

Statistical bulletin

UK producer price inflation: Nov 2016

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).



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Table of contents

1. [Main points](#)
2. [Changes to publication schedule for economic statistics](#)
3. [What is the Producer Price Index \(PPI\)?](#)
4. [Output prices: summary](#)
5. [Supplementary analysis: output prices](#)
6. [Output prices: detailed commentary](#)
7. [Output Producer Price Index range of movements](#)
8. [Input prices: summary](#)
9. [Supplementary analysis: input prices](#)
10. [Input prices: detailed commentary](#)
11. [Input PPI indices range of movements](#)
12. [Economic context](#)
13. [Revisions](#)
14. [Quality and methodology](#)
15. [Planned changes to methods for Producer Prices Index and Services Producer Prices Index](#)
16. [Background notes](#)

1 . Main points

The price of goods bought and sold by UK manufacturers, as estimated by the Producer Price Index, rose again in the year to November 2016. This is the fifth consecutive increase following 2 years of falls and the largest increase since April 2012. Between October and November, total output prices showed no movement, compared with an increase of 0.7% the previous month.

Factory gate prices (output prices) for goods produced by UK manufacturers rose 2.3% in the year to November 2016, compared with an increase of 2.1% in the year to October 2016.

Core factory gate prices, which exclude the more volatile food, beverage, tobacco and petroleum products, rose 2.2% in the year to November 2016, the largest increase since February 2012.

The overall price of materials and fuels bought by UK manufacturers for processing (total input prices) rose 12.9% in the year to November 2016, compared with a rise of 12.4% in the year to October 2016. Between October and November, total input prices fell by 1.1%, compared with a record increase of 4.5% the previous month.

Core input prices, which exclude purchases from the more volatile food, beverage, tobacco and petroleum industries, rose 11.5% in the year to November 2016, compared with a rise of 10.3% in the year to October 2016.

2 . Changes to publication schedule for economic statistics

From January 2017 we are improving the way we publish economic statistics, with related data grouped together under new "theme" days. This will increase the coherence of our data releases and involve minor changes to the timing of certain publications. For more information see [Changes to publication schedule for economic statistics](#).

3 . What is the Producer Price Index (PPI)?

The [Producer Price Index \(PPI\)](#) is a monthly survey that measures the price changes of goods bought and sold by UK manufacturers and provides an important measure of inflation, alongside other indicators such as [Consumer Prices Index \(CPI\)](#) and [Services Producer Price Index \(SPPI\)](#). This statistical bulletin contains a comprehensive selection of data on input and output index series. It contains producer price indices of materials and fuels purchased, and output of manufacturing industry by broad sector.

The factory gate price (the output price) is the price of goods sold by UK manufacturers. It includes costs such as labour, raw materials and energy, as well as interest on loans, site or building maintenance, or rent and excludes taxes.

Core factory gate inflation excludes price movements from food, beverage, petroleum, and tobacco and alcohol products, which tend to have volatile price movements. It should give a better indication of the underlying output inflation rates.

The input price indices measure change in the prices of materials and fuels bought by UK manufacturers for processing. These are not limited to just those materials used in the final product, but also include what is required by the company in its normal day-to-day running.

Core input inflation strips out purchases from the volatile food, beverage, tobacco and petroleum industries to give an indication of the underlying input inflation pressures facing the UK manufacturing sector.

4 . Output prices: summary

Factory gate inflation rose 2.3% in the year to November 2016, compared with a rise of 2.1% in the year to October 2016. This is the fifth consecutive increase following 2 years of falling prices and the largest increase since April 2012, when prices also rose by 2.3%.

Between 2014 and 2015, total output inflation remained consistently below core output price inflation. However, in 2016, although both total and core output inflation have been showing an upwards trend, total output inflation has been growing strongly and is now at a higher level than core factory gate inflation (Figure 1).

Looking at the latest estimates (Table 1), movements in factory gate prices on the year to November 2016 were as follows:

- factory gate prices rose 2.3%, compared with a rise of 2.1% in the year to October 2016
- core factory gate prices rose 2.2%, compared with a rise of 2.0% in the year to October 2016
- factory gate inflation excluding excise duty rose 2.3%, compared with a rise of 2.2% in the year to October 2016

Between October and November 2016:

- factory gate prices showed no movement, compared with an increase of 0.7% in October 2016
- core factory gate prices showed no movement, compared with an increase of 0.5% last month

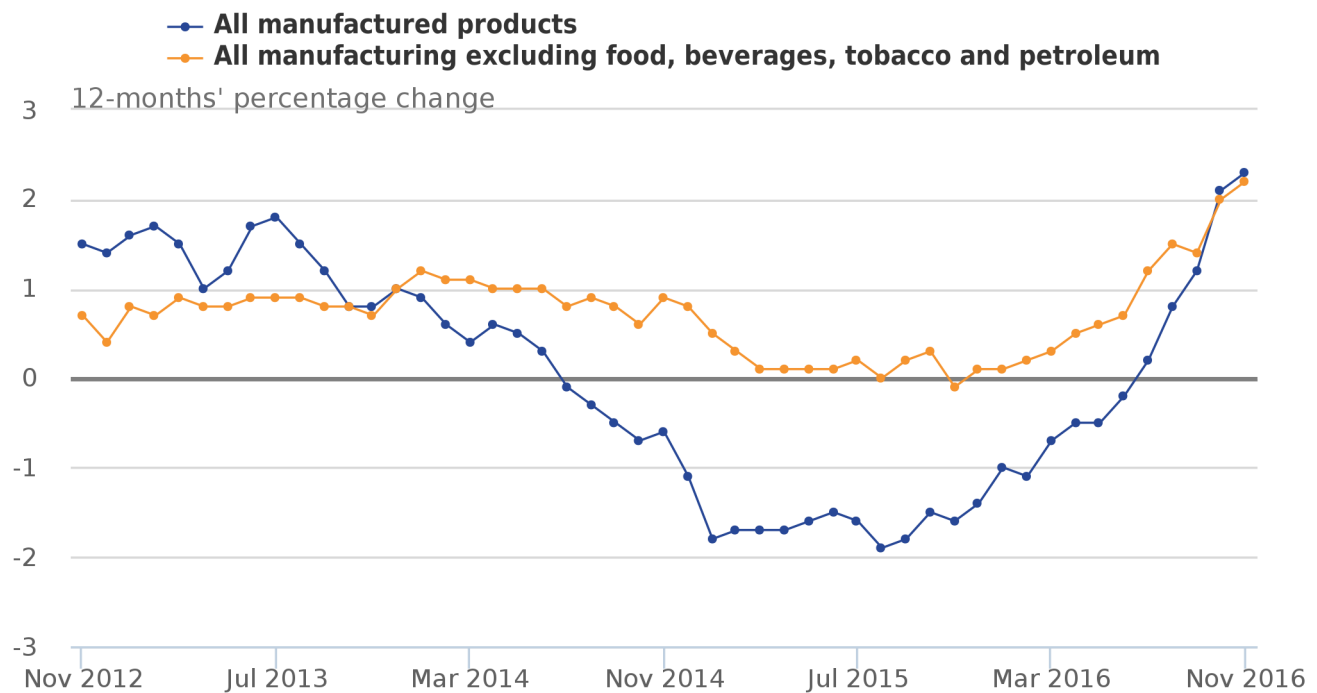
Table 1: Output prices, June 2016 to November 2016, UK

	Percentage change					
	All manufactured products		Excluding food, beverage, tobacco and petroleum		All manufactured products excluding duty	
	1 month	12 months	1 month	12 months	1 month	12 months
2016 Jun	0.3	-0.2	0.1	0.7	0.3	-0.1
Jul	0.2	0.2	0.6	1.2	0.2	0.2
Aug	0.2	0.8	0.2	1.5	0.2	0.8
Sep	0.3	1.2	0.0	1.4	0.3	1.2
Oct	0.7	2.1	0.5	2.0	0.7	2.2
Nov	0.0	2.3	0.0	2.2	-0.1	2.3

Source: Office for National Statistics

Figure 1: Output prices

UK, November 2012 to November 2016



Source: Office for National Statistics

5 . Supplementary analysis: output prices

Table 2 shows the annual percentage change in price across all product groups and Figure 2 shows their contribution to the annual factory gate inflation rate.

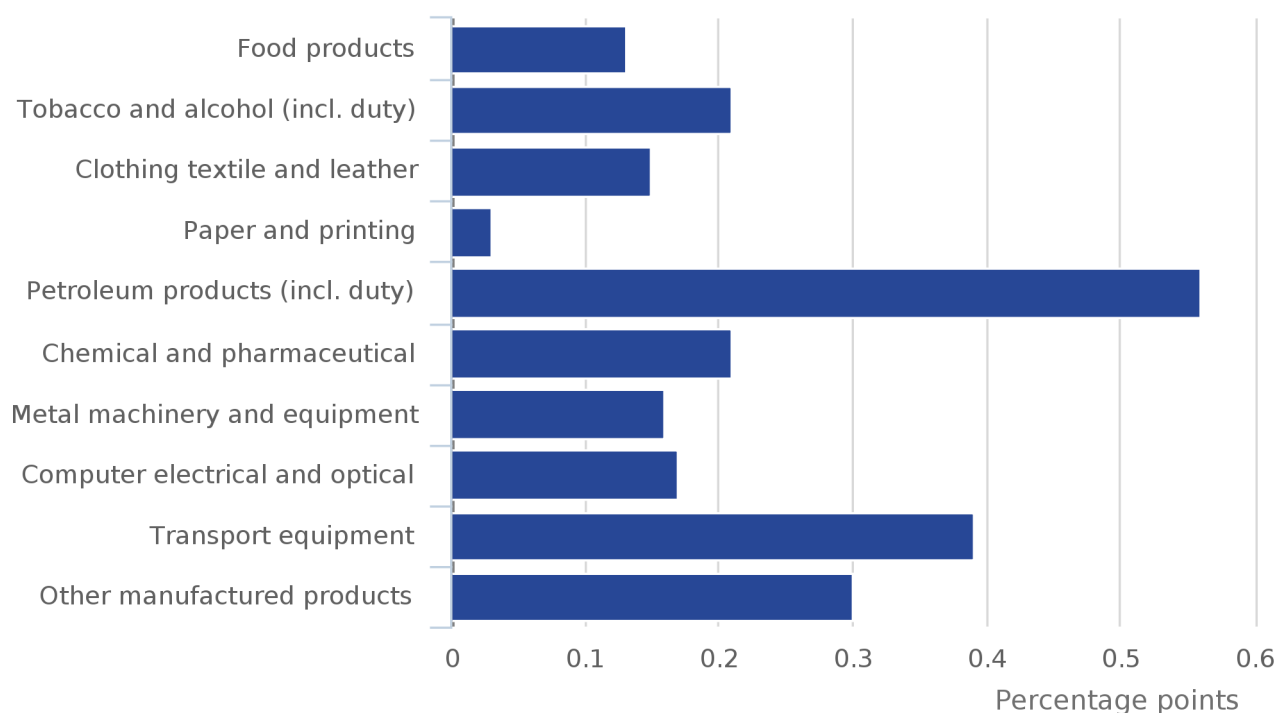
Table 2: Output prices, 12-months change, November 2016, UK

