

Statistical bulletin

Producer price inflation, UK: May 2020

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:
Martina Portanti
business.prices@ons.gov.uk
+44 (0)1633 456907

Release date:
17 June 2020

Next release:
15 July 2020

Table of contents

1. [Main points](#)
2. [Things you need to know about this release](#)
3. [Producer price inflation summary](#)
4. [Annual and monthly output inflation rates continued to display negative growth](#)
5. [Annual input inflation rate continued to display negative growth](#)
6. [Gross and net producer price indices](#)
7. [Links to related statistics](#)
8. [Quality and methodology](#)

1 . Main points

- The headline rate of output inflation for goods leaving the factory gate was negative 1.4% on the year to May 2020, down from a negative 0.7% in April 2020.
- The price for materials and fuels used in the manufacturing process displayed negative growth of 10.0% on the year to May 2020, up from negative growth of 10.2% in April 2020.
- Petroleum products made the largest downward contribution to the change in the annual rate of output inflation.
- Prices for petroleum products have seen a record fall on the year to May 2020, driven by large falls in crude oil prices in March and April 2020, which have continued to feed through the supply chain, as well as reduced demand for petroleum products, particularly for transport, during the coronavirus (COVID-19) pandemic.
- Crude oil continued to provide the largest downward contribution to the annual rate of input inflation.

2 . Things you need to know about this release

Coronavirus (COVID-19) in May 2020

On 23 March 2020, the UK and devolved governments announced official guidance on restrictions on movement for the UK as a result of the coronavirus (COVID-19) pandemic. Data collection for the Producer Price Index (PPI) surveys, including the surveys measuring domestic, import and export prices for May 2020, was via paper questionnaires that were sent to businesses on 23 April 2020, asking to return prices that were applicable on or around 1 May 2020.

The closure of workplaces and premises during May 2020 as a result of the government restrictions has led to response for May 2020 being lower in comparison with other months. We closely monitor response rates in each publication and use statistical methods to deal with non-response. For further information, please see [Section 8: Quality and methodology](#).

We have worked closely with our business respondents and data suppliers, and we have used additional data sources to quality assure the estimates in this publication. These include qualitative information sourced from manufacturing industry respondents to the [Business Impact of Coronavirus \(COVID-19\) Survey \(BICS\)](#) and anecdotal evidence from responders to both the BICS and/or PPI surveys.

Methodology changes

The Office for National Statistics (ONS) will be implementing important methodological improvements to the PPI and Services Producer Price Index (SPPI) after summer 2020. These include moving from fixed-base weights to annual chain-linking, which will improve the accuracy of these statistics. At the same time, we will be introducing [changes to the level of detail](#) of the data we publish and changes to our producer price inflation headline figure from net to gross in line with international best practice. To support users with the transition to the new headline definition, [Section 6: Gross and net producer price indices](#) includes a comparison between the existing measures of output and input producer price inflation on a net and gross basis.

We will pre-announce the exact date when these changes will be implemented over the coming few months to give users as much notice as possible.

About the PPI

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, and rent.

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 in the domestic market. It is not limited to materials used in the final product, but it includes what is required by businesses in their normal day-to-day running, such as fuels.

The use of core input inflation removes the more volatile indices of food, tobacco, beverages and petrol from our statistics.

Index numbers shown in the main text of this bulletin are on a net sector basis. The index for any industry relates only to transactions between that industry and other industries; sales and purchases within industries are excluded.

Indices relate to average prices for a month. The full effect of a price change occurring part way through any month will only be reflected in the following month's index.

All index numbers exclude Value Added Tax (VAT). The Soft Drinks Industry Levy (SDIL), introduced in April 2018, is also excluded. Excise Duty (on cigarettes, manufactured tobacco, alcoholic liquor and petroleum products) is included, except where labelled otherwise.

Each PPI has two unique identifiers: a 10-digit index number, which relates to the [Standard Industrial Classification 2007 \(SIC 2007\)](#) code appropriate to the index, and a four-character alpha-numeric code (series ID), which can be used to find series when using the [time series dataset](#) for producer price inflation.

Figures for the latest two months are provisional, and the latest five months are subject to revisions taking account of late and revised respondent data. Revisions to seasonal adjustment factors are re-estimated every month for the seasonally adjusted series. A routine seasonal adjustment review is normally conducted in the autumn each year.

3 . Producer price inflation summary

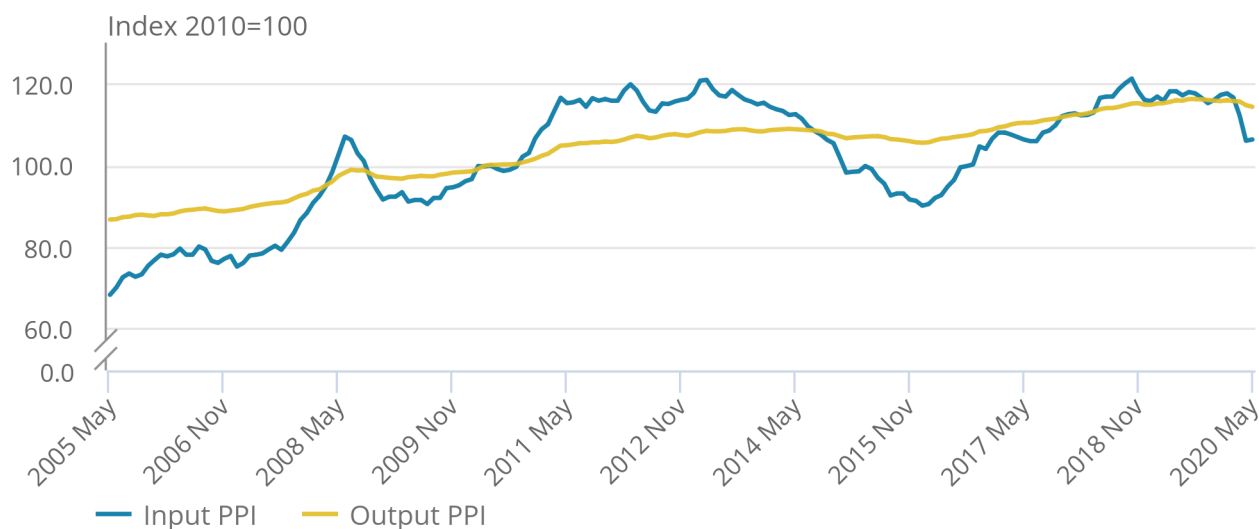
Figure 1 shows input and output Producer Price Indices (PPIs) over the past 15 years. Input producer price inflation is driven mostly by commodity prices, which tend to be more volatile over time, compared with prices for finished goods (output producer price inflation). Input producer price inflation is also sensitive to exchange rate movements, as roughly two-thirds of inputs into the UK manufacturing sector are imported.

Figure 1: Input producer price inflation has been more volatile over time than output inflation

Input and output producer price inflation, UK, May 2005 to May 2020

Figure 1: Input producer price inflation has been more volatile over time than output inflation

Input and output producer price inflation, UK, May 2005 to May 2020



Source: Office for National Statistics – Producer Price Index

4 . Annual and monthly output inflation rates continued to display negative growth

The annual rate of inflation for goods leaving the factory gate (output prices) fell by 1.4% in May 2020, down 0.7 percentage points from negative growth of 0.7% in April 2020 (Table 1). This is the second consecutive month that the rate has been negative, following 45 consecutive months of positive annual inflation, and the lowest the rate has been since December 2015.

On the month, the rate of output inflation was negative 0.3% in May 2020, up from a negative 0.8% in April 2020. The monthly rate has been negative for four consecutive months.

Table 1: Output prices, index values, growth rates and percentage point change to the 12-month rate, UK, May 2019 to May 2020

All manufactured products (JVZ7)

	PPI Index (2010=100)	1-month rate	12-month rate	Change in the 12-month rate (percentage points)
2019 May	115.9	0.3	1.9	-0.2
June	115.8	-0.1	1.6	-0.3
July	116.2	0.3	1.9	0.3
Aug	116.2	0.0	1.7	-0.2
Sept	116.1	-0.1	1.2	-0.5
Oct	116.0	-0.1	0.8	-0.4
Nov	115.8	-0.2	0.5	-0.3
Dec	115.7	-0.1	0.8	0.3
2020 Jan	115.9	0.2	1.0	0.2
Feb	115.7	-0.2	0.5	-0.5
Mar	115.6	-0.1	0.3	-0.2
Apr	114.7	-0.8	-0.7	-1.0
May	114.3	-0.3	-1.4	-0.7

Source: Office for National Statistics - Producer Price Index

Notes

1. Series are not seasonally adjusted. [Back to table](#)

Figure 2 shows contributions by product group to the monthly and annual rate of output inflation, and Table 2 shows monthly and annual growth rates by product group.

Of the 10 product groups, four provided negative contributions to the output annual rate.

Petroleum provided the largest downward contribution of 2.13 percentage points to the annual rate (Figure 2) and had negative annual price growth of 26.8% on the year to May 2020 (Table 2). This is the lowest the annual rate has been since Producer Price Index (PPI) records began in January 1996, and it was driven by diesel and gas oil, which also had a record annual fall of 24.5%. Price movements for petroleum products in May 2020 continued the trend seen in recent months and likely reflected both demand and supply side factors during the ongoing coronavirus (COVID-19) pandemic. These include large falls in crude oil prices in March and April 2020, which take time to feed through the manufacturing sector, as well as reduced demand for petroleum products, particularly for transport, because of the lockdown measures.

Chemicals and pharmaceuticals displayed the second-largest downward contribution, of 0.12 percentage points, to the annual rate, with negative annual growth of 1.5% in May 2020. The annual rate for this product group has remained negative for 11 consecutive months and was driven by chemicals and chemical products, which had negative growth of 1.7% in May 2020.

Of the six product groups that provided a positive contribution to the annual rate, tobacco and alcohol provided the largest, at 0.38 percentage points. The annual rate for tobacco and alcohol rose by 3.8% on the year to May 2020.

