	10.3	10.3	-
Feb	15.3	15.6	0.3	10.8	10.7	-0.1
Mar	19.3	19.4	0.1	13.7	13.7	-
Apr	21.3	21.5	0.2	16.6	16.7	0.1
May	22.7	23.0	0.3	17.8	17.8	-
June	24.3	24.6	0.3	19.5	19.5	-
July	22.8	22.9	0.1	19.8	19.9	0.1
Aug	21.4	21.6	0.2	19.0	19.1	0.1
Sept	21.3	21.5	0.2	18.2	18.3	0.1
Oct	20.1	20.2	0.1	17.4	17.5	0.1

Source: Office for National Statistics – Producer Price Index

Notes

1. Revisions that are smaller than +/- 0.05 percentage points and therefore do not affect published annual rates are represented with a ‘-‘.

2. The ‘‘uncorrected rate’’ reflects what the annual rate would have been if the weights had not been corrected. This may differ from previously published annual rates since it includes the latest available survey price data.

The impact of revisions on the headline indices is small as the total number of published indices that have been revised is also relatively small. The extent of these revisions are summarised in Table 2.

Table 2: Number of published and revised indices
Input producer price inflation (PPI), output PPI, Export Price Index (EPI) and Import Price Index (IPI)

	Total number of published indices	Number of indices revised in 2021	Number of indices revised in 2022
Input PPI	265	44	72
Output PPI	350	1	22
EPI	738	30	49
IPI	694	14	19

Source: Office for National Statistics – Producer Price Index

Revisions to the monthly and annual growth rates of the headline series are also covered in more detail in the revisions triangle datasets:

- PPI revision triangle: total input one month (GHIP)
- PPI revision triangle: total input 12 months (GHIP)
- PPI revision triangle: total output one month (GB7S)
- PPI revision triangle: total output 12 months (GB7S)

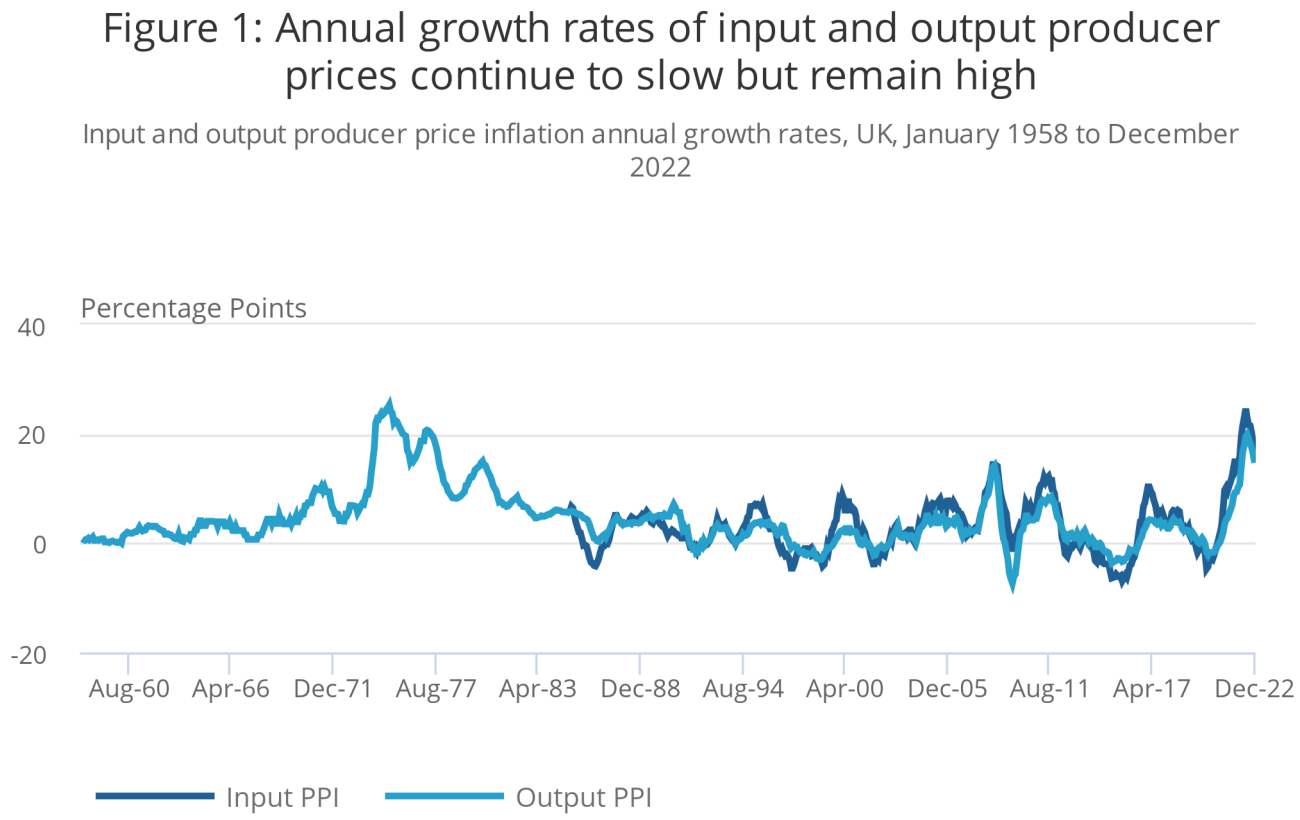
This publication was delayed by a week to complete the quality assurance described above. As of next month, it is expected that PPI will resume its normal publication cycle.

3 . Producer price inflation (PPI) annual growth rates

The annual rate of input PPI has now been positive for 25 consecutive months. However, it has slowed for the sixth consecutive month and is down 8.1 percentage points from the record high of 24.6% in June 2022. The annual rate of output PPI has now been positive for 24 consecutive months, but has slowed for the fifth consecutive month.

Figure 1: Annual growth rates of input and output producer prices continue to slow but remain high

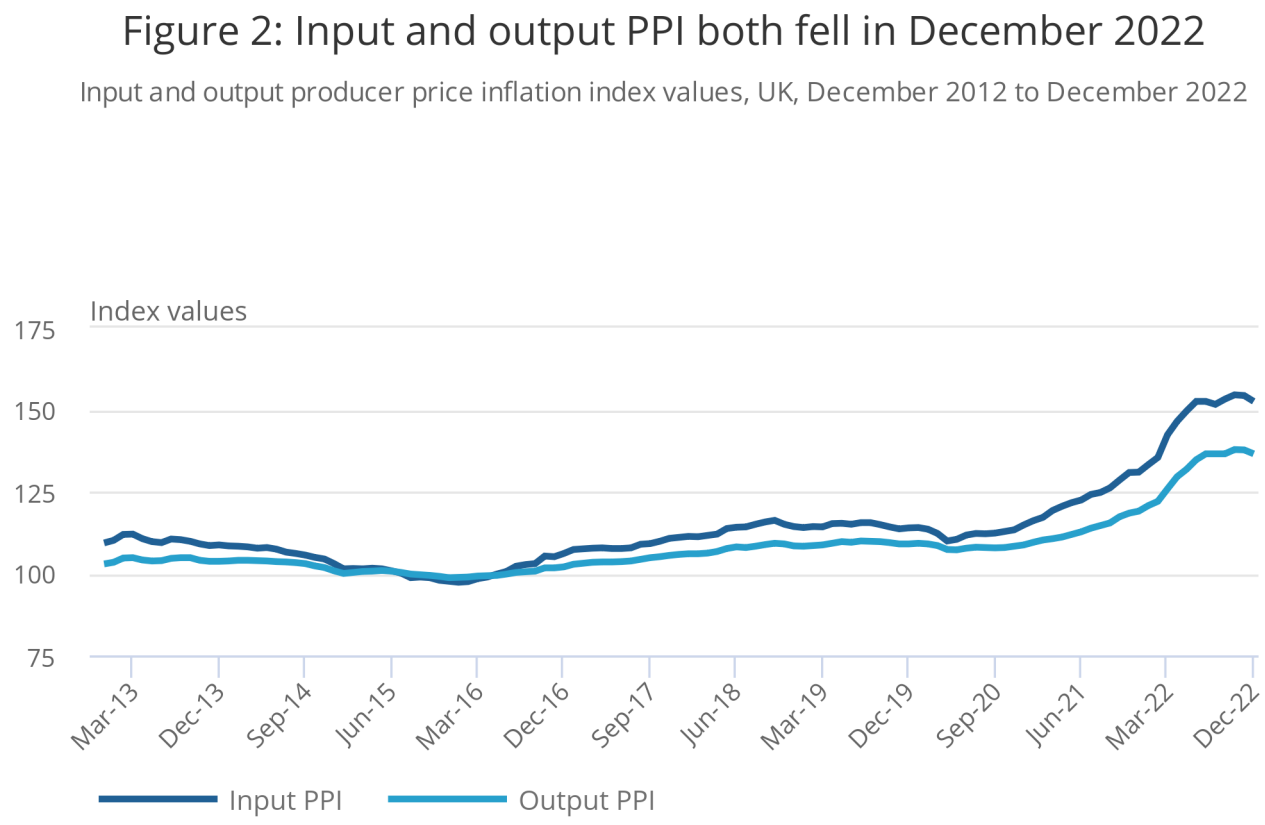
Input and output producer price inflation annual growth rates, UK, January 1958 to December 2022



Source: Office for National Statistics – Producer Price Index

Figure 2: Input and output PPI both fell in December 2022

Input and output producer price inflation index values, UK, December 2012 to December 2022



Source: Office for National Statistics – Producer Price Index

More about economy, business and jobs

- All Office for National Statistics (ONS) analysis, summarised in our economy, business and jobs roundup.
- Explore the latest trends in employment, prices and trade in our economic dashboard.
- View all economic data.

4 . Producer price inflation (PPI) input prices

Producer input prices fell by 1.1% between November and December 2022; this is down 0.9 percentage points from a decrease of 0.2% between October and November 2022 (Table 3). The monthly rate reached a record high of 5.1% in March 2022.