Product group	Percentage change
Food products	0.9
Tobacco and alcohol (incl. duty)	2.3
Clothing, textile and leather	1.3
Paper and printing	0.9
Petroleum products (incl. duty)	8.3
Chemical and pharmaceutical	2.9
Metal, machinery and equipment	2.2
Computer, electrical and optical	1.4
Transport equipment	3.2
Other manufactured products	1.9
All manufacturing	2.3

Source: Office for National Statistics

Figure 2: Output prices, contribution to 12 months' growth rate

UK, November 2016



Source: Office for National Statistics

Table 3 shows the monthly percentage change in price across all product groups and Figure 3 shows their contribution to the 1- month factory gate inflation rate.

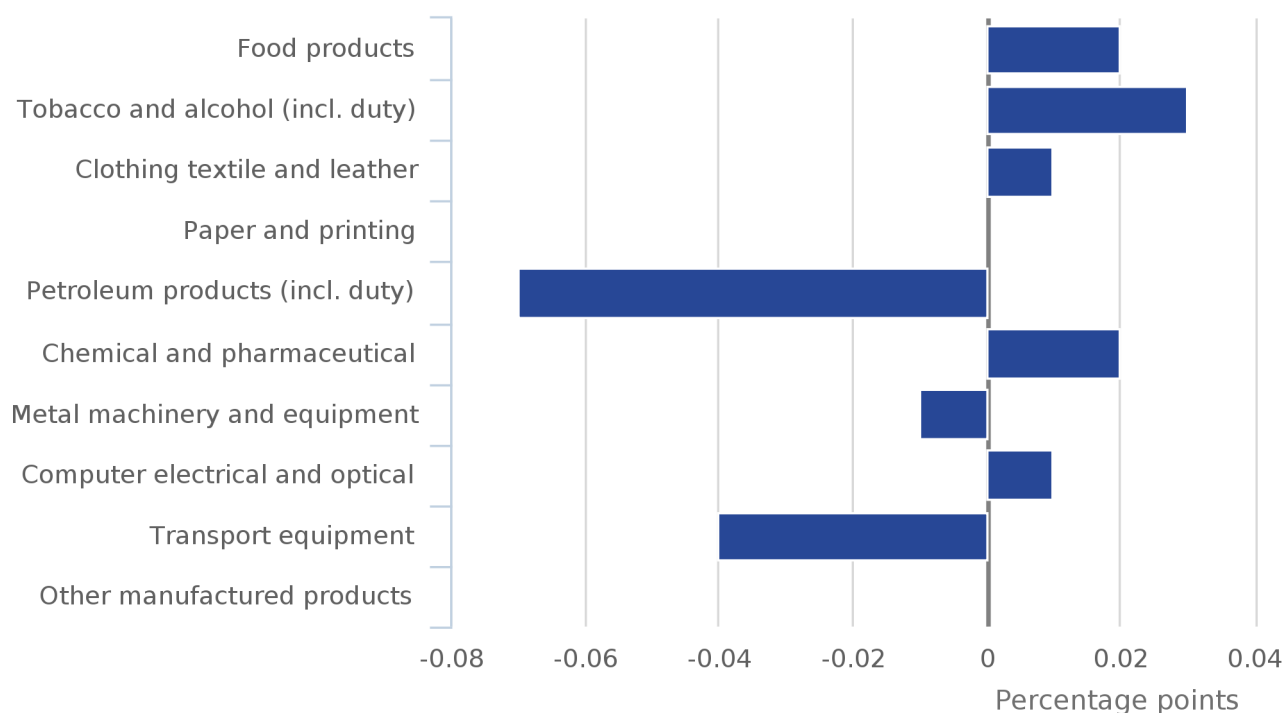
Table 3: Output prices, 1-month change, November 2016, UK

Product group	Percentage change
Food products	0.2
Tobacco and alcohol (incl. duty)	0.4
Clothing, textile and leather	0.1
Paper and printing	0.1
Petroleum products (incl. duty)	-1.1
Chemical and pharmaceutical	0.2
Metal, machinery and equipment	-0.1
Computer, electrical and optical	0.0
Transport equipment	-0.4
Other manufactured products	-0.1
All manufacturing	0.0

Source: Office for National Statistics

Figure 3: Output prices, contribution to 1-month growth rate

UK, November 2016



Source: Office for National Statistics

6 . Output prices: detailed commentary

Factory gate prices rose 2.3% in the year to November 2016, compared with a rise of 2.1% in the year to October 2016. This is now the fifth annual increase in a row. All product groups showed increases in the year to November 2016 with the main contribution to the increase coming from petroleum products. An increase in the price of transport equipment and other manufactured products also contributed towards the rise in the output price of manufactured products (Figure 2).

Petroleum products rose 8.3% in the year to November 2016, compared with a rise of 8.0% in the year to October 2016. This is the third increase in a row following 3 years of consecutive falls and the largest upwards movement in the index since December 2011. The main contributions to this rise came from diesel and gas oil, motor spirit and aviation turbine fuel (avtur), with prices rising by 6.8%, 8.1% and 20.9% respectively in the year.

Transport equipment prices increased 3.2% in the year to November 2016, compared with an increase of 3.3% in the year to October 2016. All sections within transport equipment showed increases in the annual rate with the largest upward contribution from motor vehicles, trailers and semi-trailers, which rose 2.9%.

Other manufactured product prices rose 1.9% in the year to November 2016, compared with a rise of 2.1% in the year to October 2016. The main contributors to this increase were from other manufactured goods, and repair and installation of service machinery, which increased 2.4% and 7.2% respectively in the year to November 2016.

The monthly output price showed no movement between October and November 2016, compared with an increase of 0.7% between September and October 2016. Most sectors showed small monthly movements with petroleum products and transport equipment providing the largest downward contributions. Offset by tobacco and alcohol, which provided the largest upward contribution to the monthly rate (Figure 3).

Petroleum products prices fell 1.1% between October and November 2016, compared with an increase of 5.0% between September and October 2016. The main contributor to the fall came from diesel and gas oil, which decreased 3.2%.

Transport equipment prices decreased by 0.4% between October and November 2016, compared with an increase of 0.7% between September and October 2016. A decrease of 0.6% in the price for motor vehicles, trailers and semi-trailers was the only contributor to this downward movement.

Tobacco and alcohol prices provided the largest upwards contribution, increasing 0.4% between October and November 2016 compared with no movement between September and October 2016. Tobacco products provided the largest contribution to this increase, with prices rising 0.8%.

Core factory gate inflation

Core factory gate prices, which exclude the more volatile food, beverage, tobacco and petroleum product prices, giving a measure of underlying factory gate inflation, rose 2.2% in the year to November 2016, compared with an increase of 2.0% in the year to October. This increase of 2.2% is the largest annual movement seen in core factory gate prices in over 4 years. The largest contributors to this rise were transport equipment and other manufactured products.

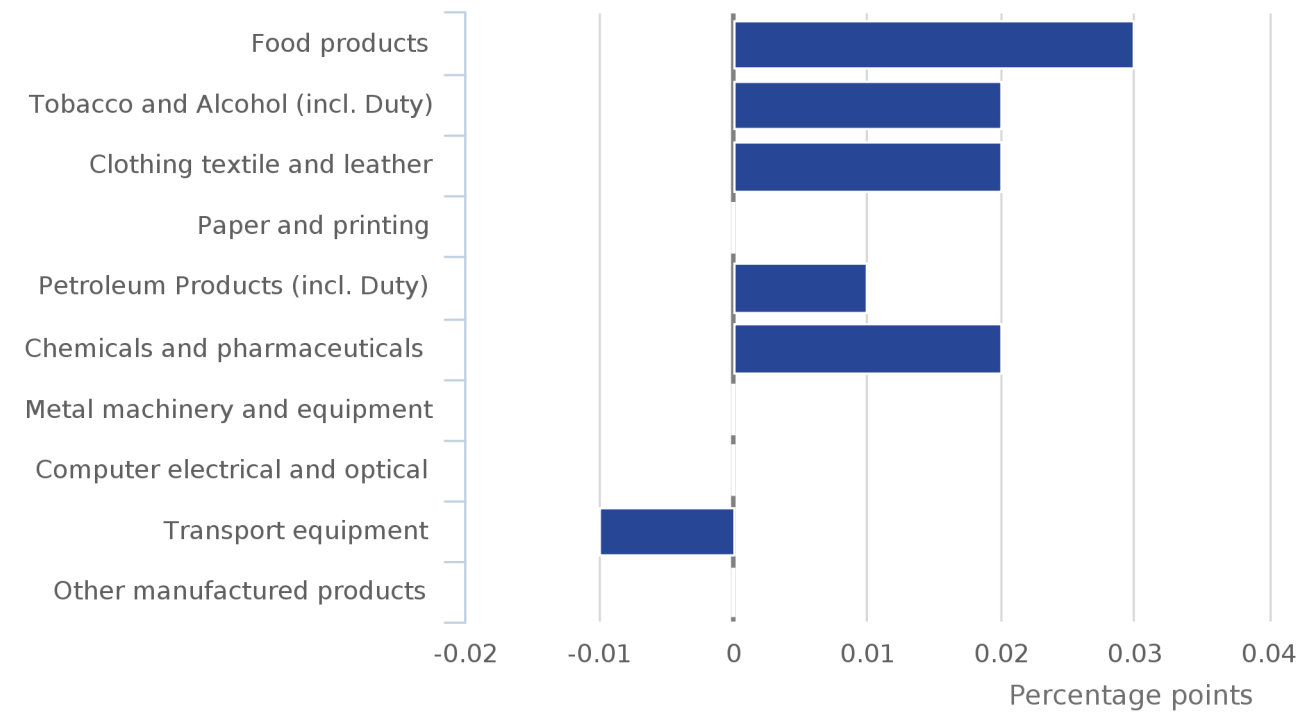
The monthly core factory gate price index showed no movement between October and November, compared with an increase of 0.5% last month.