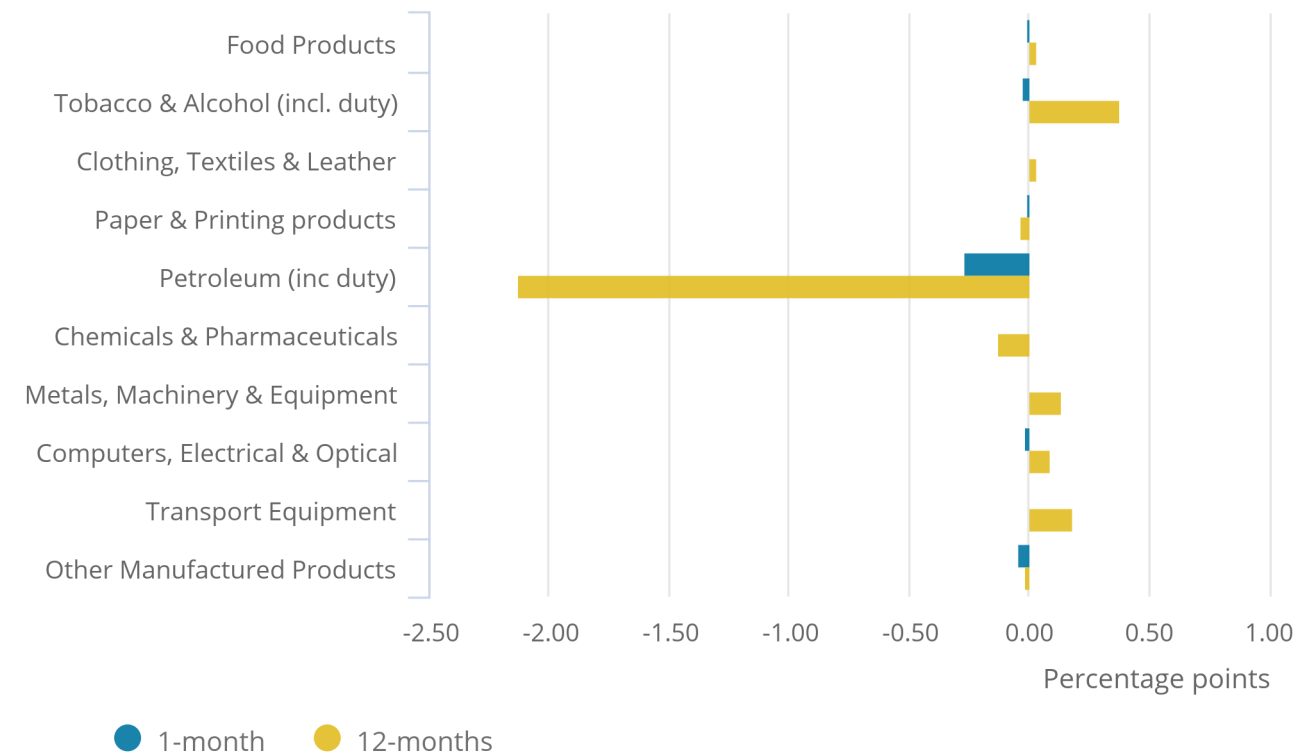
On the month, output inflation was negative 0.3%. Petroleum products displayed the largest downward contribution, at 0.26 percentage points, with prices falling by 4.7% on the month in May 2020.

Figure 2: Of the 10 product groups, 4 provided downward contributions to the annual rate, the largest coming from petroleum

Output prices contribution to 1-month and 12-month growth rate, UK, May 2020

Figure 2: Of the 10 product groups, 4 provided downward contributions to the annual rate, the largest coming from petroleum

Output prices contribution to 1-month and 12-month growth rate, UK, May 2020



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 2: Output prices, growth rates, UK, May 2020

Product group	Percentage Change	
	1-month rate	12-month rate
Food products	0.0	0.2
Tobacco and alcohol (incl. duty)	-0.3	3.8
Clothing, textile and leather	0.1	0.3
Paper and printing	0.0	-0.6
Petroleum products (incl. duty)	-4.7	-26.8
Chemical and pharmaceutical	0.1	-1.5
Metal, machinery and equipment	0.2	1.8
Computer, electrical and optical	-0.1	0.8
Transport equipment	0.1	1.6
Other manufactured products	-0.3	-0.1
All manufacturing	-0.3	-1.4

Source: Office for National Statistics

Figure 3 shows contributions to the change in the annual rate for factory gate prices (output prices).

There was a 0.7 percentage point decrease in the annual rate for output prices, from negative 0.7% in April 2020 to negative 1.4% in May 2020. Of the 10 product groups, six displayed downward contributions to the change in the rate, with petroleum products providing the largest, at 0.49 percentage points (Figure 3). The annual rate of petroleum products was negative 26.8% in May 2020, down from negative 21.4% in April 2020.

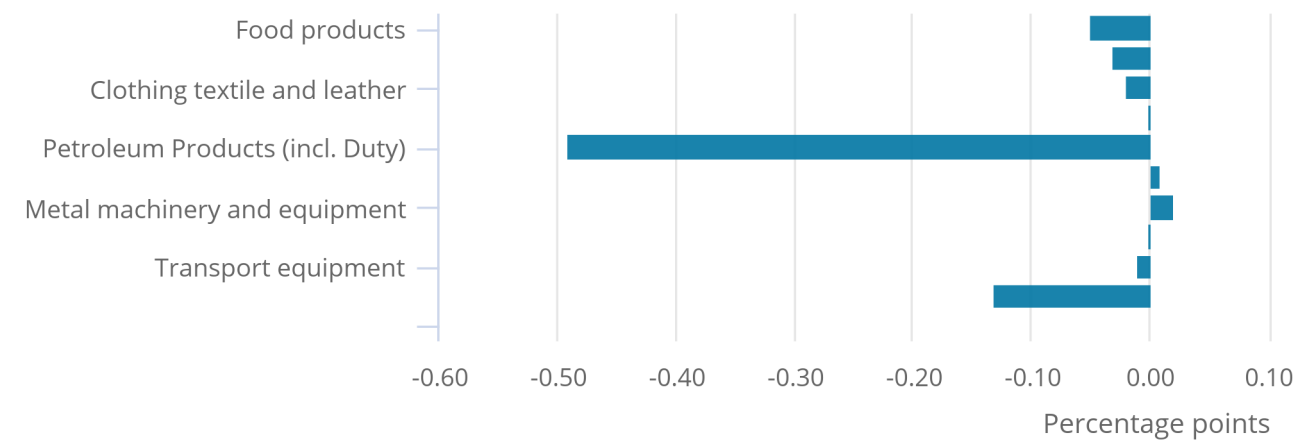
Other manufactured products provided the second-largest downward contribution to the change in the rate, at 0.13 percentage points. The annual rate was negative 0.1% in May 2020, down from 0.8% in April 2020. This is the first time the annual rate has been negative for this product group since May 2000.

Figure 3: Petroleum products made the largest downward contribution to the change in the annual rate of output inflation

Output producer price inflation, contribution to change in the annual rate, UK, May 2020

Figure 3: Petroleum products made the largest downward contribution to the change in the annual rate of output inflation

Output producer price inflation, contribution to change in the annual rate, UK, May 2020



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 . Annual input inflation rate continued to display negative growth

The annual rate of inflation for materials and fuels purchased by manufacturers (input prices) fell by 10.0% in May 2020, up from negative 10.2% in April 2020 (Table 3). This is the fourth consecutive month that the rate has been negative.

The monthly rate for materials and fuels purchased was 0.3% in May 2020, up from a record low of negative 5.5% in April 2020. This is the first time the monthly rate has been positive since January 2020.

Table 3: Input prices, index values, growth rates and percentage point change to the 12-month rate, UK, May 2019 to May 2020

All materials and fuels purchased (K646)

	PPI Index (2010=100)	1-month rate	12-month rate	Change in the 12-month rate (percentage points)
2019 May	118.1	0.0	1.4	-3.2
June	117.1	-0.8	0.3	-1.1
July	117.9	0.7	0.9	0.6
Aug	117.6	-0.3	-0.9	-1.8
Sept	116.5	-0.9	-3.0	-2.1
Oct	115.2	-1.1	-5.0	-2.0
Nov	116.0	0.7	-1.8	3.2
Dec	117.2	1.0	1.0	2.8
2020 Jan	117.6	0.3	1.6	0.6
Feb	116.6	-0.9	-0.2	-1.8
Mar	112.2	-3.8	-3.1	-2.9
Apr	106.0	-5.5	-10.2	-7.1
May	106.3	0.3	-10.0	0.2

Source: Office for National Statistics - Producer Price Index

The annual rate of inflation for imported materials and fuels was negative 10.2% in May 2020 (Table 4), which is down 0.4 percentage points from April 2020 when it was negative 9.8%. This is the lowest the annual rate has been since December 2015. The monthly rate was 0.2% in May 2020, up 6.6 percentage points from a record low of negative 6.4% in April 2020. Imported materials and fuels represent roughly two-thirds of overall materials and fuels (input prices) in terms of index weight.

The [Sterling effective exchange rate index \(ERI\)](#) fell by 1.2% on the month in May 2020. On the year, the ERI displayed negative growth of 1.9% in May 2020, which is down 0.3 percentage points from negative 1.6% in April 2020.

All else being equal, a fall in the value of Sterling would be expected to increase the cost of imports.

Table 4: Imported materials and fuels purchased and Sterling effective exchange rate, index values, growth rates and percentage point change to the 12-month rate, UK, May 2019 to May 2020

	Imported materials and fuels purchased (K64F)				Sterling effective exchange rate - month average (BK67)		
	PPI Index (2010=100)	1-month rate	12-month rate	Change in the 12-month rate (percentage points)	Sterling Index (Jan 2005 =100)	1-month rate	12-month rate
2019 May	114.5	0.6	0.6	-3.0	78.8	-0.9	0.0
June	114.0	-0.4	0.0	-0.6	77.2	-2.0	-1.5
July	115.3	1.1	0.6	0.6	76.1	-1.4	-2.6
Aug	115.9	0.5	0.1	-0.5	74.8	-1.7	-3.4
Sept	115.0	-0.8	-0.9	-1.0	76.6	2.4	-2.0
Oct	112.8	-1.9	-3.7	-2.8	78.3	2.2	-0.4
Nov	112.1	-0.6	-2.2	1.5	79.6	1.7	1.7
Dec	112.3	0.2	-0.1	2.1	80.6	1.3	5.1
2020 Jan	113.1	0.7	1.5	1.6	80.3	-0.4	3.2
Feb	113.1	0.0	0.9	-0.6	80.7	0.5	2.4
Mar	109.6	-3.1	-2.2	-3.1	76.9	-4.7	-3.8
Apr	102.6	-6.4	-9.8	-7.6	78.2	1.7	-1.6
May	102.8	0.2	-10.2	-0.4	77.3	-1.2	-1.9

Source: Office for National Statistics - Producer Price Index

Notes

1. Series are not seasonally adjusted. [Back to table](#)
2. The sterling effective exchange rate measures changes in the strength of sterling relative to a basket of other currencies. [Back to table](#)
3. 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. [Back to table](#)

Figure 4 shows contributions by product group to the monthly and annual rate of input inflation, and Table 5 shows monthly and annual growth rates by product group.

Of the nine product groups, four provided negative contributions to the input annual rate.

The largest downward contribution to the annual rate came from crude oil, which contributed 11.48 percentage points (Figure 4) and had negative annual price growth of 61.7% (Table 5). This is the lowest the annual rate has been since records began in January 1996 and while it breaks the record previously set last month, it also reflects a base effect as crude oil prices, as recorded in the Producer Price Index (PPI), increased slightly between April and May 2020 but rose by more between April and May 2019. It should also be noted that, when first published, PPI crude oil prices are compiled from expected prices provided by UK refineries during the first three weeks of the reference month. They are further revised the following month when actual prices covering the full reference period become available, in line with the wider PPI revision policy. In times of greater volatility in daily oil prices, revisions may be larger than usual.

PPI prices for crude oil typically reflect a range of factors, including geopolitical events around the world and local refineries' market conditions. The very large fall in prices in the 12-months to May 2020 continued the trend seen in April 2020 and reflected several market conditions including oversupply and reduced global demands for crude oil during the coronavirus (COVID-19) pandemic. Crude oil world prices in May 2020 have started to increase as some countries have eased lockdown and travel restrictions and global demand has picked up."

Imported chemicals provided the second-largest downward contribution to the annual rate, at 0.52 percentage points, with negative price growth of 4.0%. The annual rate for this product group has remained negative for 11 consecutive months. This was driven by imported products used in the manufacture of petrochemicals, which fell by 7.8% on the year.