Table 3: Input prices, index values, growth rates and percentage point change to the annual rate
UK, January 2021 to December 2022

All materials and fuels purchased (GHIP)

	PPI Index (2015=100)	Monthly rate	Annual rate	Change in the annual rate (percentage points)
2021 Jan	116.1	1.1	1.9	1.1
Feb	117.1	0.9	3.2	1.3
Mar	119.2	1.8	6.3	3.1
Apr	120.5	1.1	9.7	3.4
May	121.6	0.9	10.2	0.5
June	122.4	0.7	9.6	-0.6
July	124.1	1.4	10.5	0.9
Aug	124.7	0.5	11.3	0.8
Sept	126.1	1.1	12.3	1.0
Oct	128.5	1.9	13.9	1.6
Nov	130.8	1.8	15.4	1.5
Dec	130.9	0.1	14.0	-1.4
2022 Jan	133.2	1.7	14.7	0.7
Feb	135.4	1.7	15.6	0.9
Mar	142.3	5.1	19.4	3.8
Apr	146.4	2.9	21.5	2.1
May	149.6	2.2	23.0	1.5
June	152.5	1.9	24.6	1.6
July	152.5	0.0	22.9	-1.7
Aug	151.6	-0.6	21.6	-1.3
Sept	153.2	1.0	21.5	-0.1
Oct	154.5	0.9	20.2	-1.3
Nov	154.3	-0.2	18.0	-2.2
Dec	152.5	-1.1	16.5	-1.5

Source: Office for National Statistics – Producer Price Index

Notes

1. Rates may not correspond to index value changes because of rounding.

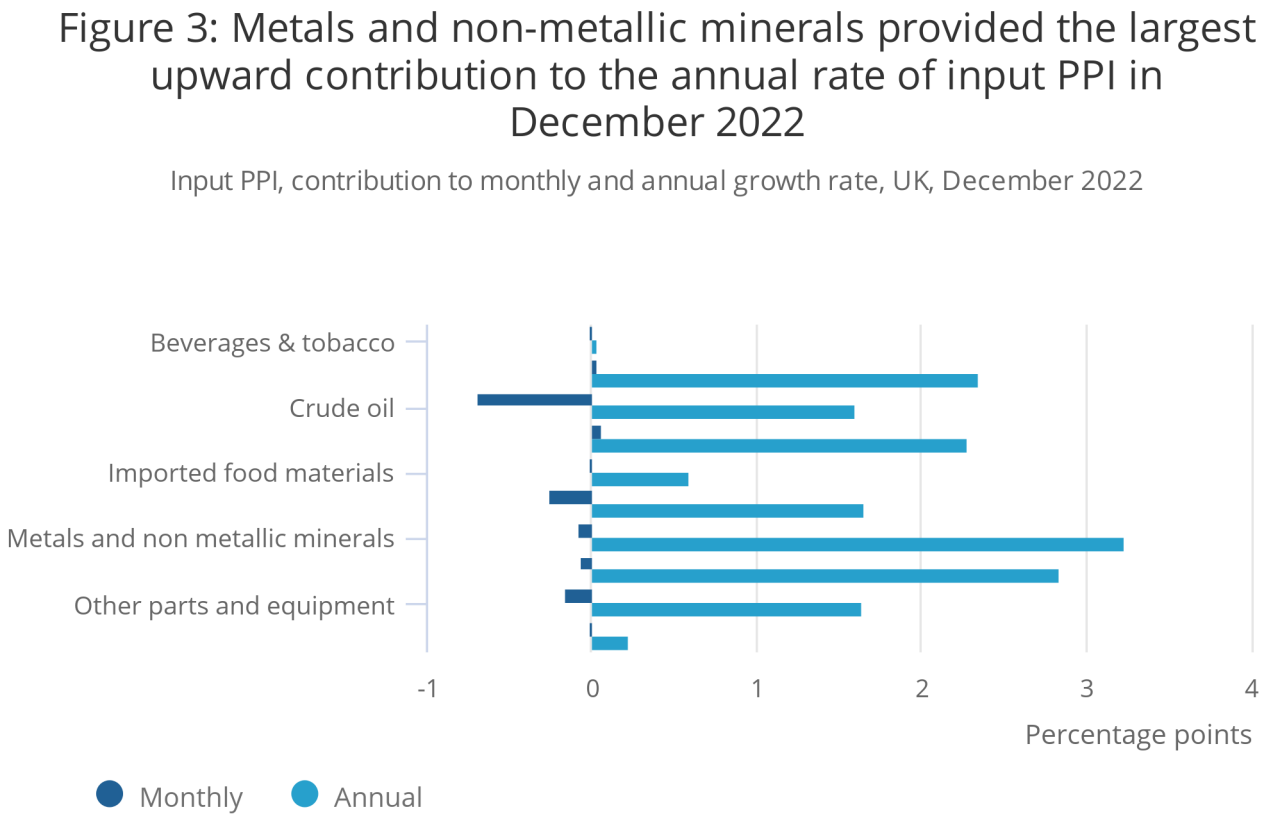
The largest upward contribution to the annual input inflation rate came from metals and non-metallic mineral products, which contributed 3.24 percentage points (Figure 3). This product group had an annual price increase of 14.4% in December 2022 (Table 4), which is down from 15.5% in November 2022. This product group also had the largest upward contribution to the annual input inflation rate in November 2022, also at 3.24 percentage points (Figure 4).

The second largest contributor to the annual rate in December 2022 came from chemicals, which contributed 2.84 percentage points (Figure 3) and had an annual price increase of 16.0% in December 2022, down from 18.3% in November 2022.

As indicated in [our Classification review of the Energy Price Guarantee and Energy Bill Relief Scheme (EBRS) statement](), the data relating to the inputs of fuel will reflect the impact of EBRS.

Figure 3: Metals and non-metallic minerals provided the largest upward contribution to the annual rate of input PPI in December 2022

Input PPI, contribution to monthly and annual growth rate, UK, December 2022



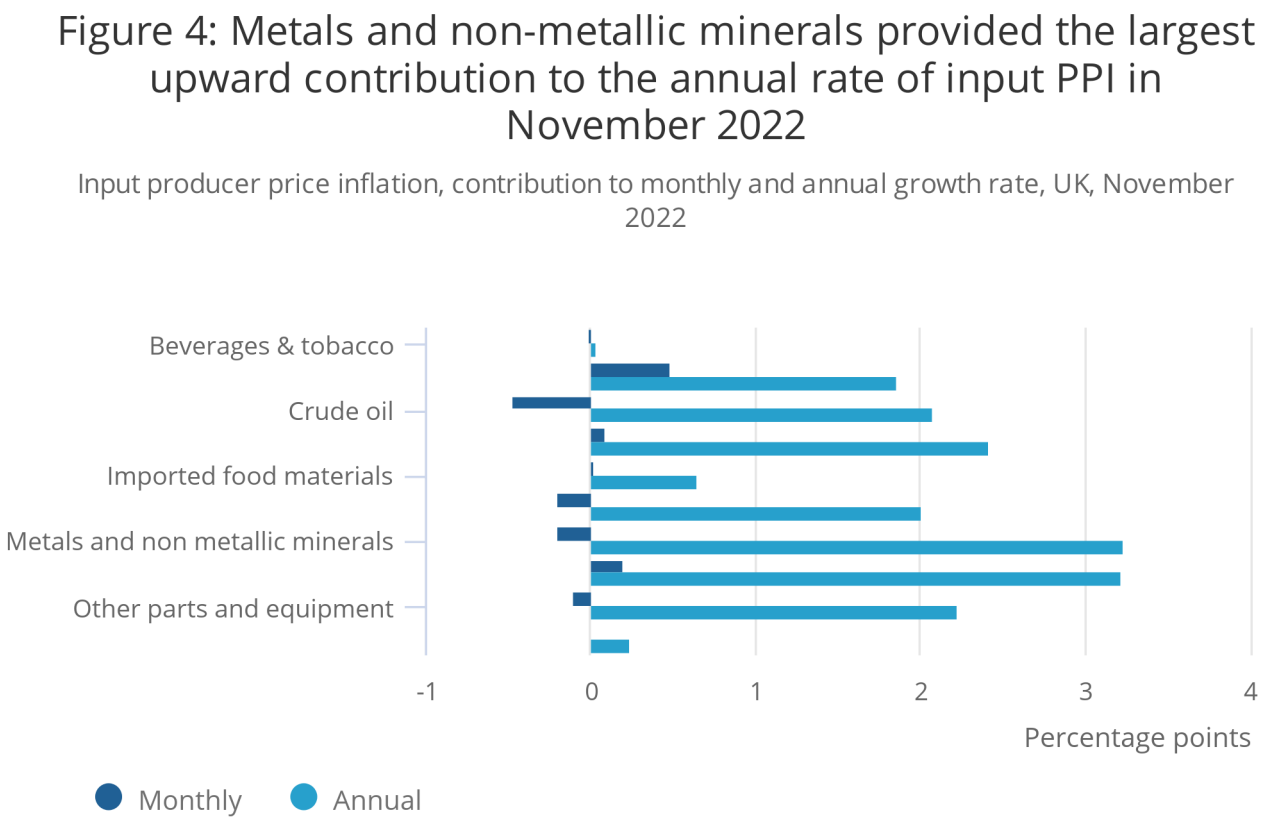
Source: Office for National Statistics – Producer Price Index

Notes:

1. Contributions to the rate may not add up to the rate exactly because of rounding.

Figure 4: Metals and non-metallic minerals provided the largest upward contribution to the annual rate of input PPI in November 2022

Input producer price inflation, contribution to monthly and annual growth rate, UK, November 2022



Source: Office for National Statistics – Producer Price Index

Notes:

1. Contributions to the rate may not add up to the rate exactly because of rounding.

Table 4: Input producer prices, growth rates
UK, October, November and December 2022

Product group	Percentage change					
	October 2022		November 2022		December 2022	
	Monthly rate	Annual rate	Monthly rate	Annual rate	Monthly rate	Annual rate
Beverages & tobacco	0.3	9.5	1.1	10.1	-0.1	10.4
Fuel excluding Climate Change Levy	1.9	54.2	11.2	48.4	0.8	69.6
Crude oil	2.7	44.1	-6.3	34.3	-10.0	27.7
Home food materials	1.5	20.7	0.7	19.2	0.5	17.2
Imported food materials	1.7	31.6	0.7	28.7	-0.5	26.2
Other produced materials	1.1	22.5	-1.7	18.7	-2.3	15.4
Metals & non-metallic minerals	0.6	18.2	-0.9	15.5	-0.3	14.4
Chemicals	0.1	19.0	1.2	18.3	-0.4	16.0
Other parts and equipment	0.3	10.1	-0.5	9.1	-0.8	7.8
Other inputs	0.5	8.9	0.3	8.8	-0.3	8.4
All manufacturing	0.9	20.2	-0.2	18.0	-1.1	16.5

Source: Office for National Statistics – Producer Price Index

Imported input prices fell by 2.6% on the month to December 2022, down from a fall of 2.3% in November 2022. The annual rate increased by 16.5% in December 2022, but this is down from 20.3% in November. It is also down 8.3 percentage points from its peak of 24.8% in October 2022 (Table 5).

Table 5: Imported materials and fuels purchased and sterling effective exchange rate, index values, growth rates and percentage point change to the annual rate
UK, January 2021 to December 2022

		Imported materials and fuels purchased (GD74)				Sterling effective exchange rate - month average (BK67)		
		PPI Index (2015=100)	Monthly rate	Annual rate	Change in the annual rate (percentage points)	Sterling Index (Jan 2005=100)	Monthly rate	Annual rate
2021	Jan	116.2	0.3	0.8	-0.1	79.1	1.3	-1.5
	Feb	115.6	-0.6	0.1	-0.7	80.6	1.9	0.0
	Mar	116.9	1.1	0.7	0.6	81.7	1.4	6.4
	Apr	118.2	1.2	5.3	4.6	81.4	-0.4	4.2
	May	118.1	-0.1	4.4	-0.9	82.0	0.7	6.2
	June	118.5	0.3	4.2	-0.2	82.0	0.0	6.6
	July	119.6	0.9	4.3	0.1	81.8	-0.2	6.2
	Aug	119.0	-0.5	4.2	-0.1	82.0	0.2	4.9
	Sept	120.4	1.2	4.6	0.4	81.5	-0.6	5.6
	Oct	121.2	0.7	5.3	0.7	82.0	0.6	5.9
	Nov	122.8	1.3	7.2	1.9	81.5	-0.6	4.1
	Dec	123.5	0.6	6.6	-0.6	81.4	-0.1	4.2
2022	Jan	124.1	0.4	6.7	0.1	82.7	1.6	4.6
	Feb	127.3	2.6	10.2	3.5	82.6	-0.1	2.5
	Mar	133.8	5.1	14.5	4.3	81.8	-1.0	0.1
	Apr	136.7	2.1	15.6	1.1	81.3	-0.6	-0.1
	May	140.3	2.7	18.8	3.2	79.9	-1.7	-2.6
	June	143.7	2.4	21.3	2.5	79.3	-0.8	-3.3
	July	143.2	-0.3	19.7	-1.6	79.0	-0.4	-3.4
	Aug	144.0	0.6	21.0	1.3	79.2	0.3	-3.4
	Sept	149.9	4.1	24.5	3.5	76.4	-3.5	-6.3
	Oct	151.2	0.9	24.8	0.3	77.1	0.9	-6
	Nov	147.7	-2.3	20.3	-4.5	78.1	1.3	-4.2
	Dec	143.8	-2.6	16.5	-3.8	79.1	1.3	-2.8