Output Producer Price Index contribution to change in rate

The annual percentage rate for the output Producer Price Index (PPI) in November 2016 increased 2.3%, compared with a rise of 2.1% the previous month resulting in an increase in the annual rate of 0.2 percentage points. Food products; clothing, textiles and leather; alcohol and tobacco; and chemicals and pharmaceuticals were the main contributors to the change in the 12-month rate.

Figure 4: Output PPI 12-month contribution to change in annual rate between October and November 2016

UK



Source: Office for National Statistics

Notes:

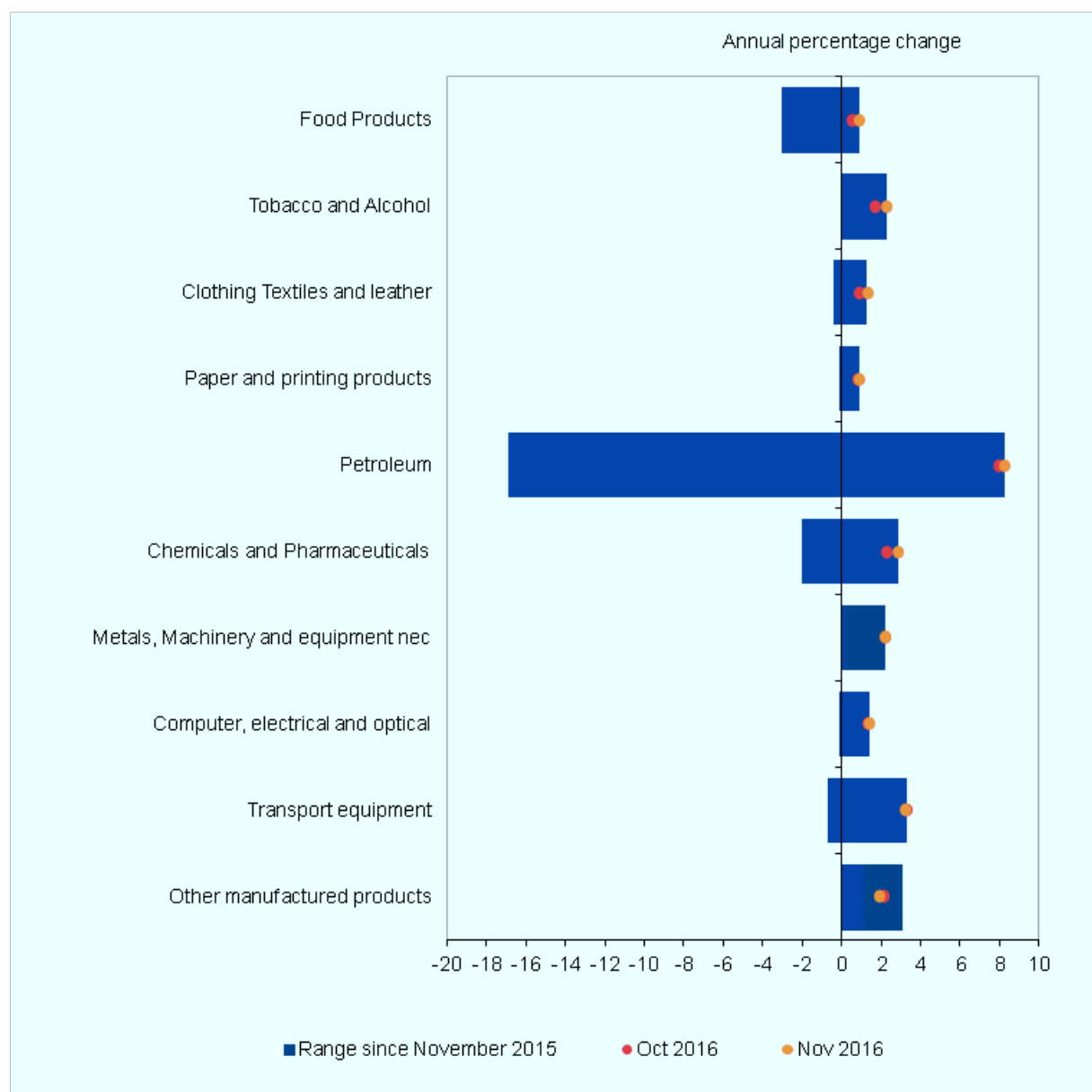
- 1. The components may not sum exactly to the overall change in the rate due to rounding.

7 . Output Producer Price Index range of movements

Figure 5 shows the year-on-year growth in output Producer Price Index (PPI) by grouping for the latest 2 months and the range of the price changes that have been seen in these sections since November 2015. It can be seen that the majority of output PPI indices have experienced little variance in inflation in the past 12 months. Petroleum shows the biggest decrease and increase, as well as the largest range of movements; ranging from a fall of 16.9% on the year in November 2015 to an increase of 8.3% in November 2016.

Figure 5: Output PPI range of movements

UK, November 2015 to November 2016



8 . Input prices: summary

Between 2014 and 2015, the annual movements in total input prices (including materials and fuels) remained below core input prices (excluding purchases from food, beverage, tobacco and petroleum industries). However, in 2016 although both total and core input inflation have been showing an upwards trend, total input inflation has been growing strongly and is now at a higher level than core input inflation (Figure 6).

The price of imported materials as a whole (including crude oil) rose 12.9%, compared with an increase of 12.4% in the year to October 2016; this index has now been rising, consistently since July 2016 and this is the largest increase on the year since October 2011.

Looking at the latest data (Table 4), the main movements in the year to November 2016 were as follows:

- the total input price index rose 12.9%, compared with a rise of 12.4% in the year to October 2016
- the core input price index saw a rise of 11.5%, compared with a rise of 10.3% in the year to October 2016

Between October and November 2016:

- the total input price index decreased 1.1% compared with a rise of 4.5% between September and October
- the seasonally adjusted input price index for the manufacturing industry excluding the food, beverage, tobacco and petroleum industries (Table 4) fell 0.6%, compared with an increase of 3.4% between September and October

Table 4: Input prices, June 2016 to November 2016, UK

		Percentage change				
		Materials and fuels purchased		Excluding purchases from food, beverage, tobacco and petroleum industries		
		1 month	12 months	1 month	12 months	1 month
		(NSA) ¹	(NSA) ¹	(NSA) ¹	(NSA) ¹	(SA) ²
2016	Jun	1.7	-0.5	0.7	-0.3	1.0
	Jul	3.2	4.2	4.3	5.1	4.4
	Aug	0.4	7.9	0.3	6.4	0.0
	Sep	0.2	7.5	-0.4	5.2	-0.5
	Oct	4.5	12.4	4.1	10.3	3.4
	Nov	-1.1	12.9	-0.3	11.5	-0.6

Source: Office for National Statistics

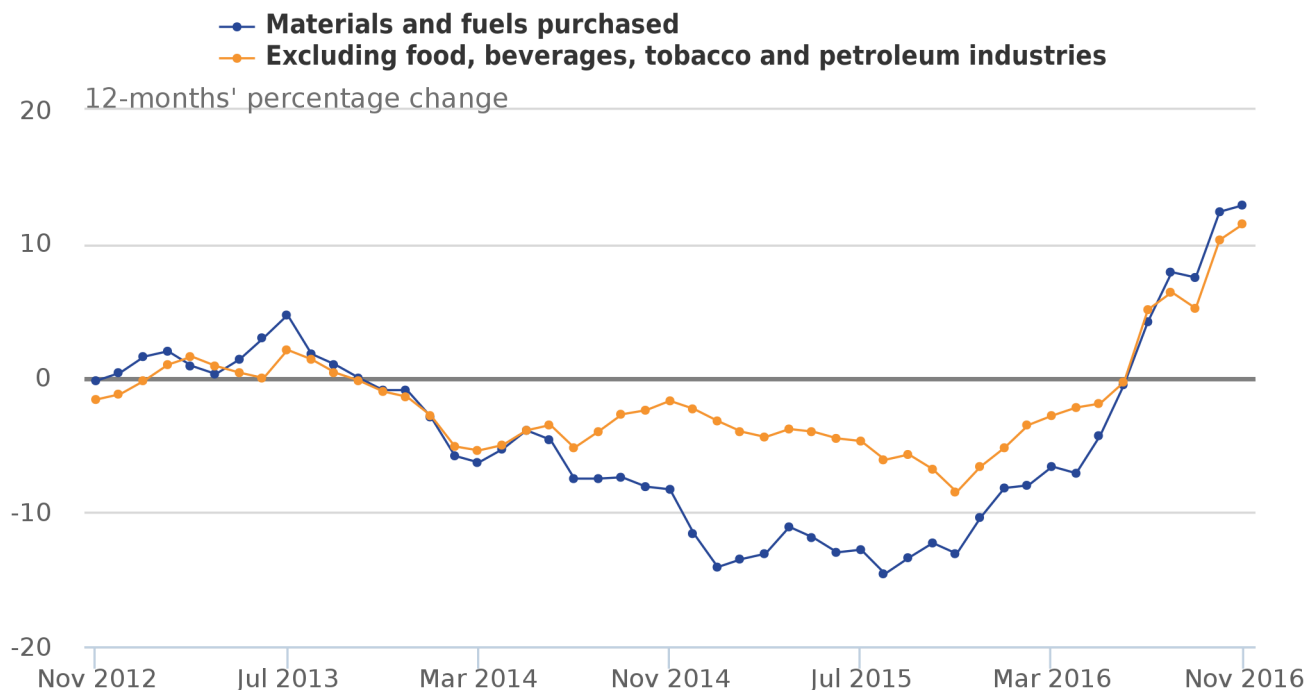
Notes:

1. NSA: Not Seasonally Adjusted

2. SA: Seasonally Adjusted

Figure 6: Input prices (materials and fuel)

UK, November 2012 to November 2016



Source: Office for National Statistics

Notes for input prices: summary

1. Input price indices include the [Climate Change Levy](#) which was introduced in April 2001.
2. Input price indices include the [Aggregate Levy](#) which was introduced in April 2002.