The largest upward contribution to the annual rate came from imported metals, with a contribution of 0.86 percentage points and price growth of 10.4%. The annual rate for this product group has remained positive for 47 consecutive months.

On the month, six out of the nine product groups provided upward contributions to the rate. Other imported parts and equipment provided the largest upward contribution of 0.19 percentage points, with prices increasing by 1.0%.

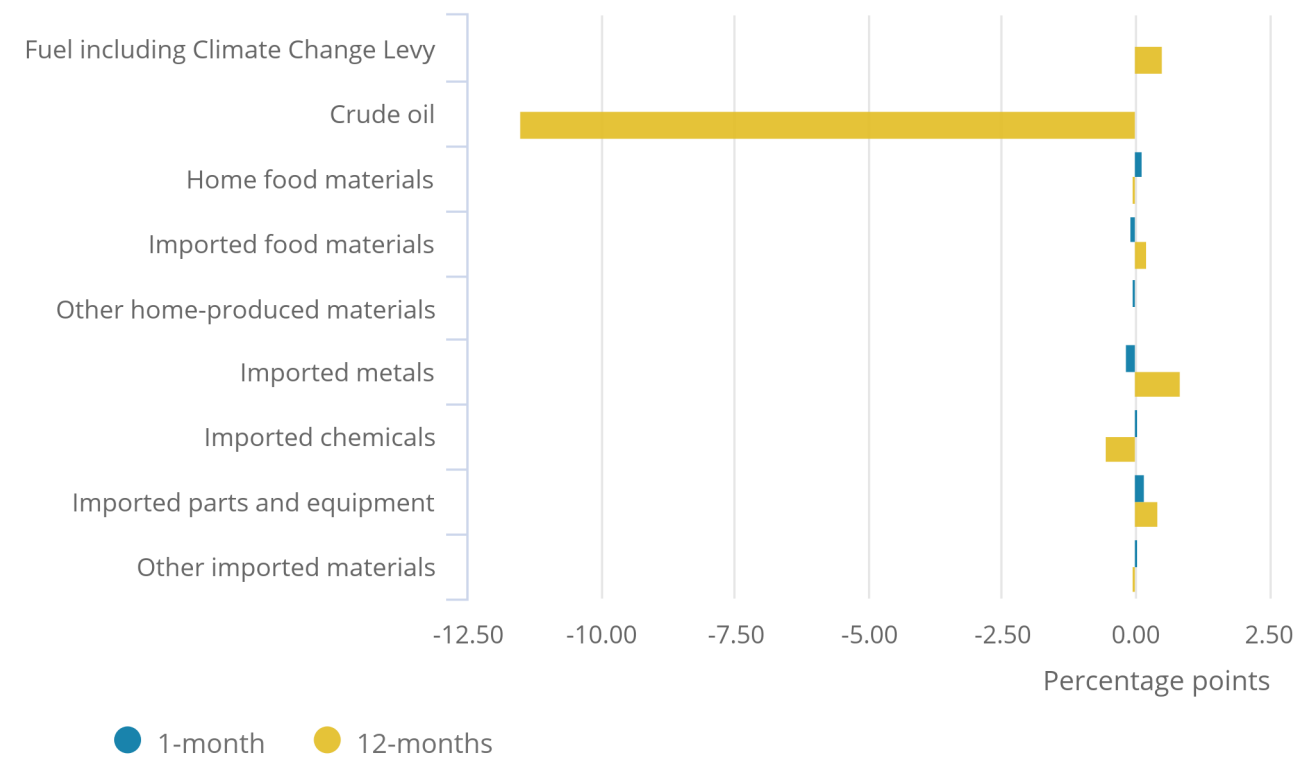
Crude oil displayed positive monthly growth for the first time since December 2019, with prices rising by 0.5% between April and May 2020.

Figure 4: Crude oil provided the largest downward contribution to the annual rate in May 2020

Input producer price inflation, contribution to 1-month and 12-month growth rate, UK, May 2020

Figure 4: Crude oil provided the largest downward contribution to the annual rate in May 2020

Input producer price inflation, contribution to 1-month and 12-month growth rate, UK, May 2020



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 5: Input prices, growth rates, UK, May 2020

Product group	Percentage change	
	1-month rate	12-month rate
Fuel including Climate Change Levy	0.2	4.7
Crude oil	0.5	-61.7
Home food materials	0.9	-0.2
Imported food materials	-0.8	3.1
Other home-produced materials	0.1	0.9
Imported metals	-1.5	10.4
Imported chemicals	0.4	-4.0
Imported parts and equipment	1.0	2.6
Other imported materials	0.7	-0.4
All manufacturing	0.3	-10.0

Source: Office for National Statistics

Figure 5 shows contributions to the change in the annual rate of inflation for materials and fuels purchased by manufacturers (input prices).

The annual rate for input prices increased by 0.2 percentage points, from negative 10.2% in April 2020 to negative 10.0% in May 2020. Of the nine product groups, five displayed upward contributions to the change in the rate, which were offset by downward contributions from three product groups.

Inputs of fuel provided the largest upward contribution to the change in the rate, at 0.33 percentage points. The annual rate of fuel rose by 4.4 percentage points, from 0.3% in April 2020 to 4.7% in May 2020. This is largely a base effect, as fuel prices were broadly unchanged between April and May 2020 but fell sharply between April and May 2019. Excess supply, particularly for gas, and unusually low demand during mild weather at the beginning of 2019 were identified as reasons for the fall in fuel prices at the time.

Home-produced food provided the second-largest upward contribution to the change in the rate, at 0.10 percentage points.

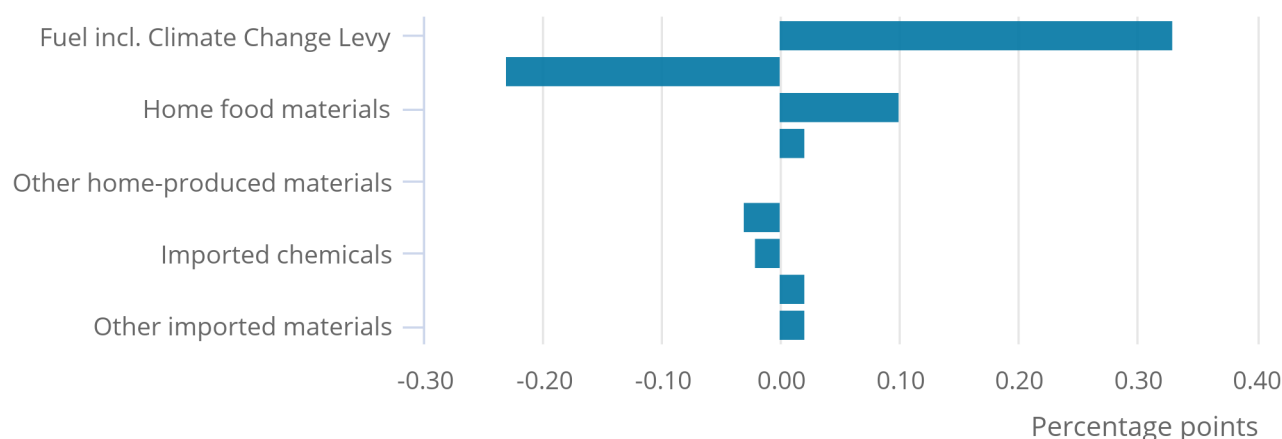
Crude oil provided the largest downward contribution to the change in the rate, at 0.23 percentage points. The annual rate of crude oil fell by 0.7 percentage points, from negative 61.0% in April 2020 to negative 61.7% in May 2020. This is largely a base effect as crude oil prices increased slightly between April and May 2020 but rose by a larger amount between the same period last year.

Figure 5: Inputs of fuel provided the largest upward contribution to the change in the annual rate in May 2020

Input producer price inflation, contribution to change in the annual rate, UK, May 2020

Figure 5: Inputs of fuel provided the largest upward contribution to the change in the annual rate in May 2020

Input producer price inflation, contribution to change in the annual rate, UK, May 2020



Source: Office for National Statistics – Producer Price Index

Notes:

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

6 . Gross and net producer price indices

Producer Price Indices (PPIs) are measured on two different bases: gross and net of inter-sector sales. Gross sector PPIs include products sold by one business to another business classified to the same industry sector. Net sector PPIs exclude (net out) products sold by a business to another business classified to the same industry sector. The Office for National Statistics (ONS) currently headlines with net sector PPIs, which include duty. We will move our headline to a gross sector basis excluding duty after summer 2020, in line with international best practice.

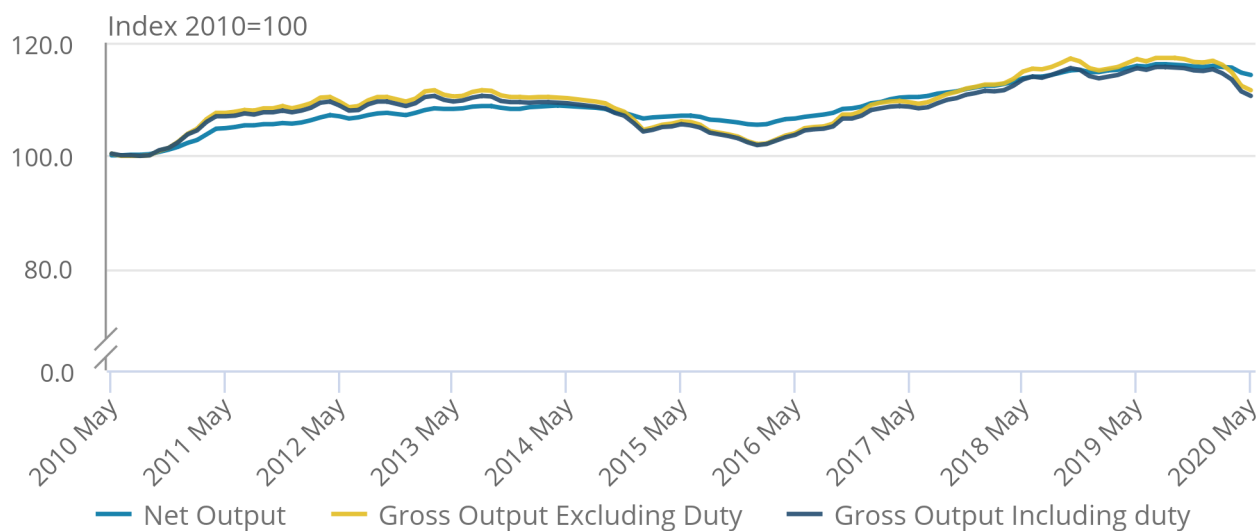
Figure 6 shows net and gross output PPIs over the past 10 years. In May 2020, the net output PPI was 114.3 while the gross output excluding duty PPI was 111.6.