Source: Office for National Statistics – Producer Price Index

Notes

1. Rates may not correspond to index value changes because of rounding.

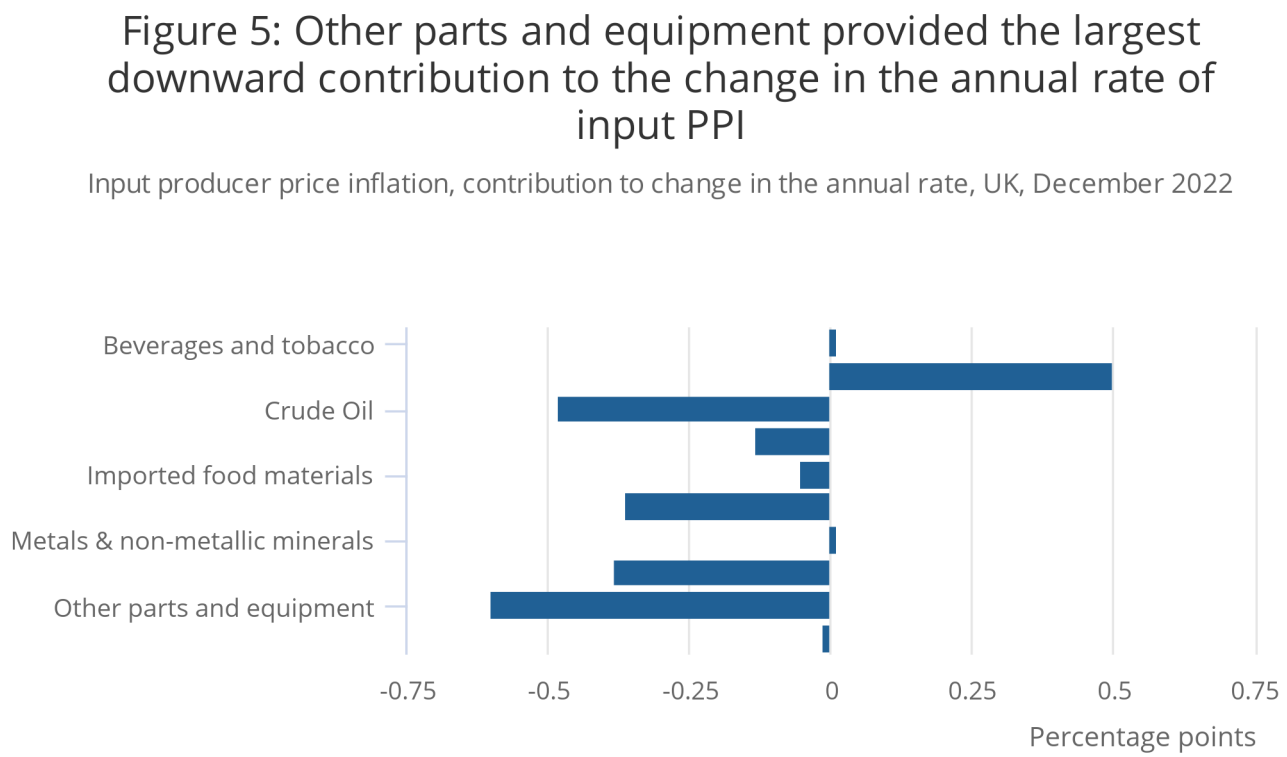
2. Total imports (GD74) represents roughly one-fifth of overall materials and fuels (input prices) in terms of index weight.

In the year to December 2022, the annual rate of input inflation was 16.5%; this is down 1.5 percentage points from 18.0% in November 2022.

Of the ten product groups, seven showed downward contributions to the change in the annual rate, with other parts and equipment providing the largest, at 0.60 percentage points (Figure 5). Other parts and equipment saw a monthly decrease of 0.8% in price between November and December 2022, compared with an increase of 0.5% in the same period last year.

Figure 5: Other parts and equipment provided the largest downward contribution to the change in the annual rate of input PPI

Input producer price inflation, contribution to change in the annual rate, UK, December 2022



Source: Office for National Statistics – Producer Price Index

Notes:

1. Contributions to the rate may not add up to the rate exactly because of rounding.

5 . Producer price inflation (PPI) output prices

Producer output (factory gate) prices decreased by 0.8% between November and December 2022, which is down from a 0.1% decrease between October and November 2022 (Table 6). This is the lowest the monthly rate has been since April 2020.

Table 6: Output prices, index values, growth rates and percentage point change to the annual rate
UK, January 2021 to December 2022

All manufactured products (GB7S)

	PPI Index (2015=100)	Monthly rate	Annual rate	Change in the annual rate (percentage points)
2021 Jan	109.5	0.7	0.2	0.4
Feb	110.2	0.7	1.0	0.8
Mar	110.6	0.4	1.9	0.9
Apr	111.1	0.4	3.5	1.6
May	111.9	0.7	4.3	0.8
June	112.7	0.8	4.6	0.3
July	113.8	1.0	5.4	0.8
Aug	114.6	0.7	6.2	0.8
Sept	115.4	0.7	7.0	0.8
Oct	117.3	1.6	8.7	1.7
Nov	118.4	1.0	9.3	0.6
Dec	119.0	0.4	9.4	0.1
2022 Jan	120.7	1.5	10.3	0.9
Feb	122.0	1.0	10.7	0.4
Mar	125.8	3.1	13.7	3.0
Apr	129.5	3.0	16.7	3.0
May	131.8	1.7	17.8	1.1
June	134.7	2.2	19.5	1.7
July	136.5	1.3	19.9	0.4
Aug	136.5	0.0	19.1	-0.8
Sept	136.5	0.0	18.3	-0.8
Oct	137.8	0.9	17.5	-0.8
Nov	137.7	-0.1	16.2	-1.3
Dec	136.5	-0.8	14.7	-1.5

Source: Office for National Statistics – Producer Price Index

Notes

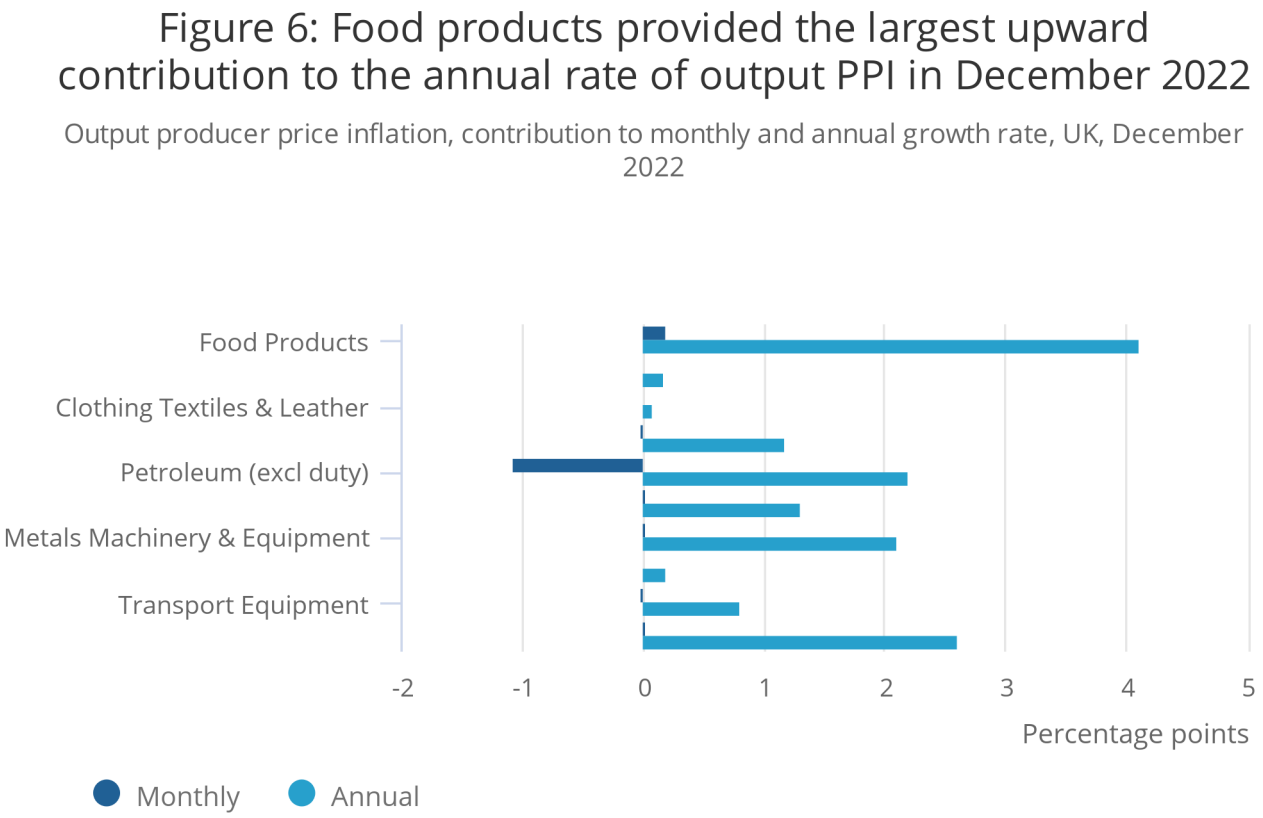
1. Rates may not correspond to index value changes because of rounding.

Food products provided the largest upward contribution to the output annual rate in December 2022, at 4.11 percentage points (Figure 6). This was mainly driven by preserved meat and meat products for domestic market. Food products had an annual price increase of 17.1% in December 2022 (Table 7), which is up from 16.9% in November 2022.

In November 2022, food products provided the second-largest upward contribution to the output annual rate, at 4.04 percentage points (Figure 7). The largest upward contribution to the output annual rate in November 2022 came from petroleum products, at 5.26 percentage points.