9 . Supplementary analysis: input prices

Table 5 and Figure 7 show the percentage change in the price of the main commodities groups over the year and their contributions to the total input index.

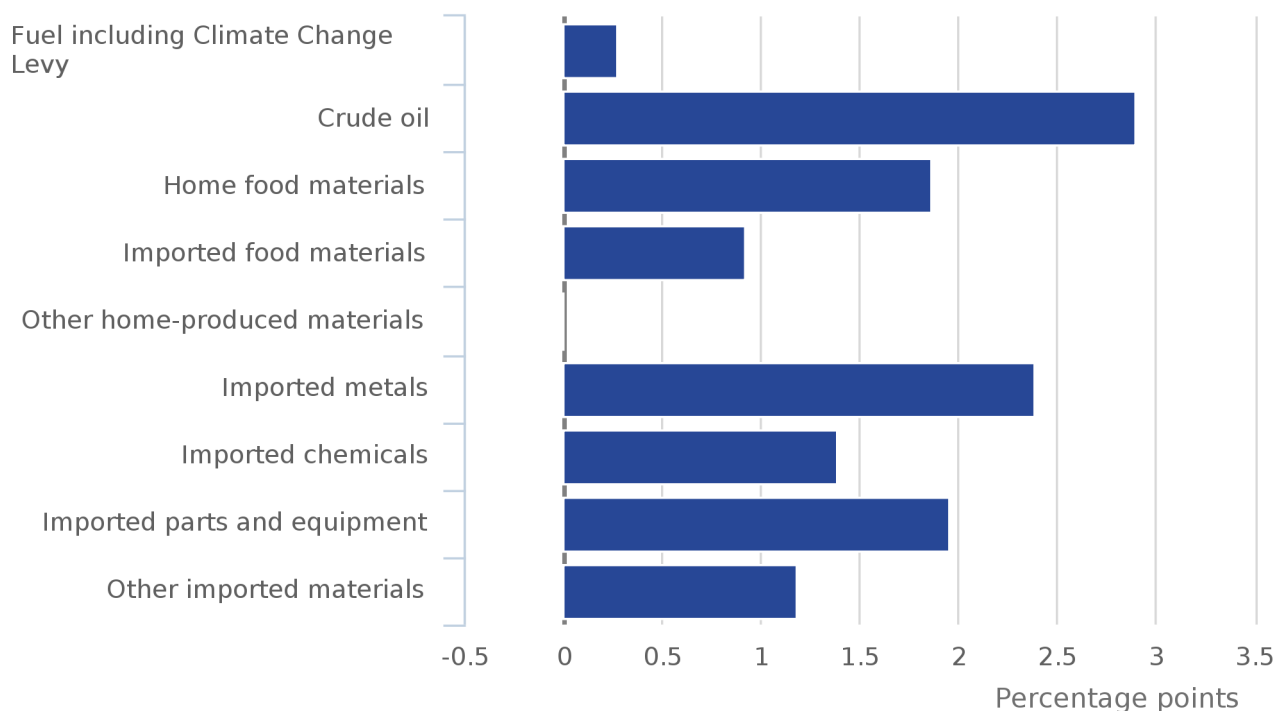
Table 5: Input prices, 12-months change, November 2016, UK

Product group	Percentage change
Fuel including Climate Change Levy	2.1
Crude oil	22.3
Home food materials	13.4
Imported food materials	11.5
Other home-produced materials	-0.3
Imported metals	35.3
Imported chemicals	9.7
Imported parts and equipment	10.5
Other imported materials	12.8
All manufacturing	12.9

Source: Office for National Statistics

Figure 7: Input prices, contribution to 12-months' growth rate

UK, November 2016



Source: Office for National Statistics

Table 6 and Figure 8 show the percentage change in the price of the main commodities groups over the month and their contributions to the total input index.

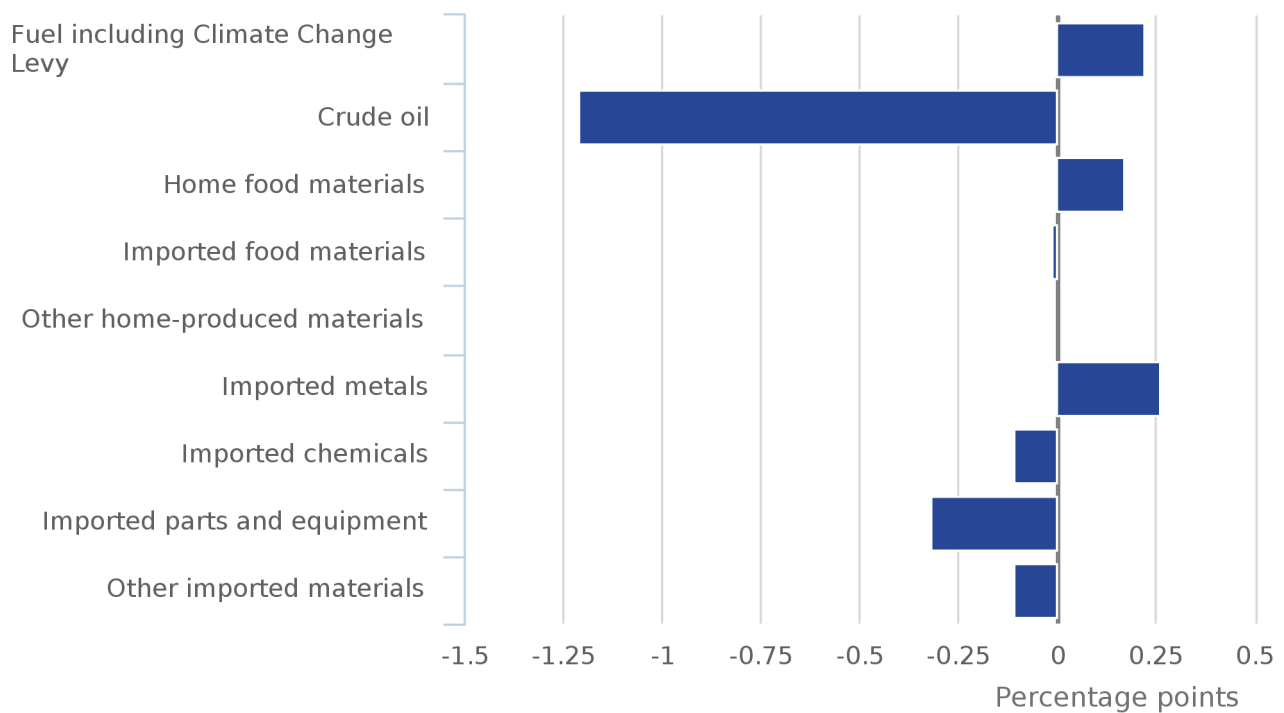
Table 6: Input prices, 1-month change, November 2016, UK

Product group	Percentage change
Fuel including Climate Change Levy	1.9
Crude oil	-7.9
Home food materials	1.2
Imported food materials	-0.1
Other home-produced materials	-0.1
Imported metals	3.3
Imported chemicals	-0.7
Imported parts and equipment	-1.6
Other imported materials	-1.1
All manufacturing	-1.1

Source: Office for National Statistics

Figure 8: Input prices, contribution to 1-month growth rate

UK, November 2016



Source: Office for National Statistics

10 . Input prices: detailed commentary

The overall input index for all manufacturing, which measures changes in the price of materials and fuels purchased by manufacturers, rose 12.9% in the year to November 2016, compared with a rise of 12.4% in the year to October 2016. The main upwards contributions to the index came from crude oil, imported metals, and imported parts and equipment.

The monthly input index decreased 1.1% between October and November 2016, compared with an increase of 4.5% between September and October 2016 (see Table 6 and Figure 8).

Crude oil rose 22.3% in the year to November 2016, compared with an increase of 24.2% in the year to October 2016. This is the fourth increase in the annual rate of crude oil prices following 34 months of falling prices. Imported crude petroleum and natural gas was the main contributor to this rise, with an increase of 20.8% compared with an increase of 22.6% in the year to October 2016. This is the fourth increase we have seen in this index in a row.

Imported metals prices rose 35.3% in the year to November 2016, compared with a rise of 26.2% in the year to October 2016; this is the largest increase on the year since recent records began. The main contribution came from imported products used in the manufacture of other basic metals and casting, which rose 35.1%, compared with an increase of 26.3% in the year to October 2016. This increase of 35.1% is the largest increase on the year since recent records began.

Home-produced food prices increased 13.4% in the year to November 2016, compared with a rise of 12.5% in the year to October 2016. This is the largest upward movement seen in this index since July 2011. The main contribution to the rise came from crop and animal production; hunting and related services, which rose 13.2% compared with an increase of 12.1% in the year to October 2016.

Core input price index (excluding purchases from the food, beverage, tobacco and petroleum industries)

The seasonally adjusted core input price index rose 11.3% in the year to November 2016, compared with a rise of 10.2% in the year to October 2016, the largest upwards movement on the year since January 2009. Between October and November 2016, the index fell 0.6%, compared with a rise of 3.4% between September and October 2016.