Figure 6: Gross and net sector output indices have displayed similar trends over time

Net output versus gross output, UK, May 2020

Figure 6: Gross and net sector output indices have displayed similar trends over time

Net output versus gross output, UK, May 2020



Source: Office for National Statistics – Producer Price Index

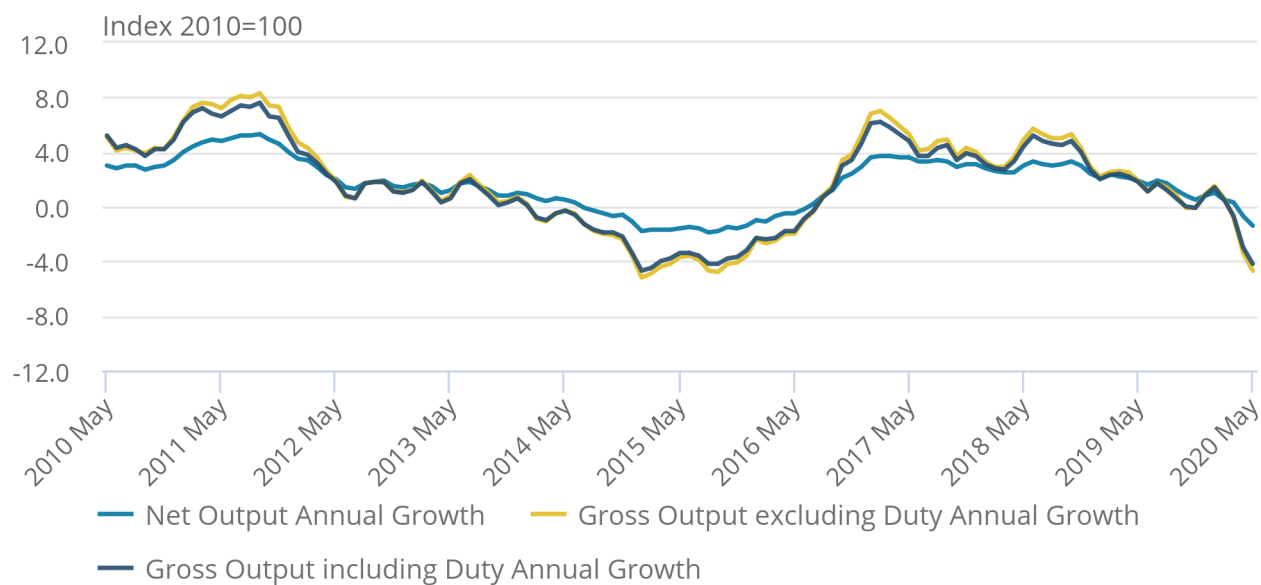
Gross and net sector output PPIs display similar trends over time, although the gross indices show higher volatility, particularly at times of high inflation, either positive or negative (Figure 7). For the net output PPI, the annual growth fell to negative 1.4% in May 2020, down from negative 0.7% in April 2020. For the gross output excluding duty PPI, the annual growth in May 2020 was negative 4.7%, down from negative 3.4% in April 2020. This is the lowest the gross annual rate has been since September 2015.

Figure 7: Gross output has showed greater volatility over time

Net output versus gross output annual growth, UK, May 2020

Figure 7: Gross output has showed greater volatility over time

Net output versus gross output annual growth, UK, May 2020



Source: Office for National Statistics – Producer Price Index

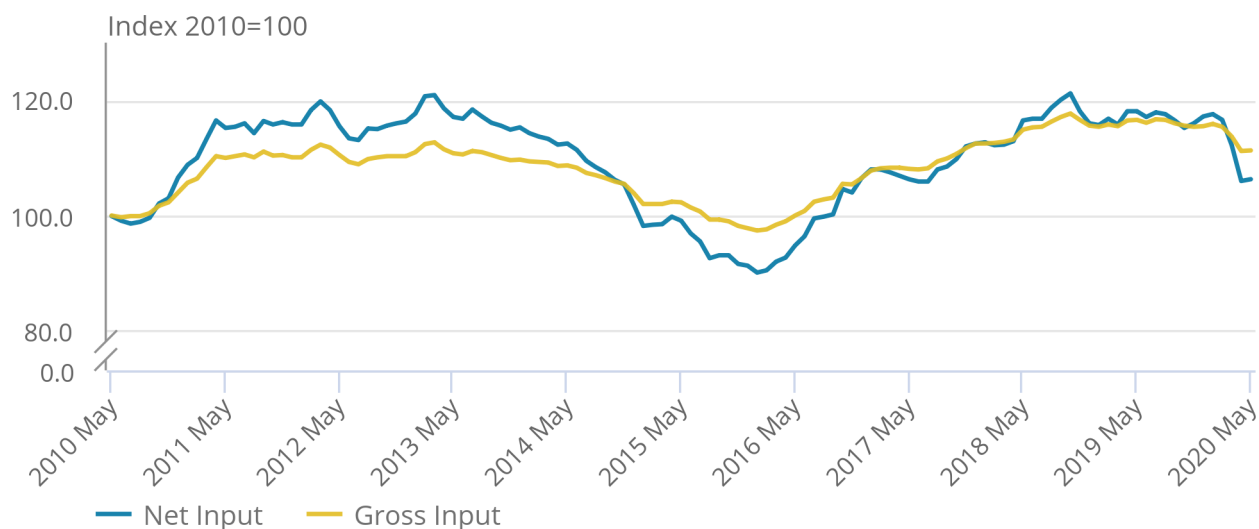
Figure 8 shows the net and gross input PPIs over the past 10 years. The trends of the PPIs are similar, although the net input PPI appears more volatile than the gross input PPI. In May 2020, the net input PPI was 106.3 while the gross input PPI was 111.3.

Figure 8: Net input has showed greater volatility but displayed similar trends to gross input

Net input versus gross input, UK, May 2020

Figure 8: Net input has showed greater volatility but displayed similar trends to gross input

Net input versus gross input, UK, May 2020



Source: Office for National Statistics – Producer Price Index

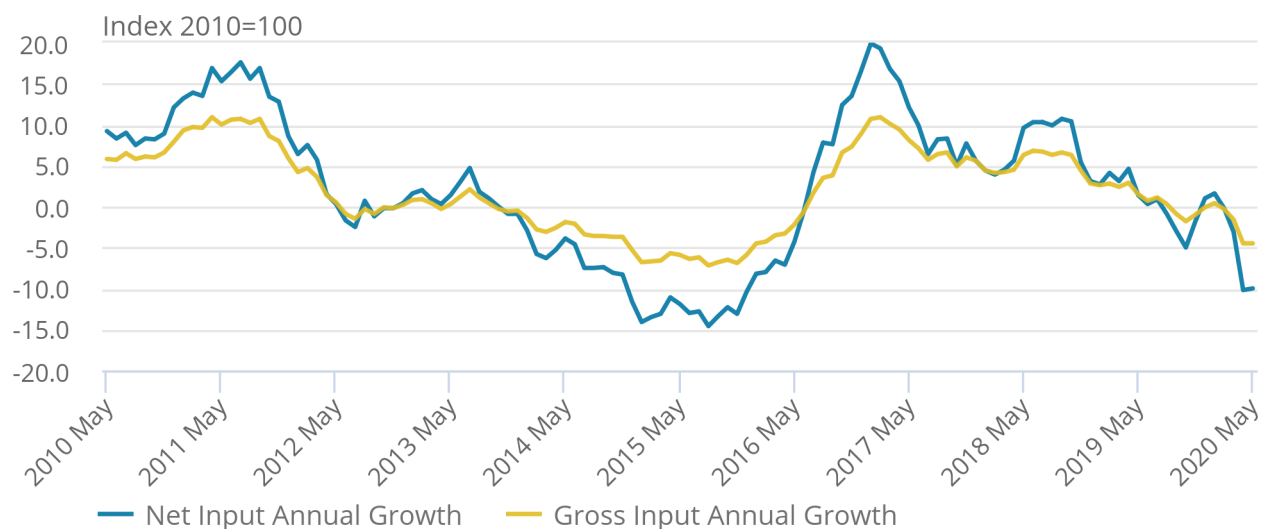
Figure 9 also shows that the annual growth rates for the net input PPI are more volatile than for the gross input PPI. For the net input PPI, the annual growth was negative 10.0% in May 2020, up from negative 10.2% in April 2020. For the gross input PPI, the annual growth in May 2020 was negative 4.5%, which is unchanged from April 2020.

Figure 9: Net input growth has displayed more volatility than gross input growth

Net input versus gross input annual growth, UK, May 2020

Figure 9: Net input growth has displayed more volatility than gross input growth

Net input versus gross input annual growth, UK, May 2020



Source: Office for National Statistics – Producer Price Index

7 . Links to related statistics

In addition to the data included in this statistical bulletin, the following detailed datasets are available:

- [Aerospace and electronic cost indices time series \(MM19\)](#)
- [Producer price inflation time series \(MM22\)](#)

Higher, lower and equal movements for each Producer Price Index (PPI) are shown in the [Producer price inflation records: monthly figures](#).

A summary of the revisions to PPI data are available in the producer price inflation revision triangles:

- [Producer price inflation revision triangle: total output 12-months \(JVZ7\)](#)
- [Producer price inflation revision triangle: total output 1-month \(JVZ7\)](#)
- [Producer price inflation revision triangle: total input 12-months \(K646\)](#)
- [Producer price inflation revision triangle: total input 1-month \(K646\)](#)

Other important measures of inflation and prices include the [Consumer Prices Index \(CPI\)](#) and the [Services Producer Price Index \(SPPI\)](#).

8 . Quality and methodology

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the [Producer Price Indices \(PPIs\) QMI](#).

If you would like more information about the reliability of the data, a [PPIPPI standard errors article](#) was published on 18 May 2018. The tables present the calculated standard errors of the PPI between January and December 2017, for both month-on-month and 12-month growth.

[Guidance on using indices in Indexation Clauses \(PDF, 197KB\)](#) covers producer prices, services producer prices and consumer prices.

An up-to-date manual for the PPIs, including the import and export index, is available. [PPIs methods and guidance \(PDF, 1.14MB\)](#) provides an outline of the methods used to produce the PPIs as well as information about recent PPI developments.

Gross sector basis figures, which include intra-industry sales and purchases, are shown in the [producer price inflation dataset Tables 4 and 6](#).

The detailed input indices of prices of materials and fuels purchased by industry ([producer price inflation dataset Table 6](#)) do not include the Climate Change Levy (CCL). This is because each industry can, in practice, pay its own rate for the various forms of energy, depending on the various negotiated discounts and exemptions that apply.

Coronavirus (COVID-19)

As highlighted in [Section 2: Things you need to know about this release](#), the coronavirus (COVID-19) pandemic has impacted on response rates in this release and is likely to be a factor in reduced response for future releases.

Table 6 shows the response rates to the domestic (PPI), export (Export Price Index (EPI)) and import (Import Price Index (IPI)) price surveys at time of publishing for each reference period. Response rates were lower in April and May 2020 compared with other months. While the response rate for the main PPI domestic survey shows a small improvement in May 2020 compared with April 2020, response rates for the EPI and IPI in May 2020 have shown an additional fall compared with April 2020 and they are around 25 percentage points lower than historical levels.

Table 6: Overall effective response rates at time of first publishing
Percentage, May 2019 to May 2020

	Weighted response		
	PPI (domestic)	IPI	EPI
May 2019	81.0	84.2	78.0
June 2019	85.3	88.3	82.7
July 2019	83.4	71.6	81.2
August 2019	85.7	85.7	82.5
September 2019	84.5	83.0	78.8
October 2019	85.5	82.0	81.4
November 2019	85.6	84.1	80.2
December 2019	86.6	84.9	80.0
January 2020	85.3	84.8	80.8
February 2020	87.4	86.8	80.3
March 2020	83.9	82.2	80.3
April 2020	73.2	69.8	68.9
May 2020	74.6	57.6	54.4

The administrative data used as part of the PPI has largely been unaffected by the coronavirus pandemic and lockdown, with the exception of some food items whose prices are collected by the Department for Environment, Food and Rural Affairs (Defra). The coronavirus pandemic has caused unusual patterns of both supply and demand at horticultural markets, where Defra collects food prices for the Office for National Statistics (ONS). The Horticultural Market Inspectors are no longer inspecting markets but are collecting data by telephone where they can. Some Defra food data are therefore based on small sample numbers as a result of both reduced trade volumes and working patterns.