Figure 6: Food products provided the largest upward contribution to the annual rate of output PPI in December 2022

Output producer price inflation, contribution to monthly and annual growth rate, UK, December 2022



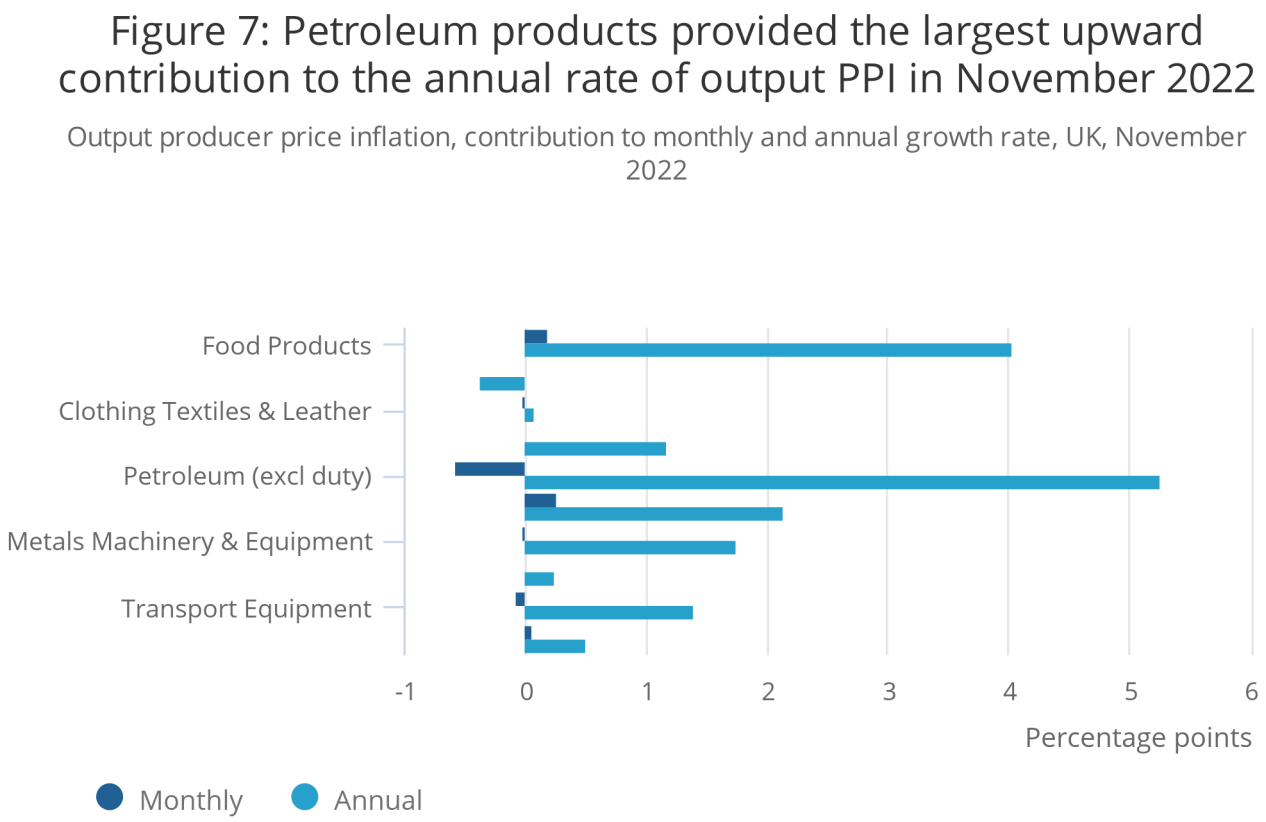
Source: Office for National Statistics – Producer Price Index

Notes:

1. Contributions to the rate may not add up to the rate exactly because of rounding.

Figure 7: Petroleum products provided the largest upward contribution to the annual rate of output PPI in November 2022

Output producer price inflation, contribution to monthly and annual growth rate, UK, November 2022



Source: Office for National Statistics – Producer Price Index

Notes:

1. Contributions to the rate may not add up to the rate exactly because of rounding.

Table 7: Output producer prices, growth rates
UK, October, November and December 2022

Product group	Percentage Change					
	October 2022		November 2022		December 2022	
	Monthly rate	Annual rate	Monthly rate	Annual rate	Monthly rate	Annual rate
Food products	1.0	16.8	0.7	16.9	0.8	17.1
Tobacco and alcohol (excl. duty)	0.0	6.9	0.6	7.9	0.0	8.5
Clothing, textile and leather	0.5	8.3	-0.5	7.4	0.7	7.1
Paper and printing	1.3	21.9	0.2	20.9	-0.1	19.9
Petroleum products (excl. duty)	2.8	63.9	-5.9	46.4	-11.9	31.1
Chemical and pharmaceutical	0.3	20.5	4.6	23.9	0.3	22.4
Metal, machinery and equipment	0.2	16.1	-0.1	15.2	0.2	14.2
Computer, electrical and optical	0.4	7.6	0.1	7.3	0.0	6.9
Transport equipment	0.8	7.2	-0.5	6.3	-0.2	6.0
Other manufactured products	0.9	12.5	0.2	11.7	0.1	11.4
All manufacturing	0.9	17.5	-0.1	16.2	-0.8	14.7

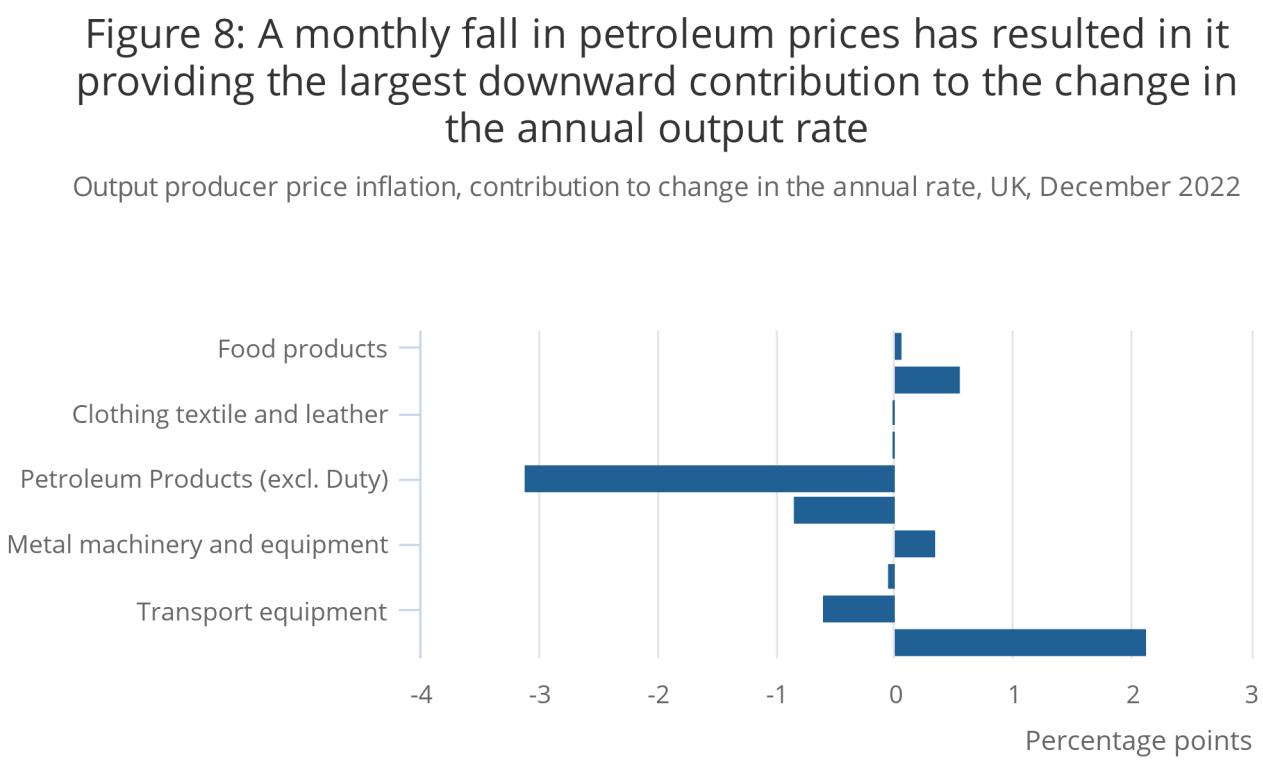
Source: Office for National Statistics – Producer Price Index

The annual rate of output inflation decreased by 1.5 percentage points from 16.2% in November 2022 to 14.7% in December 2022.

Of the ten product groups, four show downward contributions to the change in the annual rate. Petroleum products provided the largest downward contribution to the change in the annual output rate, at 3.12 percentage points (Figure 8). Petroleum products saw a monthly decrease of 11.9% in price between November and December 2022, compared with a smaller decrease of 1.6% in the same period last year.

Figure 8: A monthly fall in petroleum prices has resulted in it providing the largest downward contribution to the change in the annual output rate

Output producer price inflation, contribution to change in the annual rate, UK, December 2022



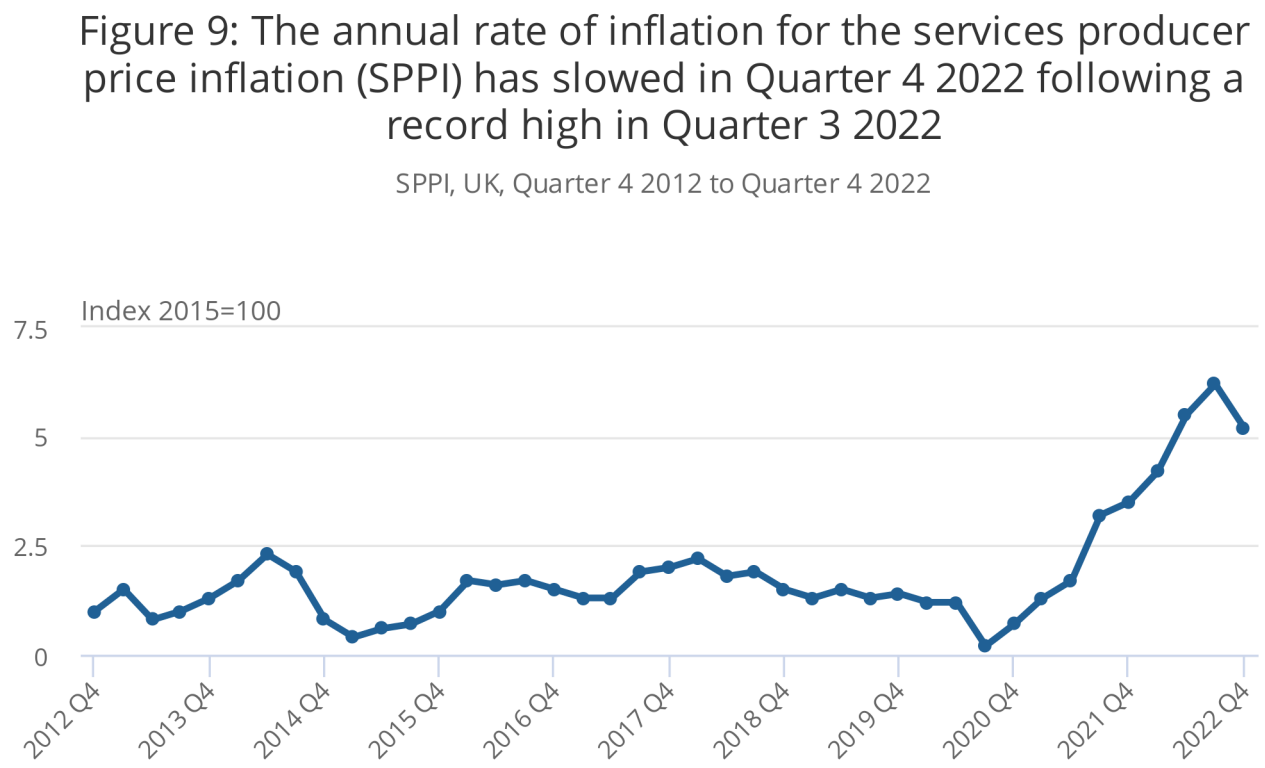
Source: Office for National Statistics – Producer Price Index

6 . Services producer price inflation (SPPI)

The annual rate of inflation for services sold by UK companies, the Services Producer Price Index (SPPI), was 5.2% in Quarter 4 (Oct to Dec) 2022 - down from a record high of 6.2% in Quarter 3 (July to Sept) 2022 (Figure 9). Seven of the nine product groups saw a slowing in their annual rate this quarter. This is somewhat of a base effect, as explained in our Beware base effects article, since sharp increases were seen in almost all service sectors in the same quarter last year.