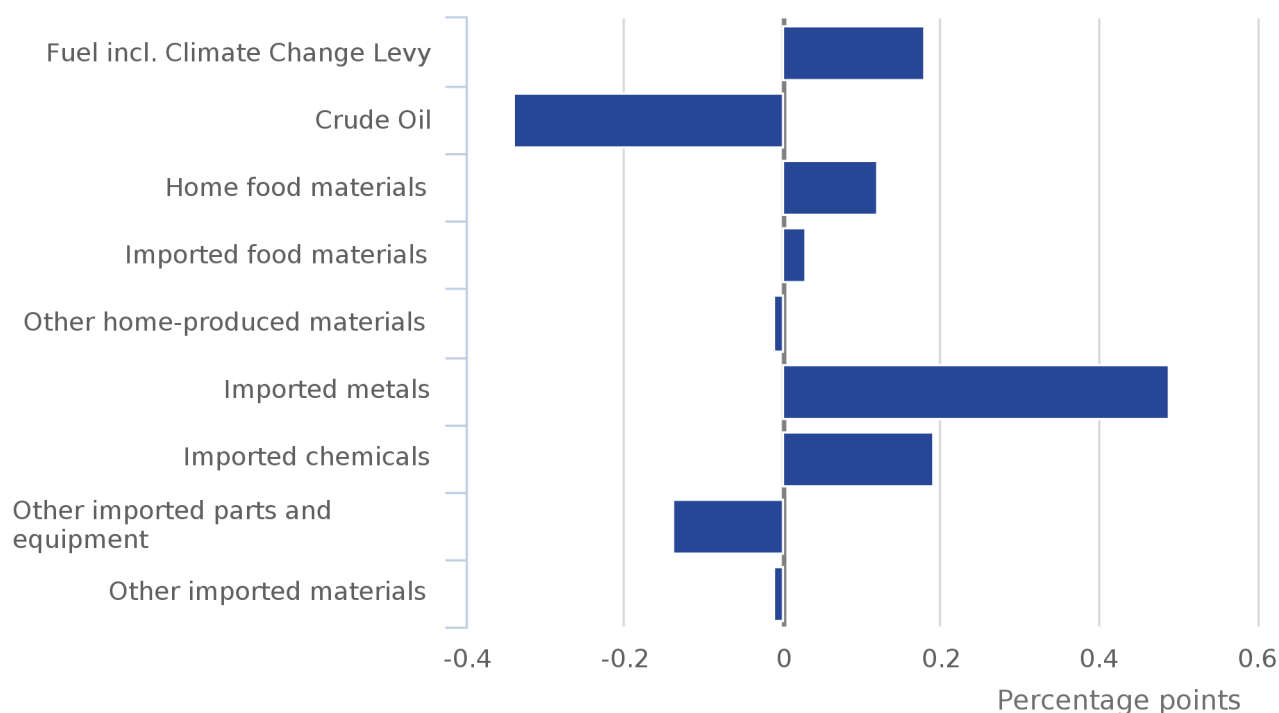
The unadjusted core input price index rose 11.5% in the year to November 2016, compared with a rise of 10.3% in the year to October 2016. This is the fifth month of rising prices in this index following almost 3 years of falling prices. The monthly index fell 0.3% between October and November 2016, compared with an increase of 4.1% between September and October 2016.

Input Producer Price Index contribution to change in rate

The annual percentage rate for the input Producer Price Index (PPI) in November 2016 rose 12.9% compared with a rise of 12.4% last month, resulting in a change to the annual rate of 0.5 percentage points. The largest contributions to this increase came from imported metals, imported chemicals and fuel (Figure 9).

Figure 9: Input PPI 12-month contribution to change in annual rate between October and November 2016

UK



Source: Office for National Statistics

Notes:

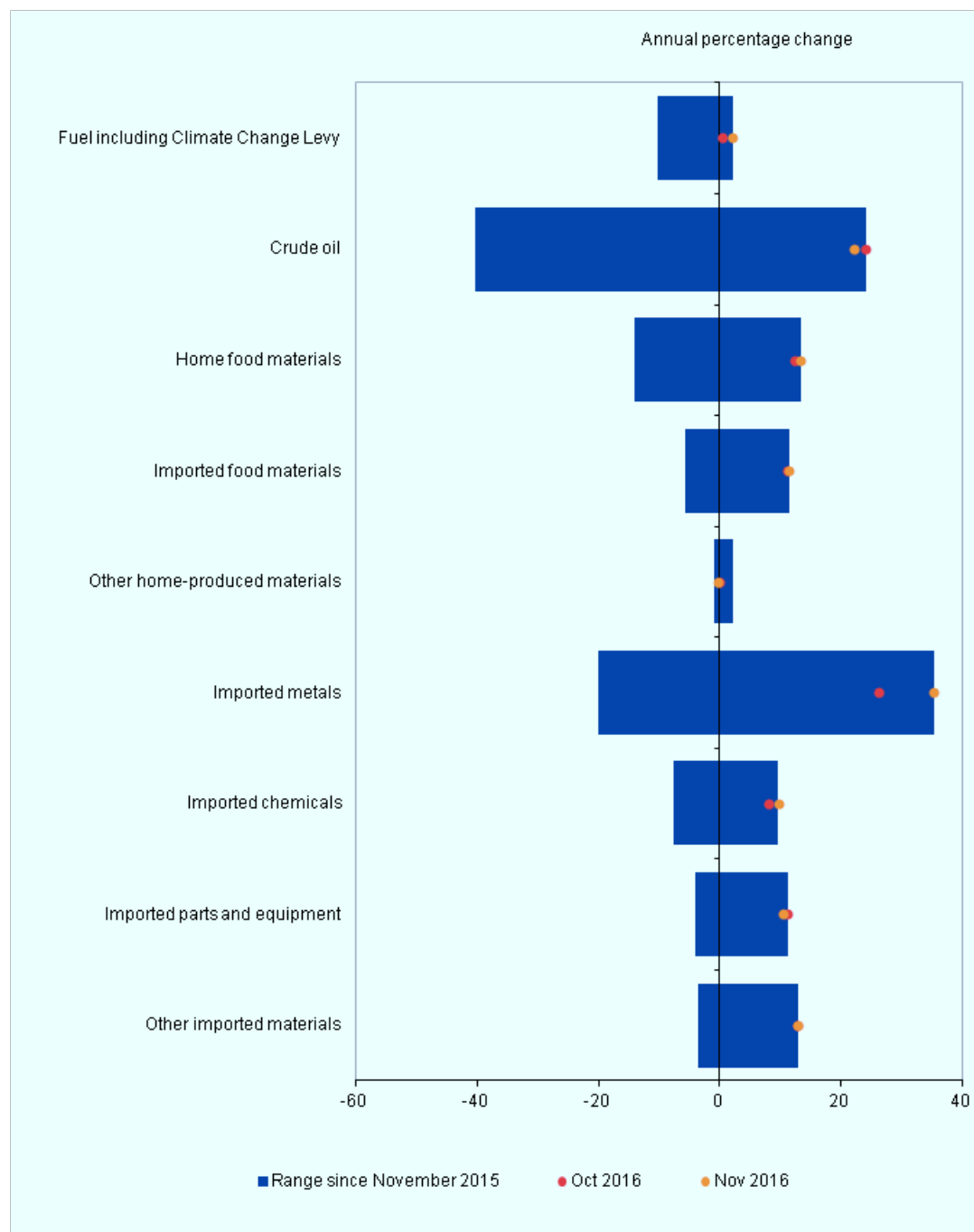
1. The components may not sum exactly to the overall change in the rate due to rounding.

11 . Input PPI indices range of movements

Figure 10 shows the year-on-year growth in input Producer Price Index (PPI) by grouping for the latest 2 months and the range of the price changes that have been seen in these groupings since November 2015. Crude oil shows the biggest decrease in the 12-month period and also the largest range of movements, from a fall of 40.4% in November 2015 to a rise of 24.2% in October 2016.

Figure 10: Input PPI range of movements

UK, November 2015 to November 2016

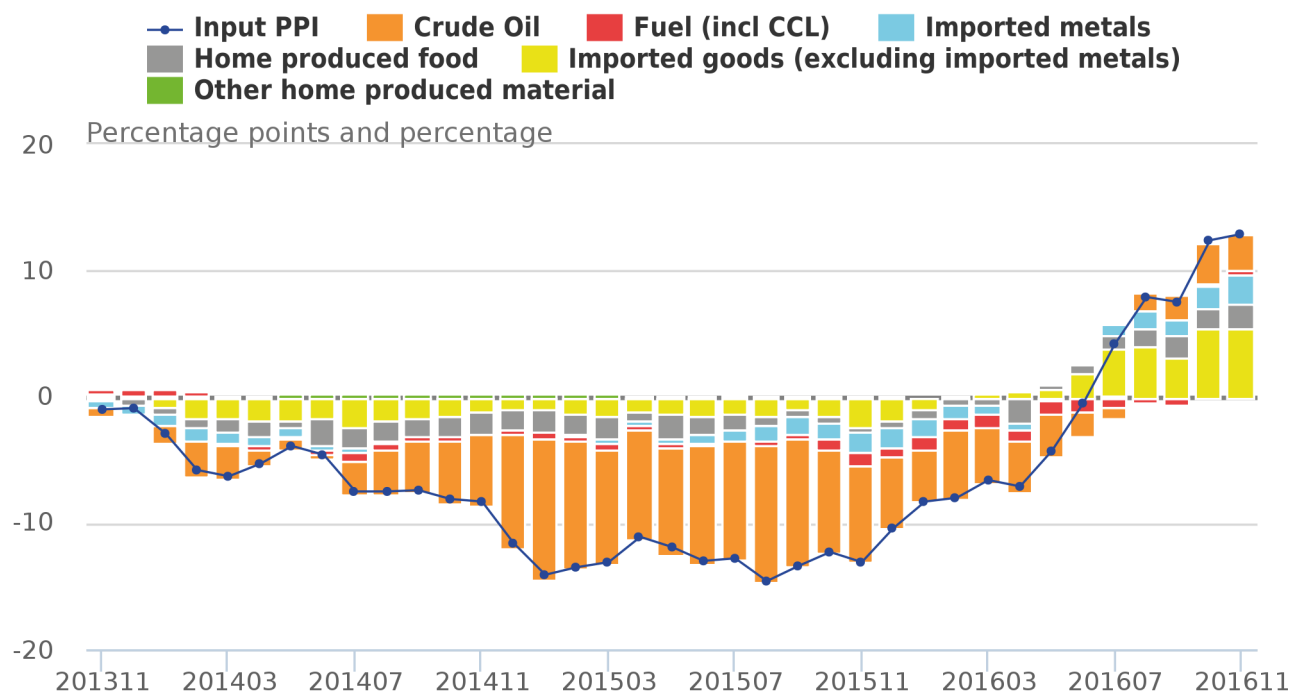


12 . Economic context

Input producer prices increased by 12.9% in the year to November 2016, compared to a 12.4% increase in the year to October 2016. Output producer prices increased by 2.3% in the year to November 2016, compared to a 2.1% increase in the year to October 2016. This month is the fifth in a period of consecutive increases in both input and output producer prices since July 2016.