The fall in response rates in May 2020 is unlikely to have had a substantial impact on the headline PPI figures. However, the smaller sample sizes are likely to have increased volatility for some of the lower-level indices, particularly among IPIs and EPIs. Revisions are also likely to be larger than usual over the next few months.

Producer prices are normally imputed for non-response by using ratio imputation. The ratio imputation method calculates the growth within an index based on prices that have been returned and then applies it to the last known value for the missing price. This method ensures that if prices for a group of products increase (decrease) from one month to the next, the imputed values for non-respondents in that product group will also increase (decrease) when compared with the last known value.

In a small number of cases, prices may be manually imputed by directly using the latest available price from the latest available period. This method is applied when the nature of the product or previous information from respondents indicate that a price change is unlikely (that is, long-term contracts and fixed listing prices).

These are simple but effective methods, used as a [standard internationally](#) and recommended by international organisations specifically for [treatment of missing producer prices because of the coronavirus pandemic \(PDF, 52KB\)](#).

Links to additional ONS sources of coronavirus information

Various articles have been published that help describe the ONS' response to how the coronavirus might be seen in our estimates:

- [Coronavirus and the effects on UK prices](#) (published 6 May 2020)
- [Meeting the challenge of measuring the economy through the COVID-19 Pandemic](#) (published 6 May 2020)
- [Coronavirus and the effects on UK GDP](#) (published 6 May 2020)
- [Real-time turning point indicators: a UK focus](#) (published 27 April 2020)
- [Communicating gross domestic product](#) (published 27 April 2020)

Our latest data and analysis on [the impact of the coronavirus on the UK economy and population](#) are also available.

The Office for National Statistics (ONS) has released a [public statement](#) on the coronavirus and the production of statistics, and any specific queries on this can be directed to the [Media Relations Office](#).

After EU withdrawal

As the UK leaves the EU, it is important that our statistics continue to be of high quality and are internationally comparable. During the transition period, those UK statistics that align with EU practice and rules will continue to do so in the same way as before 31 January 2020.

After the transition period, we will continue to produce our inflation statistics in line with the UK Statistics Authority's [Code of Practice for Statistics](#) and in accordance with internationally agreed statistical guidance and standards.

1 Output Prices: Summary (not seasonally adjusted) - SIC 2007

2010=100, SIC2007

	Net Sector						Gross Sector					
	Output of manufactured products			All manufacturing excluding food, beverages, tobacco and petroleum			Food products, beverages and tobacco, including duty			Coke and refined petroleum products, including duty		
	percentage change over		percentage change over		percentage change over		percentage change over					
	Index (2010=100)	1 mth	12 mths	Index (2010=100)	1 mth	12 mths	Index (2010=100)	1 mth	12 mths	Index (2010=100)	1 mth	12 mths
	7200700000			7200799000			7111101280			7112190080		
	JVZ7			K3BI			K65A			K37Y		
2019 Nov	115.8	-0.2	0.5	114.5	-0.1	1.1	119.0	-0.2	0.5	105.4	-1.0	-4.8
Dec	115.7	-0.1	0.8	114.4	-0.1	0.9	119.3	0.3	0.6	105.1	-0.3	1.0
2020 Jan	115.9	0.2	1.0	114.5	0.1	0.7	119.6	0.3	0.8	105.7	0.6	4.0
Feb	115.7	-0.2	0.5	114.5	-	0.5	119.9	0.3	1.1	101.6	-3.9	-1.3
Mar	115.6	-0.1	0.3	114.8	0.3	0.9	120.6	0.6	1.3	94.1	-7.4	-9.3
Apr	114.7p	-0.8	-0.7	114.8p	-	0.7	120.4p	-0.2	0.9	83.2p	-11.6	-21.4
May	114.3p	-0.3	-1.4	114.8p	-	0.6	120.3p	-0.1	0.5	79.3p	-4.7	-26.8

p = provisional
r = revised

Source: Office for National Statistics

2 Net Sector Input Prices, including Climate Change Levy¹: summary (not seasonally adjusted) - SIC 2007

2010=100, SIC2007

	All manufacturing (materials and fuel purchased)			Materials purchased by manufacturing industry			Fuel purchased by manufacturing industry		
	Index (2010=100)	percentage change over		Index (2010=100)	percentage change over		Index (2010=100)	percentage change over	
		1 mth	12 mths		1 mth	12 mths		1 mth	12 mths
	6207000050			6207000010			6207000060		
	K646			K644			K647		
2019 Nov	116.0	0.7	−1.8	113.2	–	−2.8	140.5	5.8	6.0
Dec	117.2	1.0	1.0	114.0	0.7	0.2	145.1	3.3	7.2
2020 Jan	117.6	0.3	1.6	114.6	0.5	1.3	143.8	−0.9	3.6
Feb	116.6	−0.9	−0.2	113.8	−0.7	−0.3	140.8	−2.1	−0.1
Mar	112.2	−3.8	−3.1	109.3	−4.0	−4.2	138.1	−1.9	5.7
Apr	106.0p	−5.5	−10.2	102.6p	−6.1	−11.7	135.5p	−1.9	0.3
May	106.3p	0.3	−10.0	102.9p	0.3	−11.9	135.8p	0.2	4.7

¹ The Climate Change Levy was introduced in April 2001.

Source: Office for National Statistics

p = provisional
r = revised

3 Net Sector Output Prices (not seasonally adjusted) - SIC 2007

2010=100, SIC2007

	Output of manufactured products			All manufacturing excluding food, beverages, tobacco and petroleum			All manufacturing, excluding duty ¹		
	Index (2010=100)	percentage change over		Index (2010=100)	percentage change over		Index (2010 = 100)	percentage change over	
		1 month	12 months		1 month	12 months		1 month	12 months
	7200700000			7200799000			7200700010		
	JVZ7			K3BI			JVZ8		
2016 Nov	108.4	0.1	2.4	108.0	0.1	2.3	108.8	–	2.4
Dec	108.7	0.3	2.9	108.1	0.1	2.2	109.1	0.3	2.8
2017 Jan	109.3	0.6	3.6	108.6	0.5	2.5	109.7	0.5	3.4
Feb	109.5	0.2	3.7	108.6	–	2.4	109.9	0.2	3.5
Mar	110.0	0.5	3.7	109.0	0.4	2.6	110.2	0.3	3.4
Apr	110.3	0.3	3.6	109.4	0.4	2.8	110.6	0.4	3.4
May	110.4	0.1	3.6	109.5	0.1	2.8	110.7	0.1	3.5
Jun	110.4	–	3.3	109.7	0.2	2.9	110.7	–	3.2
Jul	110.6	0.2	3.3	109.9	0.2	2.5	110.9	0.2	3.2
Aug	111.0	0.4	3.4	110.2	0.3	2.6	111.3	0.4	3.3
Sep	111.2	0.2	3.3	110.1	–0.1	2.5	111.5	0.2	3.2
Oct	111.4	0.2	2.9	110.3	0.2	2.2	111.8	0.3	2.8
Nov	111.8	0.4	3.1	110.5	0.2	2.3	112.1	0.3	3.0
Dec	112.1	0.3	3.1	110.6	0.1	2.3	112.4	0.3	3.0
2018 Jan	112.4	0.3	2.8	111.0	0.4	2.2	112.6	0.2	2.6
Feb	112.4	–	2.6	111.3	0.3	2.5	112.7	0.1	2.5
Mar	112.7	0.3	2.5	111.4	0.1	2.2	112.9	0.2	2.5
Apr	113.1	0.4	2.5	111.6	0.2	2.0	113.3	0.4	2.4
May	113.7	0.5	3.0	111.9	0.3	2.2	113.8	0.4	2.8
Jun	114.0	0.3	3.3	112.3	0.4	2.4	114.1	0.3	3.1
Jul	114.0	–	3.1	112.4	0.1	2.3	114.1	–	2.9
Aug	114.3	0.3	3.0	112.6	0.2	2.2	114.4	0.3	2.8
Sep	114.7	0.3	3.1	112.8	0.2	2.5	114.8	0.3	3.0
Oct	115.1	0.3	3.3	113.1	0.3	2.5	115.2	0.3	3.0
Nov	115.2	0.1	3.0	113.2	0.1	2.4	115.2	–	2.8
Dec	114.8	–0.3	2.4	113.4	0.2	2.5	114.9	–0.3	2.2
2019 Jan	114.8	–	2.1	113.7	0.3	2.4	115.0	0.1	2.1
Feb	115.1	0.3	2.4	113.9	0.2	2.3	115.2	0.2	2.2
Mar	115.2	0.1	2.2	113.8	–0.1	2.2	115.3	0.1	2.1
Apr	115.5	0.3	2.1	114.0	0.2	2.2	115.7	0.3	2.1
May	115.9	0.3	1.9	114.1	0.1	2.0	116.0	0.3	1.9
Jun	115.8	–0.1	1.6	114.2	0.1	1.7	115.9	–0.1	1.6
Jul	116.2	0.3	1.9	114.6	0.4	2.0	116.4	0.4	2.0
Aug	116.2	–	1.7	114.8	0.2	2.0	116.4	–	1.7
Sep	116.1	–0.1	1.2	114.7	–0.1	1.7	116.3	–0.1	1.3
Oct	116.0	–0.1	0.8	114.6	–0.1	1.3	116.2	–0.1	0.9
Nov	115.8	–0.2	0.5	114.5	–0.1	1.1	116.0	–0.2	0.7
Dec	115.7	–0.1	0.8	114.4	–0.1	0.9	116.0	–	1.0
2020 Jan	115.9	0.2	1.0	114.5	0.1	0.7	116.2	0.2	1.0
Feb	115.7	–0.2	0.5	114.5	–	0.5	116.0	–0.2	0.7
Mar	115.6	–0.1	0.3	114.8	0.3	0.9	116.0	–	0.6
Apr	114.7p	–0.8	–0.7	114.8p	–	0.7	115.2p	–0.7	–0.4
May	114.3p	–0.3	–1.4	114.8p	–	0.6	114.9p	–0.3	–0.9

¹ Series JVZ8 excludes excise duties payable on tobacco products, alcoholic liquor and petroleum products.