Figure 9: The annual rate of inflation for the services producer price inflation (SPPI) has slowed in Quarter 4 2022 following a record high in Quarter 3 2022

SPPI, UK, Quarter 4 2012 to Quarter 4 2022



Source: Office for National Statistics – Services Producer Price Index

Notes:

1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec).

The quarter-on-quarter growth of services producer prices was 0.1% in Quarter 4 2022, down from 1.7% in Quarter 3 2022 (Table 8). The quarterly rate has slowed for the second consecutive quarter; this is the lowest the rate has been since Quarter 3 2020.

Table 8: Services producer prices
UK, Quarter 4 (Oct to Dec) 2022

Percentage change

	SPPI Index (2015=100)	Quarterly	Annual	Change in the Annual rate (percentage points)
2021 Q4	111.7	1.0	3.5	0.3
2022 Q1	113.3	1.5	4.2	0.7
Q2	115.5	1.9	5.5	1.3
Q3	117.4	1.7	6.2	0.7
Q4	117.5	0.1	5.2	-1.0

Source: Office for National Statistics – Services Producer Price Index

Notes

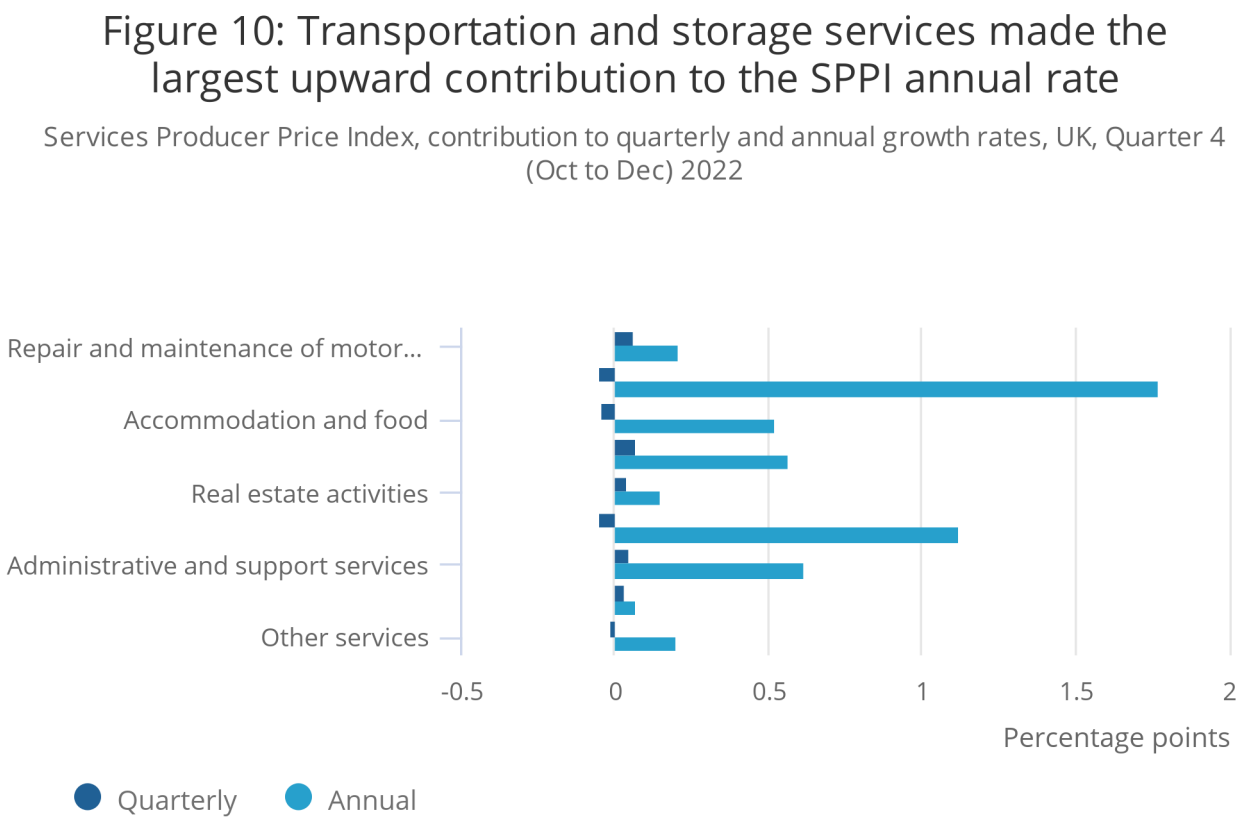
1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec).

The largest contribution to annual services producer prices in Quarter 4 2022 (Figure 10) came from transportation and storage services. Unusual demand for coach hire due to rail strikes caused an increase in other passenger land transport services. But the overall contribution shrank on the quarter as other transportation support services saw a significant slowing in the annual rate as a result of ship-broker services reflecting the impact of lower freight rates.

The second largest annual contribution came from professional, scientific and technical services, which also saw a slowing in the annual rate. This was caused predominantly by management consultancy services. However, this fall in the annual rate was affected by the mix of work undertaken, with a higher proportion of lower value projects being completed in the quarter.

Figure 10: Transportation and storage services made the largest upward contribution to the SPPI annual rate

Services Producer Price Index, contribution to quarterly and annual growth rates, UK, Quarter 4 (Oct to Dec) 2022



Source: Office for National Statistics – Services Producer Price Index

Notes:

1. Contributions to the rate may not add up to the rate exactly because of rounding.

Table 9: Services producer price inflation (SPPI), one-quarter and annual percentage change
Quarter 4 (October to December) 2022

UK

Service group	Percentage change	
	Quarterly	Annual
Repair and maintenance of motor vehicles	2.5	8.3
Transportation and storage	-0.3	9.8
Accommodation and food	-0.3	4.5
Information and communication	0.5	3.4
Real estate activities	0.9	3.4
Professional, scientific and technical activities	-0.2	4.1
Administrative and support services	0.3	3.8
Education	2.3	4.5
Other services	-0.7	10.0
SPPI	0.1	5.2

Source: Office for National Statistics – Services Producer Price Index

Notes

1. The section-level Services Producer Price Indexes (SPPIs) are an aggregate of individual industry-level SPPIs (excluding industries in sewerage and waste management) published in the Services producer price inflation statistical bulletin. They do not provide full coverage of the service sector.

7 . Producer price inflation data

Producer price inflation time series
Dataset | Released 25 January 2023
A comprehensive selection of data on input and output indices. Contains producer price indices of materials and fuels purchased and output of manufacturing industry by broad sector.

Output and input producer price inflation: contributions to the annual rates
Dataset | Released 25 January 2023
Contributions to the annual rates of input and output producer price inflation by component and overall rates.

Producer price inflation
Dataset MM22 | Released 25 January 2023
UK price movement data at all manufacturing, aggregated industry and product group level. Data supplied from individual manufacturers, importers and exporters. Monthly, quarterly and annual data.

8 . Glossary

Weight

This is the importance of the price of interest relative to other prices collected. With annual chain-linking, this is updated every year using business turnover data.

Index value

Price level in a specific basket of goods.

Annual growth rate

The annual inflation rate.

Link factor

A smoothing factor applied to create a continuous series following a weights change.

Contribution

A measure of influence that the index has on the overall growth rate. This depends on both the magnitude of the weight and the inflation rate. A positive contribution is an index that is driving a change in the annual growth rate value. Where the contribution is positive but the growth is negative, this indicates that the index is reducing the annual growth rate (for example, the growth rate would be higher if this index had a lower weight).

Producer price inflation

Changes in the prices of goods bought and sold by UK manufacturers, including price indices of materials and fuels purchased (input prices) and factory gate prices (output prices).

Input prices

The input price measures the price of materials and fuels bought by UK manufacturers for processing. It includes materials and fuels that are both imported or sourced within the domestic market. It is not limited to materials used in the final product but includes what is required by businesses in their normal day-to-day running, such as fuels.

Output prices

The factory gate price (output price) is the amount received by UK producers for the goods that they sell to the domestic market. It includes the margin that businesses make on goods, in addition to costs such as labour, raw materials and energy, as well as interest on loans, site or building maintenance, or rent.

Services producer price inflation

Quarterly estimates monitoring the changes in prices charged for services provided to UK-based customers for a range of industries.

9 . Measuring the data

Producer price inflation (PPI) uses contributions to identify how indices influence the overall inflation rate. This section gives additional information on the calculation and how to interpret it.

Example scenarios

The following gives examples of how weight and inflation rate changes most commonly affect the contribution. In PPI, the weights usually have greater influence on the contribution as these tend to show greater change than the annual inflation rate:

- decrease in weight and in inflation rate - contribution is negative
- decrease in weight, increase in inflation rate - contribution is usually negative
- no change in weight or inflation rate - no change
- no change in weight, increase in inflation rate - no change
- increase in weight, decrease in inflation rate - contribution is usually positive
- increase in weight, no change in inflation rate - contribution is positive
- increase in weight, increase in inflation rate - contribution is positive

Contributions are calculated using the following formula:

$$\frac{(weight \times index\ \ value \times link\ \ factor) for\ \ current\ \ year - (weight \times index\ \ value \times link\ \ factor) for\ \ previous\ \ ye}{chain\ \ linked\ \ value\ \ for\ \ the\ \ overall\ \ index}$$

Quality and methodology information (QMI) on strengths, limitations, appropriate uses, and how the data were created is available in our Producer Price Indices QMI report and our Services Producer Price Indices QMI report.

Other useful documentation for the PPI and the Services Producer Price Indices Report (SPPI) are our:

- Producer price indices methods changes article
- Chain-linking in business prices article
- Producer price weight changes article
- Services producer price weight changes article
- Guidance on using indices in indexation clauses (PDF, 197KB)
- PPI methods and guidance (PDF, 1.14MB)
- SPPI user guidance and methodology article
- PPI standard errors article
- SPPI standard errors article

Sterling effective exchange rate

The sterling effective exchange rate measures changes in the strength of sterling relative to baskets of other currencies. The sterling effective exchange rate is only indicative of the rates applied to producer prices. This is because the sterling effective exchange rate is a trade-weighted index that represents all UK trade, whereas producer prices reflect transactions in the manufacturing sector.

Economic statistics governance after EU exit

More information regarding the new governance following the UK's exit from the EU is available in our previous release.

10 . Strengths and limitations

Strengths

These data:

- provide users with valuable insight into the changes in the prices of goods and services bought and sold by UK manufacturers
- are comprehensive, covering many products at a much greater level of detail than other surveys
- are internationally comparable with any country using the classification by product activity (CPA) or the central product classification (CPC) systems - the classification structure is available to review on the Eurostat website
- are created using a rotational sampling method to enable many new products and new respondents to be included
- are chain-linked annually to improve results in deflation by reducing substitution bias

Limitations

The limitations are that:

- some products are produced by only a small number of manufacturers, meaning that there may not be enough manufacturers for a detailed and robust analysis, and the sector may be volatile, requiring some estimation
- though the data can be revised for 12 months, PPI weights for 2021 and 2022 have been corrected for this release, which has resulted in a small number of revisions within the previously published data back to January 2021
- the data for the latest two months of the Producer Price Index (PPI) and two quarters of the Services Producer Price Index (SPPI) are provisional

Response rates in December 2022

The response rate for the domestic PPI and Export Price Index (EPI) show an increase between November and December 2022, whereas the response rate for the Import Price Index (IPI) shows a decrease between November and December 2022 (Table 10).

The response rate for SPPI shows an increase between Quarter 3 (July to Sept) 2022 and Quarter 4 (Oct to Dec) 2022 (Table 11).