Figure 11: Contributions to Input PPI by component

UK, November 2013 to November 2016



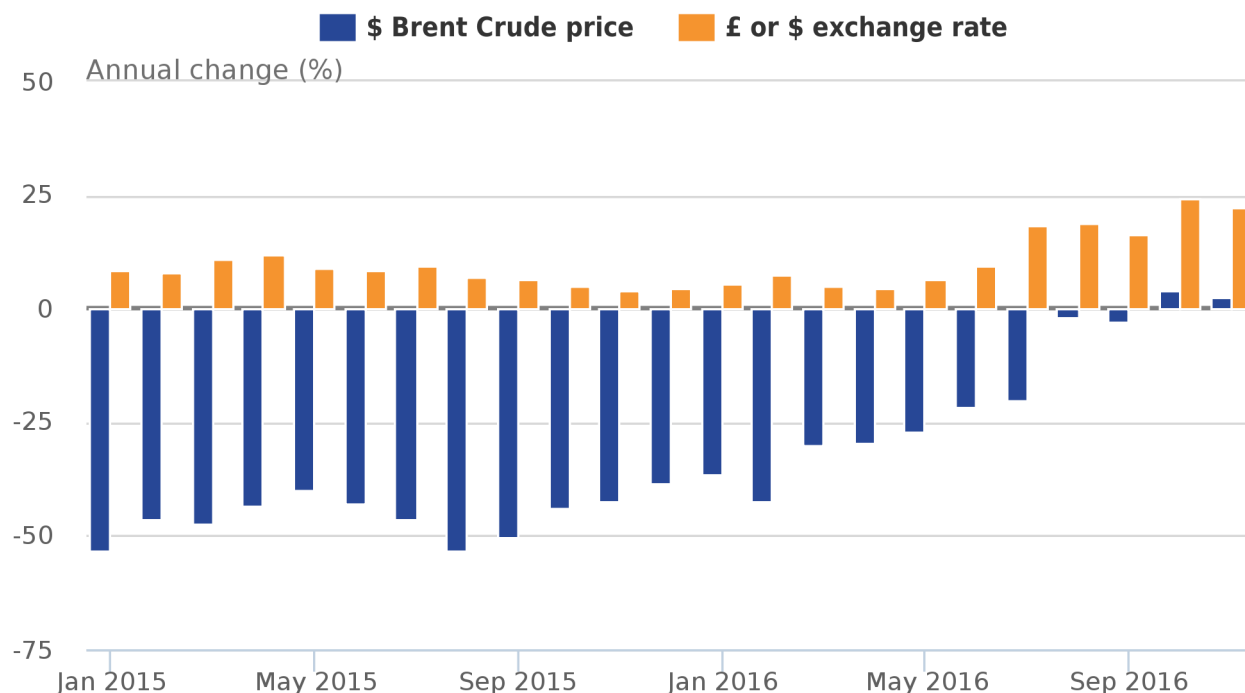
Source: Office for National Statistics

Figure 11 shows that imported products and crude oil are continuing to drive contributions to growth in input producer prices in the year to November 2016. The largest single contributor was crude oil, comprising 2.9 percentage points of the growth in input producer prices, while all imported goods contributed 7.8 percentage points to the overall growth of 12.9%

These changes can be related to a changing oil price and recent sterling depreciation.

Figure 12: 12 month change in United States Dollar(USD) crude oil price and Pound Sterling to USD exchange rate

UK, November 2013 to November 2016



Source: Financial Times, Bank of England

Notes:

1. For the £ and \$ exchange rate series bars which are above the x axis represent a depreciation of the value of the sterling compared with the dollar over that past 12 months.

Figure 12 shows recent changes in the oil price and sterling to dollar exchange rate. From August 2016 \$ Brent crude price deflation has moderated and from October 2016 growth has turned positive. Alongside this, in the year to November 2016 sterling became 22.2% weaker compared with the dollar. A combination of these changes has started to put upwards pressure on input producer prices.

Although weakness in sterling continues to put upward pressure on most imported Producer Price Index (PPI) components, this eased somewhat during November. However, costs continued to increase for UK manufacturers buying imported metals. This component was the second largest contributor to growth in input producer prices at 2.4 percentage points of the total.

In November 2016 the largest contribution to output PPI growth came from refined petroleum products which contributed 0.6 percentage points to the 2.3% annual growth. This is a slight increase from the 0.5 percentage point contribution in the year to October 2016, which reflects the rising pressure from the crude oil input PPI component.

Further analysis of PPI alongside Consumer Prices Index (CPI) analysis is published in our [Additional Analysis of the CPI and PPI article](#).

13 . Revisions

For this bulletin, [Producer price index dataset Tables 8R and 9R](#) highlight revisions to movements in price indices previously published in last month's [statistical bulletin](#). These are mainly caused by changes to the most recent estimates as more price quotes are received, and revisions to seasonal adjustment factors, which are re-estimated every month.

For more information about our [revisions policy](#), see our website.

Table 7: Revisions between first publication and estimates 12-months later, UK

				%
	Value in latest period	Revisions between first publication and estimates 12 months later		
		Average over the last 5 years	Average over the last 5 years without regard to sign (average absolute revision)	
Total output (JVZ7) - 12 months	2.3	-0.08		0.13
Total output (JVZ7) - 1 month	0.0	-0.01		0.07
Total input (K646) - 12 months	12.9	0.02		0.33
Total input (K646) - 1 month	-1.1	0.02		0.28

Source: Office for National Statistics

Notes:

1. *Statistically significant

Revisions to data provide one indication of the reliability of main indicators. Table 7 shows summary information on the size and direction of the revisions which have been made to the data covering a 5-year period. A statistical test has been applied to the average revision to find out if it is statistically significantly different from zero. The inclusion of an asterisk (*) would show the test is significant.

Table 7 presents a summary of the differences between the first estimates published between 2011 and 2015 and the estimates published 12 months later. These numbers include the effect of the reclassification onto [Standard Industrial Classification \(SIC\) 2007](#).

Spreadsheets giving revisions triangles of estimates for all months from February 1998 through to November 2016 and the calculations behind the averages in the table are available in the producer price inflation datasets.

[Revision triangle for total output \(12 months\)](#)

[Revision triangle for total output \(1 month\)](#)

[Revision triangle for total input \(12 months\)](#)

14 . Quality and methodology

The [PPI Quality and Methodology Information document](#) contains important information on:

- the strengths and limitations of the data and how it compares with related data
- users and uses of the data
- how the output was created
- the quality of the output including the accuracy of the data

15 . Planned changes to methods for Producer Prices Index and Services Producer Prices Index

An [article has been published alongside](#) this Producer Prices Index (PPI) release, outlining upcoming changes and improvements due to be delivered to Services Producer Prices Index (SPPI) and PPI (in particular exported outputs and imported inputs) throughout 2017 to 2018.

Firstly, the Short Term Statistics (STS) regulation, under which the aforementioned statistics are currently published, will be replaced by the Framework Regulation Integrating Business Statistics (FRIBS). This is a European regulation aimed at ensuring EU member states report data on a common basis, but will also include important improvements which are vital for improving the UK National Accounts' (NA) ability to calculate economic measures; such as Gross Domestic Product (GDP). It will provide more complete measures of price change in the service sector, primarily by broadening the coverage from "Business to Business" transactions to "Business to All", and assist users, such as the Bank of England (BoE), in making assessments of and monitoring the UK economy which is essential for policy making. This change in regulation will come into force in 2019.

The second change will relate to the sample size of SPPI, exported output and imported inputs within PPI and selection methods of SPPI. The number of prices collected will be increased to 6,000 in each survey and the Services Turnover Survey will be used as a sampling frame for the SPPI. Furthermore, new methodology will be used to ensure efficient use of resource and optimum quality for the resources available.

The paper will detail the scheduled dates the changes will take place, as well as the providing details on the nature of the changes. Users will also be invited to provide feedback and ask any questions regarding the changes.

16. Background notes

1. PPI standard errors

We have published an article on the [analysis of Producer Price Indices](#) (PPI) using standard errors with the [November 2015 release](#). The article presented the calculated standard errors of the PPI during the period December 2014 to November 2015, for both month-on-month and 12-month growth.

2. PPI guidance

[Guidance on using indices in indexation clauses](#) has been published on our website. It covers producer prices, services producer prices and consumer prices.

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

3. How are we doing?

We aim to constantly improve this release and its associated commentary. We welcome any feedback you might have, and are particularly interested in knowing how you make use of these data to inform your work. Please contact us via email: ppi@ons.gsi.gov.uk

4. Article about rebasing the PPI onto 2010=100

As previously announced, we have taken forward the rebasing of the PPI onto a 2010=100 basis. The first published data using 2010=100 was released in November 2013. An [article describing the results of this assessment](#) was also published on 12 November 2013.

5. Finding PPI data

All of the data included in this statistical bulletin, alongside data for the full range of PPIs, is available in the associated datasets. Also available are the datasets for the [Aerospace and Electronic Indices](#) and the [Producer Price Indices](#). There are [PPI records](#) available which give the higher, lower and equal to movements for each index. Each PPI has 2 unique identifiers: a 10- digit index number, which relates to the [Standard Industrial Classification](#) code appropriate to the index and a 4-character alpha-numeric code, which can be used to find series when using the time series dataset for PPI.

6. European comparability

The UK is required to compile and deliver the PPI to Eurostat under the [Short-Term Statistics Regulation](#). As a result, all EU countries must produce equivalent series on a comparable basis. Eurostat produce European aggregates for PPI and publish a monthly press release. This release uses the gross sector PPI as the headline figure; here in the UK, we publish the top level PPI on a net sector basis. Detailed PPI figures for the UK and the rest of the EU are also published on Eurostat's website.

7. Relevance to users

Index numbers shown in the main text of this bulletin are on a net sector basis. The index for any sector relates only to transactions between that sector and other sectors; sales and purchases within sectors are excluded. However, the more detailed figures shown in [Producer price index dataset Tables 4 and 6](#) are on a gross basis; that is, intra-industry sales and purchases are included in each of these indices.

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 VAT. Excise duty (on cigarettes, manufactured tobacco, alcoholic liquor and petroleum products) are included, except where labelled otherwise. Since PPIs exclude VAT, they are not affected by the increase in the standard rate of VAT to 20% from 4 January 2011.