Source: Office for National Statistics

p = provisional
r = revised

4 Output Prices: Detailed by product (not seasonally adjusted) - SIC 2007

2010=100, SIC2007

								Percentage change 1 month		Percentage change 12 months	
			2020 Jan	2020 Feb	2020 Mar	2020 Apr	2020 May	2020 Apr	2020 May	2020 Apr	2020 May
Net sector											
Output of manufactured products	JVZ7	7200700000	115.9	115.7	115.6	114.7p	114.3p	-0.8	-0.3	-0.7	-1.4
All manufacturing, excluding duty	JVZ8	7200700010	116.2	116.0	116.0	115.2p	114.9p	-0.7	-0.3	-0.4	-0.9
All manufacturing, excluding food, beverages, tobacco and petroleum	K3BI	7200799000	114.5	114.5	114.8	114.8p	114.8p	-	-	0.7	0.6
Gross Sector											
Food products, beverages and tobacco, including duty	K65A	7111101280	119.6	119.9	120.6	120.4p	120.3p	-0.2	-0.1	0.9	0.5
Food products	K37L	7112100000	118.8	119.0	119.2	119.0p	119.0p	-0.2	-	0.5	0.2
Tobacco products, including duty	K37Q	7112120080	175.5	175.5	184.0	184.0p	184.0p	-	-	4.8	4.8
Alcoholic beverages, including duty	MC6A	7229110080	113.7 B	114.3 B	116.7 B	116.7pB	116.2pB	-	-0.4	3.5	3.1
Soft drinks, mineral waters and other bottled waters	JU5C	1107000000	108.3 B	109.7 B	109.5 B	108.9pB	107.2pB	-0.5	-1.6	-1.9	-5.2
Textiles	K37R	7112130000	118.2	118.4	118.7	118.8p	119.2p	0.1	0.3	1.5	1.5
Wearing apparel	K37S	7112140000	119.4	119.4	119.8	119.8p	119.8p	-	-	0.8	0.7
Leather and related products	K37T	7112150000	124.2	124.2	123.3	123.3p	123.3p	-	-	-2.3	-2.8
Wood and products of wood and cork, except furniture	K37U	7112160000	129.4	129.9	129.2	129.3p	129.7p	0.1	0.3	-1.1	-0.6
Paper and paper products	K37V	7112170000	113.4	113.0r	112.9	113.0p	113.0p	0.1	-	-1.7	-1.5
Printing and recording services	K37W	7112180000	105.2	105.1	105.2	105.3p	105.3p	0.1	-	0.4	0.5
Coke and refined petroleum products, including duty	K37Y	7112190080	105.7	101.6	94.1	83.2p	79.3p	-11.6	-4.7	-21.4	-26.8
Chemicals and chemical products	K37Z	7112200000	112.1	111.9	111.2	111.7p	111.8p	0.4	0.1	-1.8	-1.7
Basic pharmaceutical products and pharmaceutical preparations	K382	7112210000	113.6	111.9	111.8	112.0p	112.0p	0.2	-	-1.1	-1.2
Rubber and plastic products	K383	7112220000	117.3	117.4	117.8	117.7p	117.8p	-0.1	0.1	1.0	0.5
Other non-metallic mineral products	K384	7112230000	123.0	123.8	124.2	124.6p	124.8p	0.3	0.2	2.3	1.8
Basic metals	K385	7112240000	113.6	113.5r	115.7	117.2p	118.1p	1.3	0.8	-1.1	0.6
Fabricated metal products, except machinery and equipment	K386	7112250000	119.5	119.6	119.7	119.5p	119.8p	-0.2	0.3	2.3	2.6
Computer, electronic and optical products	K387	7112260000	105.5	105.6	105.8	105.7p	105.7p	-0.1	-	0.3	0.3
Electrical equipment	K388	7112270000	111.3	111.6	112.0	112.1p	111.7p	0.1	-0.4	2.1	2.5
Machinery and equipment n.e.c.	K389	7112280000	120.2	120.3	120.7	120.8p	120.8p	0.1	-	1.2	1.3
Motor vehicles, trailers and semi-trailers	K38A	7112290000	109.6	109.8	109.9	109.8p	109.9p	-0.1	0.1	0.3	0.3
Other transport equipment	K38B	7112300000	121.6	121.6	122.4	122.6p	122.7p	0.2	0.1	5.2	5.0
Furniture	K38C	7112310000	116.4	116.7	116.9	116.9p	117.0p	-	0.1	0.3	-
Other manufactured goods	K38D	7112320000	113.4	113.2	113.6	113.4p	112.2p	-0.2	-1.1	0.7	-0.5
Repair and installation services of machinery and equipment	K38E	7112330000	128.5	129.8	131.1	130.9p	131.4p	-0.2	0.4	1.4	1.3

p = provisional
r = revised

Source: Office for National Statistics

B: These index values are considered less reliable mainly due to lack of market coverage.

5 Net Sector Input Prices, including Climate Change Levy¹: Materials and Fuels purchased - SIC 2007

2010=100, SIC2007

	All manufacturing			All manufacturing excluding food, beverages, tobacco and petroleum industries					
	not seasonally adjusted			not seasonally adjusted			seasonally adjusted		
	Index (2010=100)	percentage change over		Index (2010=100)	percentage change over		Index (2010=100)	percentage change over	
		1 month	12 months		1 month	12 months		1 month	12 months
	6207000050			6207990050			6207998950		
	K646			K655			K658		
2016 Nov	104.0	-0.6	13.5	107.6	-0.3	11.3	106.9	-0.6	11.1
Dec	106.5	2.4	16.6	107.9	0.3	10.3	107.4	0.5	10.4
2017 Jan	108.0	1.4	19.9	109.6	1.6	11.8	108.9	1.4	11.6
Feb	108.0	—	19.3	109.6	—	11.3	109.2	0.3	11.2
Mar	107.5	-0.5	16.8	109.7	0.1	10.8	109.2	—	11.0
Apr	106.9	-0.6	15.3	108.8	-0.8	9.6	109.1	-0.1	10.0
May	106.3	-0.6	12.1	108.7	-0.1	9.9	109.4	0.3	9.9
Jun	105.9	-0.4	9.9	109.4	0.6	9.8	109.9	0.5	9.7
Jul	105.9	—	6.4	109.3	-0.1	5.2	109.9	—	5.2
Aug	108.0	2.0	8.2	111.1	1.6	6.7	111.3	1.3	6.5
Sep	108.5	0.5	8.3	110.7	-0.4	6.5	110.9	-0.4	6.4
Oct	109.8	1.2	5.0	111.6	0.8	3.4	111.1	0.2	3.3
Nov	112.0	2.0	7.7	112.7	1.0	4.7	112.0	0.8	4.8
Dec	112.5	0.4	5.6	112.8	0.1	4.5	112.4	0.4	4.7
2018 Jan	112.7	0.2	4.4	112.7	-0.1	2.8	112.2	-0.2	3.0
Feb	112.2	-0.4	3.9	113.0	0.3	3.1	112.8	0.5	3.3
Mar	112.3	0.1	4.5	113.0	—	3.0	113.0	0.2	3.5
Apr	112.9	0.5	5.6	112.6	-0.4	3.5	113.5	0.4	4.0
May	116.5	3.2	9.6	114.6	1.8	5.4	115.6	1.9	5.7
Jun	116.8	0.3	10.3	115.4	0.7	5.5	116.1	0.4	5.6
Jul	116.8	—	10.3	115.7	0.3	5.9	116.3	0.2	5.8
Aug	118.7	1.6	9.9	117.3	1.4	5.6	117.0	0.6	5.1
Sep	120.1	1.2	10.7	118.0	0.6	6.6	117.9	0.8	6.3
Oct	121.2	0.9	10.4	118.0	—	5.7	117.5	-0.3	5.8
Nov	118.1	-2.6	5.4	117.4	-0.5	4.2	117.0	-0.4	4.5
Dec	116.0	-1.8	3.1	118.1	0.6	4.7	117.7	0.6	4.7
2019 Jan	115.7	-0.3	2.7	117.8	-0.3	4.5	117.4	-0.3	4.6
Feb	116.8	1.0	4.1	118.0	0.2	4.4	117.8	0.3	4.4
Mar	115.8	-0.9	3.1	116.3	-1.4	2.9	116.5	-1.1	3.1
Apr	118.1	2.0	4.6	117.4	0.9	4.3	118.5	1.7	4.4
May	118.1	—	1.4	117.0	-0.3	2.1	118.0r	-0.4	2.1
Jun	117.1	-0.8	0.3	117.8	0.7	2.1	118.4	0.3	2.0
Jul	117.9	0.7	0.9	119.1	1.1	2.9	119.3	0.8	2.6
Aug	117.6	-0.3	-0.9	120.4	1.1	2.6	119.5	0.2	2.1
Sep	116.5	-0.9	-3.0	118.9	-1.2	0.8	118.5	-0.8	0.5
Oct	115.2	-1.1	-5.0	118.1	-0.7	0.1	117.7	-0.7	0.2
Nov	116.0	0.7	-1.8	117.8	-0.3	0.3	117.7	—	0.6
Dec	117.2	1.0	1.0	117.9	0.1	-0.2	117.5	-0.2	-0.2
2020 Jan	117.6	0.3	1.6	119.0	0.9	1.0	118.6r	0.9	1.0
Feb	116.6	-0.9	-0.2	120.1r	0.9	1.8	119.5	0.8	1.4
Mar	112.2	-3.8	-3.1	120.5	0.3	3.6	120.5	0.8	3.4
Apr	106.0p	-5.5	-10.2	117.1p	-2.8	-0.3	118.2p	-1.9	-0.3
May	106.3p	0.3	-10.0	117.4p	0.3	0.3	118.4p	0.2	0.3

1 The Climate Change Levy was introduced in April 2001.

Source: Office for National Statistics

p = provisional
r = revised

6 Input Prices, excluding Climate Change Levy¹: Materials and Fuels purchased by selected industries (not seasonally adjusted) - SIC 2007