Table 10: Producer price inflation (PPI), Import Price Index (IPI) and Export Price Index (EPI) overall effective response rates at time of first publishing
Percentage, UK, December 2021 to December 2022

Weighted response

	PPI (domestic)	IPI	EPI
December 2021	68.6	70.0	63.6
January 2022	65.5	64.1	64.6
February 2022	70.5	70.3	69.2
March 2022	71.3	75.4	73.8
April 2022	71.4	68.2	74.2
May 2022	71.7	76.1	74.1
June 2022	74.0	78.0	69.5
July 2022	67.7	73.0	73.3
August 2022	71.6	71.6	72.0
September 2022	71.9	74.8	78.2
October 2022	73.3	61.3	71.6
November 2022	78.0	73.3	71.7
December 2022	78.2	72.9	73.7

Source: Office for National Statistics – Producer Price Index

Notes

1. Effective response rates exclude items permanently not available for collection.

Table 11: Services Producer Price Index (SPPI) overall effective response rates at time of first publishing
Percentage, Quarter 4 (Oct to Dec) 2021 to Quarter 4 (Oct to Dec) 2022

		Weighted Response SPPI
2021	**Q4**	71.3
2022	**Q1**	75.1
	Q2	78.0
	Q3	78.6
	Q4	80.0

Source: Office for National Statistics – Services Producer Price Index

Notes

1. Effective response rates exclude items permanently not available for collection.

11 . Related links

Consumer price inflation, UK
Bulletin | Released monthly
Price indices, percentage changes and weights for the different measures of consumer price inflation.

UK House Price Index
Bulletin | Released monthly
Monthly house price inflation in the UK, calculated using data from HM Land Registry, Registers of Scotland, and Land and Property Services Northern Ireland.

Construction output in Great Britain: September 2022, new orders and Construction Output Price Indices, July to September 2022
Bulletin | Released 11 November 2022
Short-term measures of output by construction industry in September 2022, contracts awarded for new construction work in Great Britain and a summary of the Construction Output Price Indices (OPIs) in the UK for Quarter 3 (Jul to Sept) 2022.

GDP monthly estimate, UK
Bulletin | Released monthly
Gross domestic product (GDP) measures the value of goods and services produced in the UK. It estimates the size of and growth in the economy.

Coronavirus and the effects on UK prices
Article | Released 6 May 2020
Plans for data collection, compilation and publication of our various prices statistics following movement restrictions as a result of the coronavirus (COVID-19) pandemic.

Coronavirus and the impact on output in the UK economy: August 2021
Article | Released 13 November 2021
Analysis of growth for the production, services and construction industries in the UK economy between February 2020 and August 2021, highlighting the impact of the coronavirus (COVID-19) pandemic.

12 . Cite this statistical bulletin

Office for National Statistics (ONS), released 25 January 2023, ONS website, statistical bulletin, Producer price inflation, UK: December 2022 including services, October to December 2022

Back to contents

Table 1: Output prices: summary (not seasonally adjusted) - CPA 2.1[1]

2015=100, CPA 2.1

	Manufactured Products for Domestic Market, excluding duty			Manufactured products excluding food beverages, tobacco,& petroleum products for domestic market			Coke and refined petroleum products, excluding duty			Food products, beverages and tobacco, excluding duty		
		percentage change over			percentage change over			percentage change over			percentage change over	
	Index (2015=100)	1 mth	12 mths	Index (2015=100)	1 mth	12 mths	Index (2015=100)	1 mth	12 mths	Index (2015=100)	1 mth	12 mths
	6150333333			6150333390			6140190000			6150888897		
	GB7S			GBBV			G6ST			GBA6		
2022 Jun	134.7r	2.2	19.5	130.5	0.7	14.9	294.7	12.7	114.2	122.7r	2.2	11.8
Jul	136.5r	1.3	19.9	131.7	0.9	14.5	301.2	2.2	112.1	124.8r	1.7	13.6
Aug	136.5r	-	19.1	132.5r	0.6	14.2	285.4	-5.3	98.4	125.9r	0.9	14.6
Sep	136.5r	-	18.3	133.6r	0.8	14.5	265.4	-7.0	76.2	127.0r	0.9	15.2
Oct	137.8	0.9	17.5	134.4	0.7	13.5	272.7	2.8	63.9	128.2	1.0	15.7
Nov	137.7p	-0.1	16.2	134.9p	0.3	13.0	256.6p	-5.9	46.4	129.3p	0.8	15.8
Dec	136.5p	-0.8	14.7	135.0p	0.1	12.4	226.1p	-11.9	31.1	130.3p	0.7	16.1

Source: Office for National Statistics

p = provisional
r = revised

	Manufactured Products for Domestic Market, including duty			Food products, beverages and tobacco, including duty			Coke and refined petroleum products, including duty		
		percentage change over			percentage change over			percentage change over	
	Index (2015=100)	1 mth	12 mths	Index (2015=100)	1 mth	12 mths	Index (2015=100)	1 mth	12 mths
	6158333333			6158888897			6148190000		
	GD73			GBA7			G6SU		
2022 Jun	135.9r	3.0	20.8	122.4r	2.1	11.5	172.3	8.1	49.2
Jul	138.0r	1.6	21.6	124.5r	1.7	13.3	176.9	2.7	50.8
Aug	137.2r	-0.6	20.0	125.4r	0.8	14.0	170.2	-3.8	44.0
Sep	136.0r	-0.8	18.2	126.7r	1.0	14.7	161.5	-5.1	33.6
Oct	137.2	0.8	17.4	127.8	0.9	15.2	163.3	1.1	28.5
Nov	136.5p	-0.5	15.7	128.9p	0.8	15.4	157.9p	-3.3	20.7
Dec	134.2p	-1.7	13.2	129.9p	0.8	15.7	146.3p	-7.4	12.6

Source: Office for National Statistics

1. All revision markers are compared against the last published values (October 2022)

p = provisional
r = revised

Back to contents

Table 2: Gross sector input prices, including Climate Change Levy[1]: summary (not seasonally adjusted) - CPA 2.1[2]

2015=100, CPA 2.1

	All manufacturing (materials and fuel purchased)			All Manufacturing (materials and fuel purchased) excluding food, beverages, tobacco & petroleum			Materials purchased by manufacturing industry			Fuels purchased by manufacturing industry		
		percentage change over			percentage change over			percentage change over			percentage change over	
	Index (2015=100)	1 mth	12 mths	Index (2015=100)	1 mth	12 mths	Index (2015=100)	1 mth	12 mths	Index (2015=100)	1 mth	12 mths
	7390333333			7390333392			7390333397			7390333394		
	GHIP			GHIO			GHIK			GHIM		
2022 Jun	152.5r	1.9	24.6	145.1r	0.8	19.0	151.4r	2.0	23.7	187.1	0.2	54.7
Jul	152.5r	-	22.9	145.3r	0.2	17.4	151.3r	-0.1	22.0	192.8	3.0	51.2
Aug	151.6r	-0.6	21.6	146.3r	0.7	17.0	149.8r	-0.9	20.4	209.3	8.6	55.2
Sep	153.2r	1.0	21.5	148.3r	1.4	17.7	151.3r	0.9	20.6	215.8r	3.1	47.8
Oct	154.5	0.9	20.2	149.0	0.4	16.6	152.5	0.8	19.2	221.5	2.6	50.9
Nov	154.3p	-0.2	18.0	149.5p	0.4	15.2	151.4p	-0.7	16.9	246.8p	11.4	46.3
Dec	152.5p	-1.1	16.5	148.8p	-0.4	14.4	149.6p	-1.2	14.7	248.3p	0.6	66.1

Source: Office for National Statistics

1 The Climate Change Levy was introduced in April 2001.

2. All revision markers are compared against the last published values (October 2022)

p = provisional

r = revised

Back to contents

Office for National Statistics

Table 3: Output prices: Detailed by product (not seasonally adjusted) - CPA 2.1[1]

2015=100, CPA 2.1

								Percentage change 1 month		Percentage change 12 months	
			2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2022 Nov	2022 Dec	2022 Nov	2022 Dec
Gross Sector											
Output of manufactured products	GB7S	6158333333	136.5r	136.5r	137.8	137.7p	136.5p	-0.1	-0.8	16.2	14.7
All manufacturing, excluding food, beverages, tobacco and petroleum	GBBV	6150333390	132.5r	133.6r	134.4	134.9p	135.0p	0.3	0.1	13.0	12.4
Food products, beverages and tobacco, excluding duty	GBA6	6150888897	125.9r	127.0r	128.2	129.3p	130.3p	0.8	0.7	15.8	16.1
Food products	G6SI	6140100000	127.0r	128.3r	129.6	130.6p	131.7p	0.7	0.8	16.9	17.1
Alcoholic beverages,excluding duty	G6SJ	6140110000	116.4	115.5	116.1	117.9p	118.0p	1.6	0.1	9.0	9.8
Soft drinks, mineral waters and other bottled waters	EVPU	6120110700	112.9r	113.2r	114.5	117.9p	118.0p	3.0	0.1	10.5	11.7
Textiles	G6SN	6140130000	117.3	118.1	118.7	117.6p	118.7p	-0.9	0.9	7.0	6.5
Wearing apparel	G6SO	6140140000	109.5	109.7	111.0	112.3p	112.4p	1.2	0.1	3.9	3.9
Leather and related products	G6SP	6140150000	121.4r	121.4r	121.4	121.4p	121.8p	-	0.3	16.8	17.1
Wood and products of wood and cork, except furniture	G6SQ	6140160000	158.9r	158.5r	160.0	159.4p	159.5p	-0.4	0.1	6.7	6.0
Paper and paper products	G6SR	6140170000	139.1r	141.1r	142.6	142.9p	142.6p	0.2	-0.2	19.8	18.2
Printing and recording services	G6SS	6140180000	123.3r	126.6r	128.6	128.7p	128.7p	0.1	-	22.2	22.0
Coke and refined petroleum products, excluding duty	G6ST	6140190000	285.4	265.4	272.7	256.6p	226.1p	-5.9	-11.9	46.4	31.1
Chemicals and chemical products	G6SV	6140200000	157.5	158.9r	158.9	167.9p	168.4p	5.7	0.3	28.2	26.3
Basic pharmaceutical products and pharmaceutical preparations	G6SW	6140210000	106.1r	106.4	109.0	106.1p	106.1p	-2.6	-	0.5	0.3
Rubber and plastic products	G6SX	6140220000	136.8r	137.9r	138.2	137.8p	137.6p	-0.3	-0.1	12.4	11.8
Other non-metallic mineral products	G6SY	6140230000	141.8r	143.4r	145.9	146.9p	147.8p	0.7	0.6	21.0	21.0
Basic metals	G6SZ	6140240000	213.1r	210.4r	201.1	198.5p	198.4p	-1.3	-	16.8	15.6
Fabricated metal products, except machinery and equipment	G6T3	6140250000	139.7r	140.0r	142.5	142.8p	143.2p	0.3	0.3	15.3	14.5
Computer, electronic and optical products	G6T5	6140260000	113.2r	113.8	113.8	113.7p	113.6p	-0.1	-	6.5	6.2
Electrical equipment	G6VF	6140270000	124.9r	124.8r	126.0	126.3p	126.3p	0.2	-	8.3	7.7
Machinery and equipment n.e.c.	G6VG	6140280000	124.9r	126.2r	127.1	127.5p	127.8p	0.4	0.2	12.8	11.8
Motor vehicles, trailers and semi-trailers	G6WH	6140290000	116.5r	118.3r	118.5	118.3p	118.9p	-0.2	0.5	6.1	6.6
Other transport equipment	G72N	6140300000	118.4	119.9	121.4	120.4p	119.5p	-0.8	-0.7	6.5	5.5
Furniture	G75I	6140310000	123.7r	124.7r	125.6	126.0p	126.7p	0.3	0.6	11.2	11.5
Other manufactured goods	G776	6140320000	109.5r	110.2r	110.7	111.6p	111.5p	0.8	-0.1	7.2	7.0
Repair and installation services of machinery and equipment	G777	6140330000	117.0r	118.3r	118.7	118.6p	118.0p	-	-0.5	7.1	6.4