The detailed input indices of prices of materials and fuels purchased by industry ([Producer price index 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.

8. Common pitfalls in interpreting series

Expectations of accuracy and reliability in sample surveys are often too high. Revisions and sampling variability are inevitable consequences of the trade off between timeliness, accuracy and the burden on respondents. Details of sampling variability are included elsewhere in this bulletin.

Very few statistical revisions arise as a result of “errors” in the popular sense of the word. All estimates, by definition, are subject to statistical “error” but, in this context, the word refers to the uncertainty in any process or calculation that uses sampling, estimation or modelling. Most revisions reflect either the adoption of new statistical techniques or the incorporation of new information which allows the statistical error of previous estimates to be reduced. Only rarely are there avoidable “errors” such as human or system failures, and such mistakes are made quite clear when they are discovered and corrected.

9. Definitions and explanations

Definitions found within the main statistical bulletin follow.

Index number

A measure of the average level of prices, quantities or other measured characteristics, relative to their level for a defined reference period of location. It is usually expressed as a percentage above or below, but relative to, the base index of 100.

Seasonally adjusted

Seasonal adjustment aids interpretation by removing effects associated with the time of the year or the arrangement of the calendar, which could obscure movements of interest. Seasonal adjustment removes regular variation from a time series. Regular variation includes effects due to month lengths, different activity near particular events, such as bank holidays and leap years.

Sampling variability

Very few statistical revisions arise as a result of “errors” in the popular sense of the word. All estimates, by definition, are subject to statistical “error” but in this context the word refers to the uncertainty. Data in the bulletin are based on statistical samples and, as such, are subject to sampling variability. If many samples were drawn, each would give different results.

Prices

All characteristics that determine the price of the products – including quantity of units sold, transport provided, rebates, service conditions, guarantee conditions and destination – are taken into account.

The appropriate price is the basic price, which excludes VAT and similar deductible taxes directly linked to turnover, as well as all duties and taxes on the goods and services invoiced by the unit, whereas any subsidies on products received by the producer are added.

Transport costs are included but only as part of the product specification.

An actual transaction price and not a list price are given to show the true development of price movements.

The output price index takes into account the quality changes in products.

The price collected in period *t* refers to orders booked during period *t* (time of the order), not when the commodities leave the factory gates.

For output prices on the non-domestic market, the price is calculated at national frontiers, FOB (free on board). This means that the seller pays for transportation of the goods to the port of shipment, plus loading costs, and the buyer pays freight, insurance, unloading costs and transportation from the port of destination to the factory.

10. Accuracy

Figures for the latest 2 months are provisional and the latest 5 months are subject to revisions in light of (a) late and revised respondent data and (b) for the seasonally adjusted series, revisions to seasonal adjustment factors

are re-estimated every month. A routine seasonal adjustment review is normally conducted in the autumn each year.

Every 5 years, producer price indices are rebased, and their weights updated to reflect changes in the industry. The [rebasings article](#) referred to in background note 1, informs users about work underway to rebase PPIs from a 2005=100 basis to a 2010=100 basis, and update the weights. PPIs will move to a 2010=100 basis from autumn 2013. More information about the impact of rebasing will be published as the project progresses and will be drawn to users' attention in the regular statistical bulletin.

11. Publication policy

There is a list of [publication dates](#) available up to January 2017 on our release calendar.

12. PPI/SPPI enquiries

Tel +44 (0)1633 455723 or +44 (0)1633 456297

13. Code of Practice for Official Statistics

Details of the [policy governing the release of new data](#) can be found on the [UK Statistics Authority](#) website.

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		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		1 mth	12 mths		
	7200700000			7200799000			7111101280			7112190080			
2016	May	JVZ7			K3BI			K65A			K37Y		
	Jun	106.6	0.1	−0.5	106.5	0.1	0.6	110.3	−0.8	−1.3	86.4	3.3	−9.7
		106.9	0.3	−0.2	106.6	0.1	0.7	110.1	−0.2	−1.6	89.4	3.5	−6.1
	Jul	107.1r	0.2	0.2	107.2	0.6	1.2	109.4r	−0.6	−2.1	89.6	0.2	−3.9
	Aug	107.3r	0.2	0.8	107.4	0.2	1.5	109.7r	0.3	−1.3	89.0	−0.7	−0.8
	Sep	107.6	0.3	1.2	107.4	−	1.4	110.3	0.5	−0.4	90.2	1.3	1.8
	Oct	108.3p	0.7	2.1	107.9p	0.5	2.0	110.8p	0.5	0.5	94.7p	5.0	8.0
	Nov	108.3p	−	2.3	107.9p	−	2.2	111.0p	0.2	0.9	93.7p	−1.1	8.3

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		
2016 May	94.8	2.3	−4.3	93.5	2.9	−3.7	105.1	−2.1	−9.7
Jun	96.4	1.7	−0.5	95.2	1.8	0.5	105.3	0.2	−8.8
Jul	99.5	3.2	4.2	98.3	3.3	5.6	108.7	3.2	−6.1
Aug	99.9r	0.4	7.9	98.9r	0.6	9.5	107.2	−1.4	−3.9
Sep	100.1	0.2	7.5	99.2	0.3	9.3	106.9	−0.3	−5.6
Oct	104.6p	4.5	12.4	103.4p	4.2	14.0	114.5p	7.1	0.5
Nov	103.4p	−1.1	12.9	101.8p	−1.5	14.4	116.7p	1.9	2.1

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		
2013 May	108.3	–	1.2	104.8	–	0.8	108.2	–	1.5
Jun	108.4	0.1	1.7	104.8	–	0.9	108.3	0.1	2.0
Jul	108.7	0.3	1.8	104.9	0.1	0.9	108.5	0.2	2.0
Aug	108.8	0.1	1.5	104.9	–	0.9	108.6	0.1	1.7
Sep	108.8	–	1.2	104.9	–	0.8	108.6	–	1.4
Oct	108.5	–0.3	0.8	104.9	–	0.8	108.4	–0.2	1.1
Nov	108.3	–0.2	0.8	104.8	–0.1	0.7	108.3	–0.1	1.0
Dec	108.3	–	1.0	104.9	0.1	1.0	108.2	–0.1	1.1
2014 Jan	108.6	0.3	0.9	105.4	0.5	1.2	108.5	0.3	1.0
Feb	108.7	0.1	0.6	105.6	0.2	1.1	108.6	0.1	0.6
Mar	108.8	0.1	0.4	105.8	0.2	1.1	108.9	0.3	0.6
Apr	108.9	0.1	0.6	105.8	–	1.0	108.9	–	0.6
May	108.8	–0.1	0.5	105.8	–	1.0	108.8	–0.1	0.6
Jun	108.7	–0.1	0.3	105.8	–	1.0	108.6	–0.2	0.3
Jul	108.6	–0.1	–0.1	105.7	–0.1	0.8	108.6	–	0.1
Aug	108.5	–0.1	–0.3	105.8	0.1	0.9	108.5	–0.1	–0.1
Sep	108.3	–0.2	–0.5	105.7	–0.1	0.8	108.4	–0.1	–0.2
Oct	107.7	–0.6	–0.7	105.5	–0.2	0.6	107.9	–0.5	–0.5
Nov	107.6	–0.1	–0.6	105.7	0.2	0.9	107.8	–0.1	–0.5
Dec	107.1	–0.5	–1.1	105.7	–	0.8	107.3	–0.5	–0.8
2015 Jan	106.6	–0.5	–1.8	105.9	0.2	0.5	107.0	–0.3	–1.4
Feb	106.8	0.2	–1.7	105.9	–	0.3	107.1	0.1	–1.4
Mar	106.9	0.1	–1.7	105.9	–	0.1	107.3	0.2	–1.5
Apr	107.0	0.1	–1.7	105.9	–	0.1	107.4	0.1	–1.4
May	107.1	0.1	–1.6	105.9	–	0.1	107.4	–	–1.3
Jun	107.1	–	–1.5	105.9	–	0.1	107.4	–	–1.1
Jul	106.9	–0.2	–1.6	105.9	–	0.2	107.3	–0.1	–1.2
Aug	106.4	–0.5	–1.9	105.8	–0.1	–	106.8	–0.5	–1.6
Sep	106.3	–0.1	–1.8	105.9	0.1	0.2	106.7	–0.1	–1.6
Oct	106.1	–0.2	–1.5	105.8	–0.1	0.3	106.5	–0.2	–1.3
Nov	105.9	–0.2	–1.6	105.6	–0.2	–0.1	106.3	–0.2	–1.4
Dec	105.6	–0.3	–1.4	105.8	0.2	0.1	106.1	–0.2	–1.1
2016 Jan	105.5	–0.1	–1.0	106.0	0.2	0.1	106.1	–	–0.8
Feb	105.6	0.1	–1.1	106.1	0.1	0.2	106.2	0.1	–0.8
Mar	106.1	0.5	–0.7	106.2	0.1	0.3	106.6	0.4	–0.7
Apr	106.5	0.4	–0.5	106.4	0.2	0.5	107.0	0.4	–0.4
May	106.6	0.1	–0.5	106.5	0.1	0.6	107.0	–	–0.4
Jun	106.9	0.3	–0.2	106.6	0.1	0.7	107.3	0.3	–0.1
Jul	107.1r	0.2	0.2	107.2	0.6	1.2	107.5r	0.2	0.2
Aug	107.3r	0.2	0.8	107.4	0.2	1.5	107.7r	0.2	0.8
Sep	107.6	0.3	1.2	107.4	–	1.4	108.0	0.3	1.2
Oct	108.3p	0.7	2.1	107.9p	0.5	2.0	108.8p	0.7	2.2
Nov	108.3p	–	2.3	107.9p	–	2.2	108.7p	–0.1	2.3