2010=100, SIC2007

								% change 1 month		% change 12 months		
								2020 Apr	2020 May	2020 Apr	2020 May	
								2020 Jan	2020 Feb	2020 Mar	2020 Apr	2020 May
Gross sector												
Other mining & quarrying products ²	MC3K	6107208000	125.3	125.1	125.7	124.5p	124.5p	-1.0	-	0.2	-	
Manufacture of food products, beverages, tobacco	MC35	6107110120	122.5	122.9r	123.4	122.3p	122.5p	-0.9	0.2	-0.2	0.2	
Preserved meat & meat products	MC3V	6107310100	124.5	125.1	126.0	125.2p	125.3p	-0.6	0.1	1.2	1.1	
Fish, crustaceans, molluscs, fruit & vegetables	MB4X	6107310230	125.9r	124.6r	123.6	120.8p	122.7p	-2.3	1.6	-5.2	-2.7	
Vegetable & animal oils and fats	MC3W	6107310400	128.7	130.9	132.6	131.7p	130.8p	-0.7	-0.7	2.5	2.0	
Dairy products	MC3X	6107310500	126.3	127.3r	127.9	126.9p	127.0p	-0.8	0.1	-0.3	0.2	
Grain mill products, starches & starch products	MC3Y	6107310600	122.3	122.9	123.6	122.9p	123.0p	-0.6	0.1	-0.5	-0.1	
Bakery & farinaceous products	MC3Z	6107310700	118.8	118.8	119.0	118.0p	117.8p	-0.8	-0.2	-0.8	-1.0	
Other food products	MB4Y	6107310800	118.5	118.7	119.2	118.3p	118.3p	-0.8	-	0.2	0.3	
Animal feeds	MC42	6107310900	121.5	122.1r	123.1	122.3p	122.2p	-0.6	-0.1	0.6	0.4	
Alcoholic Beverages	MB55	6107411016	117.8r	117.7r	118.1	116.6p	116.4p	-1.3	-0.2	-0.5	-0.7	
Soft drinks; mineral waters & other bottled waters	MC4D	6107411070	115.1	115.1	115.4	114.7p	114.7p	-0.6	-	-	-0.3	
Tobacco products	MC3M	6107212000	156.9	156.7	156.7	156.1p	156.1p	-0.4	-	-0.4	-0.2	
Manufacture of textiles & textile products; clothing	MC36	6107113140	117.5	117.5	117.7	117.1p	117.3p	-0.5	0.2	-0.3	-0.3	
Textiles	MB4P	6107213000	116.6	116.5	116.7	116.0p	116.2p	-0.6	0.2	-0.9	-0.8	
Wearing apparel	MC3N	6107214000	118.8	118.8	119.3	118.6p	118.9p	-0.6	0.3	0.3	0.4	
Manufacture of leather & related products	MC3O	6107215000	119.4	119.3	119.8	119.2p	119.3p	-0.5	0.1	0.3	-0.3	
Manufacture of wood & wood products	MC3P	6107216000	128.1r	128.1r	127.7	127.0p	127.1p	-0.5	0.1	-2.4	-2.2	
Manufacture of pulp, paper & paper products, recording media & printing services	MC39	6107117180	115.6	115.2	115.3	114.7p	114.7p	-0.5	-	-1.4	-1.0	
Pulp, paper & paper products	MB4Q	6107217000	116.7	116.1	116.0	115.1p	115.2p	-0.8	0.1	-2.1	-1.5	
Printing & recording services	MC3Q	6107218000	114.2	114.0	114.4	114.1p	114.1p	-0.3	-	-0.6	-0.5	
Manufacture of coke & refined petroleum products	MC3R	6107219000	103.0	94.3	70.9	51.3p	50.7p	-27.6	-1.2	-53.3	-54.7	
Manufacture of chemicals, chemical products & man-made fibres	MC3B	6107120000	111.9	111.4	110.4	109.3p	109.2p	-1.0	-0.1	-4.9	-5.0	
Paints, varnishes & similar coatings, printing ink & mastics	MC43	6107320300	113.5	113.5	113.3	113.0p	113.1p	-0.3	0.1	-2.5	-2.5	
Soaps, detergents, cleaning & polishing preparations perfumes & toilet preparations	MC44	6107320400	113.9	113.8	114.0	113.6p	113.7p	-0.4	0.1	-1.0	-1.0	
Other chemical products	MC45	6107320500	115.3	115.0	114.3	112.6p	112.3p	-1.5	-0.3	-3.3	-3.6	
Industrial gases; other basic inorganic chemicals; fertilisers & nitrogen compounds	MC4E	6107420910	116.0	115.3	114.3	112.8p	112.7p	-1.3	-0.1	-4.3	-4.4	
Petrochemicals & man made fibres	MC4F	6107420920	110.1	109.5	108.4	107.5p	107.4p	-0.8	-0.1	-5.5	-5.9	
Dyes & pigments: pesticides & other agrochemical products	MC4G	6107420930	116.2	114.6	110.9	107.5p	107.6p	-3.1	0.1	-9.0	-8.6	
Manufacture of basic pharmaceutical products & pharmaceutical preparations	MC3S	6107221000	112.1	111.1	111.2	110.6p	110.7p	-0.5	0.1	-1.4	-1.4	
Manufacture of rubber & plastic products	MB4R	6107222000	113.5	113.2	112.9	112.2p	112.2p	-0.6	-	-2.7	-2.9	
Manufacture of cement, lime & plaster	MC46	6107323560	123.0	122.8	123.0	121.8p	121.8p	-1.0	-	-0.7	-0.3	
Manufacture of glass, refractory, clay, other porcelain, ceramic stone products	MB4Z	6107323990	119.2	119.0r	119.0	117.6p	117.6p	-1.2	-	-0.9	-0.6	

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

Source: Office for National Statistics

² Indices includes the Aggregate Levy which was introduced in April 2002.

p = provisional
r = revised

6 Input Prices, excluding Climate Change Levy¹: Materials and Fuels purchased by selected industries (not seasonally adjusted) - SIC 2007

continued

2010=100, SIC2007

								% change 1 month		% change 12 months	
			2020 Jan	2020 Feb	2020 Mar	2020 Apr	2020 May	2020 Apr	2020 May	2020 Apr	2020 May
Manufacture of basic metals & fabricated products	MC3F	6107124250	118.7	119.2	118.0	115.6p	115.7p	-2.0	0.1	-2.0	-1.2
Basic iron, steel & alloys: tubes, pipes, hollow profiles	MC47	6107324130	115.5	114.5	113.8	110.2p	110.1p	-3.2	-0.1	-8.5	-8.1
Other basic metals & casting	MB52	6107324450	122.5	123.3	117.9	113.4p	113.5p	-3.8	0.1	-2.6	-1.6
Weapons & ammunition	MC48	6107325400	119.6	120.0	120.4	119.9p	120.2p	-0.4	0.3	5.2	5.8
Fabricated metal products, excluding machinery & equipment & weapons & ammunition	MB53	6107325990	118.0	118.8	119.3	118.1p	118.3p	-1.0	0.2	0.2	0.9
Manufacture of computer, electronic and optical products, electrical equipment	MC3G	6107126270	114.8	115.3	115.9	115.1p	115.3p	-0.7	0.2	0.8	1.1
Computer, electronic & optical products	MB4S	6107226000	114.3	114.8	115.7	114.9p	115.1p	-0.7	0.2	1.0	1.1
Electrical equipment	MB4T	6107227000	115.5	116.0	116.4	115.4p	115.5p	-0.9	0.1	0.4	0.7
Manufacture of machinery & equipment n.e.c	MB4U	6107228000	116.8	117.3	118.0	117.2p	117.4p	-0.7	0.2	0.6	0.9
Manufacturing of motor vehicles & other transport equipment	MC3I	6107129300	114.0	114.6	115.3	114.7p	114.9p	-0.5	0.2	1.7	1.8
Motor vehicles, trailers & semi trailers	MB4V	6107229000	111.7	112.1	112.9	112.4p	112.7p	-0.4	0.3	1.3	1.4
Ships & boats	MC49	6107330100	118.2	118.3	118.8	118.3p	118.6p	-0.4	0.3	0.7	1.2
Aircraft & spacecraft & related machinery	MC4A	6107330300	123.1	124.0	124.6	123.5p	123.8p	-0.9	0.2	3.5	3.7
Other transport equipment	MB54	6107330990	114.0	114.8	115.4	114.8p	115.1p	-0.5	0.3	0.3	0.4
Manufacture of other manufactured goods n.e.c	MC3J	6107131330	119.7	120.4	121.1	120.3p	120.5p	-0.7	0.2	0.9	1.1
Furniture	MC3T	6107231000	117.6	117.8	118.1	117.4p	117.6p	-0.6	0.2	-1.4	-1.3
Other manufacturing	MB4W	6107232000	117.1	117.7	118.3	117.5p	117.6p	-0.7	0.1	1.2	1.4
Repair of maintenance of ships & boats	MC4H	6107433150	118.7	118.8	119.4	118.9p	119.2p	-0.4	0.3	0.6	1.2
Repair & maintenance services of aircraft & spacecraft	MC4I	6107433160	133.1	134.9	136.3	135.4p	135.7p	-0.7	0.2	4.6	4.5
Other repair; installation	MB56	6107433990	113.9	114.4	115.4	114.6p	114.8p	-0.7	0.2	0.8	1.1

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

Source: Office for National Statistics

2 Indices includes the Aggregate Levy which was introduced in April 2002.

p = provisional
r = revised

7 Input Prices: detailed by commodity (not seasonally adjusted) - SIC 2007

2010=100, SIC2007

								% change 1 month		% change 12 months	
			2020 Jan	2020 Feb	2020 Mar	2020 Apr	2020 May	2020 Apr	2020 May	2020 Apr	2020 May
Fuel incl. CCL¹	K647	6207000060	143.8	140.8	138.1	135.5p	135.8p	-1.9	0.2	0.3	4.7
Domestic coal & lignite incl. CCL	MC78	7167205005	117.9	117.9	117.9	117.9p	117.9p	-	-	-1.3	-1.3
Imported coal & lignite incl. CCL	MC8U	7169205005	116.4	107.7	128.8	128.8p	128.8p	-	-	-25.9	6.6
Electricity incl. CCL	MC8F	7167335105	155.0	151.3	148.7	151.0p	152.7p	1.5	1.1	5.2	8.7
Gas incl. CCL	MC8H	7167335235	126.4	124.6	121.1	110.4p	108.3p	-8.8	-1.9	-8.7	-3.6
Fuel excl. CCL	K645	6207000020	140.7	137.7	134.6	131.3p	131.4p	-2.5	0.1	-1.1	3.9
Domestic coal & lignite excl. CCL	MC77	7167205000	116.7	116.7	116.7	116.7p	116.7p	-	-	-2.7	-2.7
Imported coal & lignite excl. CCL	MC8T	7169205000	112.5	106.1	127.7	127.6p	127.6p	-0.1	-	-27.1	6.6
Electricity excl. CCL	MC8E	7167335100	153.0	149.7	146.4	148.1p	149.5p	1.2	0.9	4.2	8.4
Gas excl. CCL	MC8G	7167335230	121.9	119.4	116.1	104.2p	102.1p	-10.2	-2.0	-11.1	-5.7
Crude petroleum oils & metal ores	MC4P	6207008700	99.2	89.5	63.0	41.8p	42.0p	-33.7	0.5	-61.0	-61.7
Domestic crude oil & metal ores	MC79	7167206070	98.8	85.8	57.2	39.6p	39.8p	-30.8	0.5	-63.4	-63.7
Imported crude oil & metal ores	MC8V	7169206070	99.4	91.3	65.7	42.8p	43.0p	-34.9	0.5	-60.0	-60.8
Food manufacturing:											
Home produced food materials	MB57	6207008100	127.3r	128.4r	129.3	128.6p	129.8p	-0.5	0.9	-1.2	-0.2
Agricultural crop products	MC74	7167201000	127.0r	128.8r	130.3	130.3p	130.9p	-	0.5	0.5	0.8
Fish & other fish products	MC76	7167203000	131.7	122.3r	113.6	101.8p	112.4p	-10.4	10.4	-26.3	-14.9
Imported food materials	MC4O	6207008600	129.1	129.6	132.0	129.0p	128.0p	-2.3	-0.8	2.5	3.1
Agricultural crop products	MC8Q	7169201000	138.6	139.5	138.9	134.9p	133.9p	-2.9	-0.7	-0.6	2.4
Fish & fish products	MC8S	7169203000	159.8	160.7	166.2	165.6p	166.7p	-0.4	0.7	2.3	2.4
Meat & meat products	MC9F	7169310100	126.3	124.8	127.8	126.5p	125.4p	-1.0	-0.9	11.7	8.5
Processed fish & fish products; fruit & vegetables	MC9G	7169310230	134.3	135.7	139.8	137.6p	136.5p	-1.6	-0.8	0.5	-1.3
Vegetable, animal oils & fats	MC9H	7169310400	108.7	110.9	119.5	116.2p	112.4p	-2.8	-3.3	8.8	5.2
Dairy products	MC9I	7169310500	126.3	124.4	123.1	121.2p	121.2p	-1.5	-	-2.9	-1.9
Grain mill products & starches	MC9J	7169310600	110.8	109.5	116.0	114.1p	115.6p	-1.6	1.3	1.2	1.8
Bakery & farinaceous products	MC9K	7169310700	108.6	114.7	118.5	116.0p	117.1p	-2.1	0.9	4.3	4.5
Other food products	MC9L	7169310800	122.2	122.9	126.1	123.0p	123.3p	-2.5	0.2	2.9	2.5
Prepared animal feeds	MC9M	7169310900	114.5	115.8	117.9	116.4p	116.3p	-1.3	-0.1	2.6	1.9
Other home produced materials	MC4J	6207008200	132.4	132.3	133.1	133.1p	133.2p	-	0.1	1.0	0.9
Forestry products	MC75	7167202000	259.4	259.4	259.4	259.4p	259.4p	-	-	-2.5	-2.5
Other mining & quarrying products	MC7A	7167208000	124.9	124.8	125.9	125.9p	126.0p	-	0.1	1.9	1.9
Water collection, treatment & supply	MC7R	7167236000	121.3	121.3	121.3	121.3p	121.3p	-	-	-	-
Imported metals	MC4K	6207008300	138.2	147.5r	145.2	135.3p	133.3p	-6.8	-1.5	10.8	10.4
Basic iron, steel & ferro alloys, tubes & pipes	MC9S	7169324130	122.9r	125.1r	125.2	115.7p	115.9p	-7.6	0.2	-6.1	-4.8
Other basic metals & casting	MC9T	7169324450	145.8	158.7	155.1	145.0p	142.0p	-6.5	-2.1	19.3	18.1
Imported chemicals	MC4L	6207008400	107.0	107.6r	110.2	108.8p	109.2p	-1.3	0.4	-3.9	-4.0
Paints, varnishes & coatings, printing inks & other mastics	MC9N	7169320300	115.3	116.0	118.5	117.1p	117.5p	-1.2	0.3	4.5	4.5
Soap, detergents, cleaning & polishing preparations, perfumes & toilet preparations	MC9O	7169320400	110.1r	110.2r	112.8	112.3p	113.3p	-0.4	0.9	3.6	4.2