Source: Office for National Statistics

1. All revision markers are compared against the last published values (October 2022)

p = provisional
r = revised

Back to contents

Office for National Statistics

Table 4: Input prices, excl Climate Change Levy[1]: materials and fuels purchased by selected industries (not seasonally adjusted) - CPA 2.1[2]

2015=100, CPA 2.1

								Percentage change 1 month		Percentage change 12 months	
			2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2022 Nov	2022 Dec	2022 Nov	2022 Dec
Gross sector											
Other mining & quarrying products	GHEA	7390080000	152.5r	154.2r	156.5	158.8p	156.8p	1.5	-1.3	25.8	25.9
Manufacture of food products, beverages, tobacco	GHHV	7390888897	142.4r	144.9r	147.0	148.5p	148.7p	1.0	0.2	20.9	19.5
Preserved meat & meat products	GHEF	7390101000	142.8r	145.4r	147.5	148.1p	148.0p	0.4	-0.1	19.5	17.7
Fish, crustaceans, molluscs, fruit & vegetables	GHEH	7390333387	138.3r	140.2r	143.1	145.2p	148.1p	1.5	2.0	17.2	13.5
Vegetable & animal oils & fats	GHEJ	7390104000	178.8r	191.9r	192.2	199.6p	196.3p	3.8	-1.6	32.7	31.0
Dairy products	GHEL	7390105000	153.7r	155.9r	158.4	159.3p	159.0p	0.6	-0.2	22.5	20.3
Grain mill products, starches & starch products	GHEN	7390106000	146.5r	150.7r	153.4	155.2p	154.6p	1.2	-0.4	24.1	22.3
Bakery & farinaceous products	GHEP	7390107000	141.2r	143.9r	146.2	148.3p	148.2p	1.4	-	23.7	23.7
Other food products	GHER	7390108000	134.4r	136.9r	138.2	140.0p	140.7p	1.3	0.5	20.9	21.1
Animal feeds	GHET	7390109000	147.8r	150.1r	152.3	153.3p	152.9p	0.7	-0.3	23.0	21.4
Alcoholic Beverages	GHEV	7390333384	139.6r	140.5	141.9	144.2p	144.1p	1.6	-0.1	20.5	20.7
Soft drinks; mineral waters & other bottled waters	GHEX	7390110700	128.2r	129.6r	131.1	132.6p	133.0p	1.1	0.3	14.8	14.9
Tobacco products	GHEZ	7390120000	153.0r	158.6r	160.6	160.8p	159.7p	0.1	-0.7	24.2	21.5
Manufacture of textiles & textile products; clothing	GHHW	7390888895	127.6r	129.6r	130.7	130.8p	130.8p	-	-	11.3	10.6
Textiles	GHFB	7390130000	130.1r	132.0r	133.1	133.4p	133.5p	0.2	0.1	12.2	11.6
Wearing apparel	GHFD	7390140000	123.1r	125.3r	126.4	126.0p	125.9p	-0.3	-0.1	9.6	8.6
Manufacture of leather & related products	GHFF	7390150000	131.2r	132.7r	132.9	133.4p	133.1p	0.4	-0.2	15.8	14.9
Manufacture of wood & wood products	GHFH	7390160000	163.4r	162.1r	162.9	162.4p	161.3p	-0.3	-0.7	6.6	5.9
Manufacture of pulp, paper & paper products, recording media & printing services	GHHZ	7390888892	143.1r	145.4r	147.1	148.5p	148.1p	0.9	-0.3	19.8	19.6
Pulp, paper & paper products	GHFJ	7390170000	148.3	150.5r	152.1	153.6p	153.1p	1.0	-0.3	19.7	19.7
Printing & recording services	GHFL	7390180000	136.2r	138.5r	140.5	141.6p	141.4p	0.8	-0.1	19.8	19.5
Manufacture of coke & refined petroleum products	GHFN	7390190000	249.1r	240.9r	247.9	232.8p	210.6p	-6.1	-9.6	35.5	28.7
Manufacture of chemicals, chemical products & man-made fibres	GHIB	7390888890	168.9r	170.9r	170.8	176.4p	174.8p	3.3	-0.9	28.4	25.9
Paints, varnishes & similar coatings, printing ink & mastics	GHFP	7390203000	153.1r	154.7r	155.2	158.4p	158.2p	2.0	-0.1	20.1	18.2
Soaps, detergents, cleaning & polishing preparations, perfumes & toilet preparations	GHFR	7390204000	138.1r	140.4r	140.5	142.2p	141.9p	1.2	-0.2	17.2	16.4
Other chemical products	GHFT	7390205000	141.8r	143.1	142.2	143.0p	142.5p	0.5	-0.4	16.4	14.4
Industrial gases; other basic inorganic chemicals; fertilisers & nitrogen compounds	GHFV	7390333378	195.0	199.7r	198.6	218.8p	217.3p	10.1	-0.7	47.2	46.3
Petrochemicals & man made fibres	GHFX	7390333377	179.5r	180.8r	181.3	184.3p	181.7p	1.7	-1.5	28.5	24.8
Dyes & pigments: pesticides & other agrochemical products	GHFZ	7390333376	161.7r	162.8r	160.9	168.0p	167.1p	4.4	-0.5	24.8	23.8
Manufacture of basic pharmaceutical products & pharmaceutical preparations	GHGB	7390210000	125.3r	126.8r	128.1	127.8p	127.5p	-0.2	-0.3	11.7	11.0
Manufacture of rubber & plastic products	GHGD	7390220000	148.7r	150.5r	152.1	152.7p	152.4p	0.4	-0.2	17.5	16.6
Manufacture of cement, lime & plaster	GHGF	7390333375	154.3r	155.4r	155.1	158.1p	157.6p	1.9	-0.3	22.5	23.1
Manufacture of glass, refractory, clay, other porcelain, ceramic stone products	GHGH	7390333374	152.9r	154.5r	155.8	159.2p	157.8p	2.2	-0.9	26.3	26.1
Manufacture of basic metals & fabricated products	GHIF	7390888884	175.1r	177.6	177.3	176.8p	175.8p	-0.3	-0.6	17.3	16.9
Basic iron, steel & alloys: tubes, pipes, hollow profiles	GHGJ	7390333369	195.6r	200.5r	194.8	193.4p	193.4p	-0.7	-	18.2	18.9
Other basic metals & casting	GHGL	7390333368	183.7r	188.2r	192.6	190.7p	187.0p	-1.0	-1.9	17.0	15.3
Weapons & ammunition	GHGN	7390254000	138.4r	139.3r	140.5	141.0p	140.9p	0.4	-0.1	13.2	12.7
Fabricated metal products, excluding machinery & equipment & weapons & ammunition	GHGP	7390333365	168.4r	169.2r	169.0	169.3p	168.8p	0.2	-0.3	17.5	17.3
Manufacture of computer, electronic & optical products, electrical equipment	GHIG	7390888883	134.9r	137.2	138.3	138.2p	137.4p	-0.1	-0.5	12.8	11.8
Computer, electronic & optical products	GHGR	7390260000	130.9r	133.7r	135.1	135.1p	134.3p	-	-0.6	13.1	12.2
Electrical equipment	GHGT	7390270000	139.5r	141.2	141.9	141.6p	141.0p	-0.2	-0.5	12.4	11.4
Manufacture of machinery & equipment n.e.c	GHGV	7390280000	144.8	146.5	147.7	147.2p	146.7p	-0.3	-0.3	13.6	12.8
Manufacturing of motor vehicles & other transport equipment	GHII	7390888881	137.9r	140.2r	140.9	140.1p	139.1p	-0.6	-0.7	12.5	11.3
Motor vehicles, trailers & semi trailers	GHGX	7390290000	132.2r	134.1r	134.7	134.5p	134.0p	-0.1	-0.4	10.1	9.4
Ships & boats	GHGZ	7390301000	144.3	145.4	146.3	145.8p	145.5p	-0.3	-0.2	13.3	12.5
Aircraft & spacecraft & related machinery	GHHB	7390303000	150.5r	153.9r	154.7	152.4p	150.2p	-1.5	-1.4	17.4	15.2
Other transport equipment	GHHD	7390333358	125.3r	126.8r	126.8	126.5p	125.7p	-0.3	-0.6	9.9	9.2
Manufacture of other manufactured goods n.e.c	GHIJ	7390888880	149.9r	151.6r	153.3	152.8p	151.8p	-0.3	-0.6	12.4	11.5
Furniture	GHHF	7390310000	153.8r	154.6r	155.2	154.5p	153.7p	-0.4	-0.5	9.5	8.8
Other manufacturing	GHHH	7390320000	146.8r	149.2	151.8	151.4p	150.3p	-0.2	-0.7	14.8	13.8
Repair & maintenance of ships & boats	GHHJ	7390331500	152.1r	151.7r	149.6	149.1p	148.9p	-0.4	-0.2	12.8	12.1
Repair & maintenance services of aircraft & spacecraft	GHHL	7390331600	118.6r	121.7	122.1	119.9p	117.6p	-1.8	-1.9	2.8	0.6
Other repair; installation	GHHN	7390333355	139.8r	139.2r	139.6	139.7p	137.9p	0.1	-1.3	14.2	13.2

Source: Office for National Statistics

1 Climate Change Levy is excluded from the detailed industry input index,
(see background notes of the Statistical Bulletin for more detail).