1 The Climate Change Levy was introduced in April 2001.

Source: Office for National Statistics

p = provisional
r = revised

7 Input Prices: detailed by commodity (not seasonally adjusted) - SIC 2007

continued

2010=100, SIC2007

								% change 1 month		% change 12 months	
			2020 Jan	2020 Feb	2020 Mar	2020 Apr	2020 May	2020 Apr	2020 May	2020 Apr	2020 May
Other chemical products	MC9P	7169320500	112.6	113.9	117.1	116.3p	117.0p	-0.7	0.6	-0.2	-0.4
Industrial gases, inorganic chemicals, fertilisers & nitrogen compounds	MCA3	7169420910	119.0	120.0r	122.1	120.6p	122.2p	-1.2	1.3	-3.8	-2.2
Petrochemicals & man made fibres	MCA4	7169420920	101.2	101.7r	104.1	102.9p	102.7p	-1.2	-0.2	-7.0	-7.8
Dyes & pigments; pesticides & other agro-chemical products	MCA5	7169420930	106.5	106.9	112.0	110.6p	111.5p	-1.2	0.8	5.1	4.6
Basic pharmaceutical products & pharmaceutical preparations	MC97	7169221000	97.2	95.5	97.8	96.3p	97.4p	-1.5	1.1	0.5	0.7
Rubber & plastic products	MC98	7169222000	118.5	119.5	122.3	120.8p	121.6p	-1.2	0.7	0.8	1.0
Other imported parts & equipment	MC4N	6207008520	108.2	109.2	112.2	110.4p	111.5p	-1.6	1.0	2.4	2.6
Computer, electronic & optical products	MC99	7169226000	126.7	128.0	131.6	129.9p	130.7p	-1.3	0.6	2.5	2.4
Electrical equipment	MC9A	7169227000	114.3	115.6	119.6	116.7p	117.9p	-2.4	1.0	1.8	2.2
Machinery & equipment n.e.c	MC9B	7169228000	115.0	116.6	120.3	118.8p	120.5p	-1.2	1.4	3.0	3.5
Motor vehicles, trailers & semi-trailers	MC9C	7169229000	99.2	99.4	102.8	101.8p	102.8p	-1.0	1.0	5.4	4.8
Weapons & ammunition	MC9U	7169325400	89.4	90.0	92.0	90.9p	91.9p	-1.2	1.1	1.8	2.3
Fabricated metal products	MC9V	7169325990	87.7	88.2	90.3	89.2p	90.2p	-1.2	1.1	1.9	2.4
Ships & boats	MC9W	7169330100	115.8	116.3	118.5	116.0p	116.7p	-2.1	0.6	-0.2	-0.1
Aircraft, spacecraft & related machinery	MC9X	7169330300	108.0	108.2	107.7	103.2p	103.8p	-4.2	0.6	-4.7	-4.5
Other transport equipment	MC9Y	7169330990	111.7	112.4	114.9	113.5p	114.3p	-1.2	0.7	1.5	1.8
Other imports	MC4M	6207008510	119.2	120.0	122.7	121.1p	121.9p	-1.3	0.7	-0.7	-0.4
Forestry products	MC8R	7169202000	134.4	135.5	139.0	137.0p	137.3p	-1.4	0.2	-1.7	-1.9
Other mining & quarrying products	MC8W	7169208000	140.6	141.8	149.0	148.2p	149.7p	-0.5	1.0	5.0	4.7
Tobacco products	MC8X	7169212000	98.7	98.5	101.7	99.4p	99.4p	-2.3	-	-0.8	-1.8
Textiles	MC8Y	7169213000	121.0	121.4	125.1	123.6p	124.6p	-1.2	0.8	0.8	1.2
Wearing apparel	MC8Z	7169214000	123.4	124.0	126.3	122.8p	124.2p	-2.8	1.1	-0.7	-0.4
Leather & related leather products	MC92	7169215000	120.6	122.1	125.2	124.3p	124.7p	-0.7	0.3	-0.1	-0.4
Wood & wooden products	MC93	7169216000	110.6	110.2r	112.6	112.9p	113.2p	0.3	0.3	-6.1	-5.7
Paper & paper products	MC94	7169217000	111.6	112.2	114.5	112.8p	113.9p	-1.5	1.0	-0.6	-0.2
Printing & recording services	MC95	7169218000	108.5	108.5	108.2	106.7p	106.9p	-1.4	0.2	-1.7	-1.7
Coke & refined petroleum products	MC96	7169219000	150.3	152.4	153.0	147.9p	147.9p	-3.3	-	-5.2	-4.5
Furniture	MC9D	7169231000	69.0	69.6	69.7	69.0p	69.5p	-1.0	0.7	9.2	8.8
Glass, refractory, clay other porcelain, ceramic stone & abrasive products	MC9R	7169323990	114.9	116.1	118.7	117.7p	118.4p	-0.8	0.6	2.2	2.2
Cement, lime, plaster & articles of concrete, cement & plaster	MC9Q	7169323560	114.9	116.1	118.7	117.7p	118.4p	-0.8	0.6	2.2	2.2
Alcoholic beverages	MC9Z	7169411016	109.5	111.1	114.2	114.3p	115.8p	0.1	1.3	5.9	6.4
Soft drinks, mineral water & other bottled waters	MCA2	7169411070	114.0	116.2	119.9	120.1p	121.7p	0.2	1.3	6.9	7.3
Other manufactured goods n.e.c	MC9E	7169232000	98.2	99.3	102.7	102.2p	103.3p	-0.5	1.1	4.5	3.9
Imported materials											
All imported materials - total (incl Crude Oil)	K64F	6207008500	113.1	113.1	109.6	102.6p	102.8p	-6.4	0.2	-9.8	-10.2

1 The Climate Change Levy was introduced in April 2001.

Source: Office for National Statistics

p = provisional
r = revised

8R Output Prices: revisions (not seasonally adjusted) - SIC 2007

2010=100, SIC2007

	Output of manufactured products			All manufacturing excluding food, beverages, tobacco and petroleum		
	Index (2010=100)	percentage change over		Index (2010=100)	percentage change over	
		1 month	12 months		1 month	12 months
	7200700000			7200799000		
	JVZ7			K3BI		
2016 Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2017 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2018 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2019 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2020 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	0.1	0.1	-	0.1	0.1	0.1
Apr	-	-0.1	-	-	-	-
May	..	..	..	..	..	..

Please see Statistical Bulletin section entitled 'Revisions' for further information.

Source: Office for National Statistics

9R Net Sector Input Prices, including Climate Change Levy¹: revisions - SIC 2007

2010=100, SIC2007

	All manufacturing industries			All manufacturing excluding food, beverages, tobacco and petroleum industries					
	not seasonally adjusted			not seasonally adjusted			seasonally adjusted		
	Index (2010=100)	percentage change over		Index (2010=100)	percentage change over		Index (2010=100)	percentage change over	
		1 month	12 months		1 month	12 months		1 month	12 months
	6207000050 K646			6207990050 K655			6207998950 K658		
2016 Nov	—	—	—	—	—	—	—	—	—
Dec	—	—	—	—	—	—	—	—	—
2017 Jan	—	—	—	—	—	—	—	—	—
Feb	—	—	—	—	—	—	—	—	—
Mar	—	—	—	—	—	—	—	—	—
Apr	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—
Jun	—	—	—	—	—	—	—	—	—
Jul	—	—	—	—	—	—	—	—	—
Aug	—	—	—	—	—	—	—	—	—
Sep	—	—	—	—	—	—	—	—	—
Oct	—	—	—	—	—	—	—	—	—
Nov	—	—	—	—	—	—	—	—	—
Dec	—	—	—	—	—	—	—	—	—
2018 Jan	—	—	—	—	—	—	—	—	—
Feb	—	—	—	—	—	—	—	—	—
Mar	—	—	—	—	—	—	—	—	—
Apr	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—
Jun	—	—	—	—	—	—	—	—	—
Jul	—	—	—	—	—	—	—	—	—
Aug	—	—	—	—	—	—	—	—	—
Sep	—	—	—	—	—	—	—	—	—
Oct	—	—	—	—	—	—	—	—	—
Nov	—	—	—	—	—	—	—	—	—
Dec	—	—	—	—	—	—	—	—	—
2019 Jan	—	—	—	—	—	—	—	—	—
Feb	—	—	—	—	—	—	—	—	—
Mar	—	—	—	—	—	—	—	—	—
Apr	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—0.1	—0.1	—0.1
Jun	—	—	—	—	—	—	—	—	—
Jul	—	—	—	—	—	—	—	—	—
Aug	—	—	—	—	—	—	—	—	—
Sep	—	—	—	—	—	—	—	—	—
Oct	—	—	—	—	—	—	—	—	—
Nov	—	—	—	—	—	—	—	—	—
Dec	—	—	—	—	—	—	—	—	—
2020 Jan	—	—	—	—	—	—	0.1	—	0.1
Feb	—	—	—	—0.1	—0.1	—0.1	—	—	—
Mar	—	—	—	—	0.1	—	—	—	—
Apr	—0.5	—0.4	—0.4	—0.3	—0.2	—0.3	—0.4	—0.3	—0.4
May	..	..	..	..	..	..	..	..	..

¹ The Climate Change levy was introduced in April 2001.
Please see Statistical Bulletin section entitled 'Revisions' for further information.

Source: Office for National Statistics