2. All revision markers are compared against the last published values (October 2022)

p = provisional
r = revised

Back to contents

Office for National Statistics

Table 5: Input prices: detailed by commodity (not seasonally adjusted) - CPA 2.1[1,2]

2015=100, CPA 2.1

								Percentage change 1 month		Percentage change 12 months	
			2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2022 Nov	2022 Dec	2022 Nov	2022 Dec
Fuel excl. CCL	FSQ3	7490222295	214.6	224.9r	229.2	254.9p	257.0p	11.2	0.8	48.4	69.6
Mining of coal & lignite exc CCL	GHDW	7390050000	183.6r	200.2r	196.2	188.5p	184.0p	-3.9	-2.4	38.4	35.9
Electricity excl. CCL	GHHP	7390351000	208.2	216.8r	225.4	247.4p	247.5p	9.8	-	45.7	64.3
Gas excl. CCL	GHHR	7390444499	238.3	231.4r	213.9	239.4p	241.2p	11.9	0.8	42.0	55.1
Crude Oil	FSQ4	7490444498	252.9	243.9	250.6	234.7p	211.4p	-6.3	-10.0	34.3	27.7
Domestic crude oil & metal ores	GGT3	7190222295	257.3	249.2	258.6	240.9p	213.6p	-6.8	-11.3	37.1	27.7
Imported crude oil & metal ores	GHBV	7290222295	245.2	234.6	236.5	223.9p	207.6p	-5.3	-7.3	29.3	27.7
Home produced food:	FSP7	7190351000	139.5r	141.5r	143.6	144.6p	145.3p	0.7	0.5	19.2	17.2
Products of agriculture, hunting and related services	GGO7	7190010000	160.9r	162.8r	165.0	165.3p	164.9p	0.2	-0.2	21.4	17.9
Fish & other fish products	GGS8	7190030000	125.5r	124.1r	133.8	136.8p	148.0p	2.2	8.2	11.1	-1.1
Preserved meat and meat products	GH2M	7190101000	119.0	120.1r	120.4	120.7p	121.8p	0.3	0.9	11.7	12.0
Processed fish & fish products; fruit & vegetables	GH7R	7190333387	117.3r	118.5r	118.7	119.1p	121.7p	0.4	2.2	7.7	9.7
Vegetable & animal oils and fats	GH7S	7190104000	174.8r	193.1r	197.6	202.5p	197.9p	2.5	-2.3	41.6	37.6
Dairy products	GH8A	7190105000	158.0r	159.1r	161.9	163.0p	164.3p	0.6	0.8	32.1	32.1
Grain mill products, starches and starch products	GH8B	7190106000	137.3r	138.3r	141.6	142.4p	142.7p	0.6	0.2	22.7	21.0
Bakery and Farinaceous products	GH8C	7190107000	120.6r	122.2r	124.5	126.0p	127.7p	1.3	1.3	16.8	17.7
Other Food products	GH8L	7190108000	112.8r	113.4r	114.9	116.4p	117.2p	1.3	0.7	12.6	12.8
Prepared animal feeds	GH98	7190109000	154.9r	155.8r	157.0	158.5p	158.4p	1.0	-0.1	25.7	24.6
Imported food materials	FSP9	7490333354	149.4r	156.8r	159.4	160.6p	159.8p	0.7	-0.5	28.7	26.2
Agricultural crop products	GHBQ	7290010000	124.3	129.2r	135.4	136.9p	135.0p	1.0	-1.4	14.4	10.5
Fish & fish products	GHBS	7290030000	164.1	168.6	157.6	159.9p	160.8p	1.4	0.5	13.9	13.9
Meat & meat products	GHBX	7290101000	161.6r	172.4r	176.3	174.8p	173.4p	-0.9	-0.8	40.6	39.1
Processed fish & fish products, fruit & vegetables	GHBY	7290333387	128.9r	135.1r	136.0	136.0p	135.0p	-	-0.7	21.0	19.3
Vegetable & animal oils & fats	GHBZ	7290104000	193.6	202.8	197.0	210.0p	207.3p	6.6	-1.3	13.8	14.3
Dairy products	GHCA	7290105000	153.9	164.0	167.2	168.2p	168.0p	0.6	-0.1	65.0	59.8
Grain mill products & starches	GHCB	7290106000	159.3	166.0	166.6	165.3p	164.2p	-0.8	-0.7	27.2	25.7
Bakery & farinaceous products	GHCC	7290107000	138.0	144.8r	154.9	154.8p	153.3p	-	-1.0	29.6	27.9
Other food products	GHCD	7290108000	188.9	199.6r	201.1	202.8p	206.5p	0.8	1.8	59.2	54.1
Prepared animal feeds	GHCE	7290109000	161.9	175.1	176.7	176.3p	174.4p	-0.2	-1.1	41.7	39.6
Other home produced materials	FSQ2	7490333353	159.0r	158.9r	160.7	158.0p	154.3p	-1.7	-2.3	18.7	15.4
Forestry products	GGP2	7190020000	237.2	216.4r	216.4	216.4p	216.4p	-	-	-3.3	-3.3
Other mining & quarrying products exc agg	GH2L	7190080000	137.3r	138.8r	136.9	142.6p	142.6p	4.1	-	24.9	25.9
Textiles	GHAE	7190130000	117.3	118.1	118.7	117.6p	118.7p	-0.9	0.9	7.0	6.5
Wearing Apparel	GHAF	7190140000	109.5	109.7	111.0	112.3p	112.4p	1.2	0.1	3.9	3.9

Leather and related products	GHAG	7190150000	121.4r	121.4r	121.4	121.4p	121.8p	-	0.3	16.8	17.1
Wood and products of wood and cork, exc furniture	GHAH	7190160000	158.9r	158.5r	160.0	159.4p	159.5p	-0.4	0.1	6.7	6.0
Paper and paper products	GHAI	7190170000	139.1r	141.1r	142.6	142.9p	142.6p	0.2	-0.2	19.8	18.2
Coke & refined petroleum products	GHAK	7190190000	285.4	265.4	272.7	256.6p	226.1p	-5.9	-11.9	46.4	31.1
Water collection, treatment & supply	GHBP	7190360000	110.9	110.9	110.9	110.9p	110.9p	-	-	3.6	3.6

Source: Office for National Statistics

1 The Climate Change Levy was introduced in April 2001.

2. All revision markers are compared against the last published values (October 2022)

p = provisional

r = revised

Back to contents

Office for National Statistics

Table 5: Input prices: detailed by commodity (not seasonally adjusted) - CPA 2.1[1,2]

2015=100, CPA 2.1

								Percentage change 1 month		Percentage change 12 months	
			2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2022 Nov	2022 Dec	2022 Nov	2022 Dec
Inputs of Metals and Non-Metallic Mineral products	FSQ8	7390333351	174.0r	175.5	176.5	174.9p	174.3p	-0.9	-0.3	15.5	14.4
Cement, lime, plaster and articles of concrete, cement & plaster	GHGF	7390333375	154.3r	155.4r	155.1	158.1p	157.6p	1.9	-0.3	22.5	23.1
Glass, refractory clay, porcelain, ceramic and stone products	GHGH	7390333374	152.9r	154.5r	155.8	159.2p	157.8p	2.2	-0.9	26.3	26.1
Basic iron, steel & alloys, tubes, pipes, hollow profiles and fittings	GHGJ	7390333369	195.6r	200.5r	194.8	193.4p	193.4p	-0.7	-	18.2	18.9
Other basic metals & casting	GHGL	7390333368	183.7r	188.2r	192.6	190.7p	187.0p	-1.0	-1.9	17.0	15.3
Weapons & ammunition	GHGN	7390254000	138.4r	139.3r	140.5	141.0p	140.9p	0.4	-0.1	13.2	12.7
Fabricated metal products excluding weapons & ammunition	GHGP	7390333365	168.4r	169.2r	169.0	169.3p	168.8p	0.2	-0.3	17.5	17.3
Inputs of Chemicals	FSQ7	7490333352	147.0r	148.7r	148.9	150.6p	150.1p	1.2	-0.4	18.3	16.0
Paints, varnishes & coatings, printing inks & other mastics	GHFP	7390203000	153.1r	154.7r	155.2	158.4p	158.2p	2.0	-0.1	20.1	18.2
Soap, detergents, cleaning & polishing preparations, perfumes & toilet preparations	GHFR	7390204000	138.1r	140.4r	140.5	142.2p	141.9p	1.2	-0.2	17.2	16.4
Other chemical products	GHFT	7390205000	141.8r	143.1	142.2	143.0p	142.5p	0.5	-0.4	16.4	14.4
Industrial gases, inorganic chemicals, fertilisers & nitrogen compounds	GHFV	7390333378	195.0	199.7r	198.6	218.8p	217.3p	10.1	-0.7	47.2	46.3
Petrochemicals	GHFX	7390333377	179.5r	180.8r	181.3	184.3p	181.7p	1.7	-1.5	28.5	24.8
Dyes & pigments; pesticides & other agro-chemical products	GHFZ	7390333376	161.7r	162.8r	160.9	168.0p	167.1p	4.4	-0.5	24.8	23.8
Basic pharmaceutical products & pharmaceutical preparations	GHGB	7390210000	125.3r	126.8r	128.1	127.8p	127.5p	-0.2	-0.3	11.7	11.0
Rubber & plastic products	GHGD	7390220000	148.7r	150.5r	152.1	152.7p	152.4p	0.4	-0.2	17.5	16.6
Other parts & equipment	FSQ9	7490333349	119.8r	122.1r	122.5	121.9p	120.9p	-0.5	-0.8	9.1	7.8
Computer, electronic & optical products	GHGR	7390260000	130.9r	133.7r	135.1	135.1p	134.3p	-	-0.6	13.1	12.2
Electrical equipment	GHGT	7390270000	139.5r	141.2	141.9	141.6p	141.0p	-0.2	-0.5	12.4	11.4
Machinery & equipment n.e.c	GHGV	7390280000	144.8	146.5	147.7	147.2p	146.7p	-0.3	-0.3	13.6	12.8
Motor vehicles, trailers & semi-trailers	GHGX	7390290000	132.2r	134.1r	134.7	134.5p	134.0p	-0.1	-0.4	10.1	9.4
Ships & boats	GHGZ	7390301000	144.3	145.4	146.3	145.8p	145.5p	-0.3	-0.2	13.3	12.5
Aircraft, spacecraft & related machinery	GHHB	7390303000	150.5r	153.9r	154.7	152.4p	150.2p	-1.5	-1.4	17.4	15.2
Other transport equipment	GHHD	7390333358	125.3r	126.8r	126.8	126.5p	125.7p	-0.3	-0.6	9.9	9.2
Other Inputs	FSQ6	7490111196	116.4r	117.9r	118.5	118.8p	118.5p	0.3	-0.3	8.8	8.4
Printing & recording services	GHFL	7390180000	136.2r	138.5r	140.5	141.6p	141.4p	0.8	-0.1	19.8	19.5
Furniture	GHHF	7390310000	153.8r	154.6r	155.2	154.5p	153.7p	-0.4	-0.5	9.5	8.8
Other manufactured goods n.e.c	GHHH	7390320000	146.8r	149.2	151.8	151.4p	150.3p	-0.2	-0.7	14.8	13.8
Repair & maintenance of ships and boats	GHHJ	7390331500	152.1r	151.7r	149.6	149.1p	148.9p	-0.4	-0.2	12.8	12.1
Repair & maintenance of aircraft and spaceships	GHHL	7390331600	118.6r	121.7	122.1	119.9p	117.6p	-1.8	-1.9	2.8	0.6
Rest of repair and installation	GHHN	7390333355	139.8r	139.2r	139.6	139.7p	137.9p	0.1	-1.3	14.2	13.2
Imported materials:											
Total Imports	GD74	8170111199	144.0r	149.9r	151.2	147.7p	143.8p	-2.3	-2.6	20.3	16.5

Source: Office for National Statistics

1 The Climate Change Levy was introduced in April 2001.

2. All revision markers are compared against the last published values (October 2022)

p = provisional

r = revised

Back to contents

Table 6R: Output prices: revisions (not seasonally adjusted) - CPA 2.1[1]

2015=100, CPA 2.1

	Output of manufactured products			All manufacturing excluding food, beverages, tobacco and petroleum		
		percentage change over			percentage change over	
	Index (2015=100)	1 mth	12 mths	Index (2015=100)	1 mth	12 mths
	6150333333			6150333390		
	GB7S			GBBV		
2021 Dec	-	-0.1	-	-	-	-
2022 Jan	-	-	-	-	-	-
Feb	-	-0.1	-0.1	-0.1	-	-0.1
Mar	-	-	-	-0.1	-	-0.1
Apr	-	-	-	-0.1	-	-
May	-	-	-	-0.1	-	-
Jun	0.1	0.1	0.1	-	0.1	-
Jul	0.2	0.1	0.2	-	-	-
Aug	0.2	-	0.2	0.1	-	0.1
Sep	0.3	-	0.2	0.2	-	0.1
Oct	0.4	-	0.3	0.3	0.2	0.2
Nov						

Source: Office for National Statistics

1. All revision markers are compared against the last published values (October 2022)
Please see Statistical Bulletin section entitled "Revisions" for further information