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	
			2016 Jul	2016 Aug	2016 Sep	2016 Oct	2016 Nov	2016 Oct	2016 Nov	2016 Oct	2016 Nov
Net sector											
Output of manufactured products	JVZ7	7200700000	107.1r	107.3r	107.6	108.3p	108.3p	0.7	–	2.1	2.3
All manufacturing, excluding duty	JVZ8	7200700010	107.5r	107.7r	108.0	108.8p	108.7p	0.7	–0.1	2.2	2.3
All manufacturing, excluding food, beverages, tobacco and petroleum	K3BI	7200799000	107.2	107.4	107.4	107.9p	107.9p	0.5	–	2.0	2.2
Gross Sector											
Food products, beverages and tobacco, including duty	K65A	7111101280	109.4r	109.7r	110.3	110.8p	111.0p	0.5	0.2	0.5	0.9
Food products	K37L	7112100000	108.0r	108.3r	108.9	109.6p	109.8p	0.6	0.2	0.5	0.9
Tobacco products, including duty	K37Q	7112120080	150.2	150.9	151.8	151.8p	153.0p	–	0.8	4.3	4.8
Alcoholic beverages, including duty	MC6A	7229110080	110.3 B	110.4rB	110.3 B	110.4pB	110.4pB	0.1	–	0.1	0.5
Soft drinks, mineral waters and other bottled waters	JU5C	1107000000	102.7rB	103.2rB	104.4 B	103.7pB	103.2pB	–0.7	–0.5	–1.7	–2.1
Textiles	K37R	7112130000	110.8r	111.0r	111.2	111.0p	111.1p	–0.2	0.1	–1.2	–1.2
Wearing apparel	K37S	7112140000	113.6	113.9	114.0	114.0p	114.0p	–	–	1.0	1.6
Leather and related products	K37T	7112150000	120.8	121.4	122.2	123.0p	123.6p	0.7	0.5	3.0	3.5
Wood and products of wood and cork, except furniture	K37U	7112160000	113.9r	114.2r	114.2	115.4p	115.7p	1.1	0.3	0.8	1.0
Paper and paper products	K37V	7112170000	106.8	106.7	106.8	107.4p	107.5p	0.6	0.1	1.4	1.6
Printing and recording services	K37W	7112180000	100.0	99.9r	100.2	100.3p	100.3p	0.1	–	0.1	–0.2
Coke and refined petroleum products, including duty	K37Y	7112190080	89.6	89.0	90.2	94.7p	93.7p	5.0	–1.1	8.0	8.3
Chemicals and chemical products	K37Z	7112200000	98.8	98.7	98.8	100.3p	100.8p	1.5	0.5	–	1.2
Basic pharmaceutical products and pharmaceutical preparations	K382	7112210000	108.5	108.5	108.9	109.0p	109.0p	0.1	–	4.9	5.0
Rubber and plastic products	K383	7112220000	109.6r	109.8r	109.9	110.1p	110.0p	0.2	–0.1	1.6	1.8
Other non-metallic mineral products	K384	7112230000	113.6	113.6	113.6	113.9p	114.1p	0.3	0.2	1.9	2.1
Basic metals	K385	7112240000	96.6r	99.5	98.9	100.6p	101.6p	1.7	1.0	13.8	16.6
Fabricated metal products, except machinery and equipment	K386	7112250000	106.5	106.8	106.9	107.1p	106.9p	0.2	–0.2	1.1	1.0
Computer, electronic and optical products	K387	7112260000	98.8	99.4	99.3	99.7p	99.7p	0.4	–	1.7	1.8
Electrical equipment	K388	7112270000	103.8	103.7	103.8	104.1p	104.3p	0.3	0.2	0.3	0.4
Machinery and equipment n.e.c.	K389	7112280000	113.2	113.4	113.4	113.9p	113.9p	0.4	–	2.1	2.2
Motor vehicles, trailers and semi-trailers	K38A	7112290000	102.6r	103.0	102.9	103.7p	103.1p	0.8	–0.6	3.0	2.9
Other transport equipment	K38B	7112300000	112.5	112.5	112.9	113.4p	113.5p	0.4	0.1	4.3	4.2
Furniture	K38C	7112310000	110.0	110.1r	110.3	110.3p	110.5p	–	0.2	1.1	1.0
Other manufactured goods	K38D	7112320000	111.1	111.1	111.2	111.3p	111.2p	0.1	–0.1	2.7	2.4
Repair and installation services of machinery and equipment	K38E	7112330000	124.3	124.7	124.6	126.5p	126.2p	1.5	–0.2	7.7	7.2

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			
		percentage change over						percentage change over		
		Index (2010=100)	1 month	12 months	Index (2010=100)	1 month	12 months	Index (2010=100)	1 month	12 months
6207000050				6207990050			6207998950			
K646				K655			K658			
2013 May	117.1	-1.3	1.4	109.3	-1.6	0.4	109.2	-1.1	0.6	
Jun	116.8	-0.3	3.0	108.4	-0.8	-	108.9	-0.3	0.1	
Jul	118.4	1.4	4.7	109.5	1.0	2.1	110.1	1.1	1.9	
Aug	117.2	-1.0	1.8	108.6	-0.8	1.4	109.5	-0.5	1.4	
Sep	116.1	-0.9	1.0	107.6	-0.9	0.4	108.5	-0.9	0.3	
Oct	115.6	-0.4	-	107.8	0.2	-0.2	108.2	-0.3	-0.4	
Nov	114.9	-0.6	-0.9	107.5	-0.3	-1.0	107.7	-0.5	-1.1	
Dec	115.3	0.3	-0.9	107.2	-0.3	-1.4	107.2	-0.5	-1.6	
2014 Jan	114.3	-0.9	-2.9	106.8	-0.4	-2.8	103.2	-3.7	-5.8	
Feb	113.7	-0.5	-5.8	106.4	-0.4	-5.1	105.8	2.5	-4.9	
Mar	113.3	-0.4	-6.3	106.6	0.2	-5.4	105.4	-0.4	-5.3	
Apr	112.3	-0.9	-5.3	105.5	-1.0	-5.0	105.1	-0.3	-4.8	
May	112.5	0.2	-3.9	105.0	-0.5	-3.9	105.1	-	-3.8	
Jun	111.4	-1.0	-4.6	104.6	-0.4	-3.5	105.1	-	-3.5	
Jul	109.5	-1.7	-7.5	103.8	-0.8	-5.2	104.8	-0.3	-4.8	
Aug	108.4	-1.0	-7.5	104.3	0.5	-4.0	105.1	0.3	-4.0	
Sep	107.5	-0.8	-7.4	104.7	0.4	-2.7	105.5	0.4	-2.8	
Oct	106.2	-1.2	-8.1	105.2	0.5	-2.4	105.3	-0.2	-2.7	
Nov	105.4	-0.8	-8.3	105.7	0.5	-1.7	105.4	0.1	-2.1	
Dec	101.9	-3.3	-11.6	104.7	-0.9	-2.3	104.5	-0.9	-2.5	
2015 Jan	98.2	-3.6	-14.1	103.4	-1.2	-3.2	103.2	-1.2	-	
Feb	98.4	0.2	-13.5	102.1	-1.3	-4.0	101.6	-1.6	-4.0	
Mar	98.5	0.1	-13.1	101.9	-0.2	-4.4	100.9	-0.7	-4.3	
Apr	99.8	1.3	-11.1	101.5	-0.4	-3.8	101.0	0.1	-3.9	
May	99.1	-0.7	-11.9	100.8	-0.7	-4.0	100.8	-0.2	-4.1	
Jun	96.9	-2.2	-13.0	99.9	-0.9	-4.5	100.2	-0.6	-4.7	
Jul	95.5	-1.4	-12.8	98.9	-1.0	-4.7	99.8	-0.4	-4.8	
Aug	92.6	-3.0	-14.6	97.9	-1.0	-6.1	98.4	-1.4	-6.4	
Sep	93.1	0.5	-13.4	98.7	0.8	-5.7	99.0	0.6	-6.2	
Oct	93.1	-	-12.3	98.0	-0.7	-6.8	97.7	-1.3	-7.2	
Nov	91.6	-1.6	-13.1	96.7	-1.3	-8.5	96.2r	-1.5	-8.7	
Dec	91.3	-0.3	-10.4	97.8	1.1	-6.6	97.6	1.5	-6.6	
2016 Jan	90.1	-1.3	-8.2	98.0	0.2	-5.2	97.8	0.2	-5.2	
Feb	90.5	0.4	-8.0	98.5	0.5	-3.5	98.2	0.4	-3.3	
Mar	92.0	1.7	-6.6	99.0	0.5	-2.8	98.5	0.3	-2.4	
Apr	92.7	0.8	-7.1	99.3	0.3	-2.2	99.2	0.7	-1.8	
May	94.8	2.3	-4.3	98.9	-0.4	-1.9	99.3	0.1	-1.5	
Jun	96.4	1.7	-0.5	99.6	0.7	-0.3	100.3	1.0	0.1	
Jul	99.5	3.2	4.2	103.9	4.3	5.1	104.7r	4.4	4.9	
Aug	99.9r	0.4	7.9	104.2	0.3	6.4	104.7r	-	6.4	
Sep	100.1	0.2	7.5	103.8	-0.4	5.2	104.2	-0.5	5.3	
Oct	104.6p	4.5	12.4	108.1p	4.1	10.3	107.7p	3.4	10.2	
Nov	103.4p	-1.1	12.9	107.8p	-0.3	11.5	107.1p	-0.6	11.3	

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

				2016 Jul	2016 Aug	2016 Sep	2016 Oct	2016 Nov	% change 1 month		% change 12 months	
									2016 Oct	2016 Nov	2016 Oct	2016 Nov
Gross sector												
Other mining & quarrying products ²	MC3K	6107208000	115.6r	114.9r	114.5	117.1p	116.8p		2.3	-0.3	4.6	4.7
Manufacture of food products, beverages, tobacco	MC35	6107110120	110.2r	110.6r	111.1	112.6p	112.9p		1.4	0.3	5.7	6.1
Preserved meat & meat products	MC3V	6107310100	111.4	112.2r	112.8	113.8p	114.1p		0.9	0.3	6.4	6.8
Fish, crustaceans, molluscs, fruit & vegetables	MB4X	6107310230	109.9	110.4r	111.3	114.0p	115.4p		2.4	1.2	8.9	8.6
Vegetable & animal oils and fats	MC3W	6107310400	119.2r	118.5r	119.6	120.9p	120.2p		1.1	-0.6	11.3	10.9
Dairy products	MC3X	6107310500	110.7	111.8	112.5	113.7p	114.5p		1.1	0.7	8.9	9.6
Grain mill products, starches & starch products	MC3Y	6107310600	110.2	110.6	111.1	112.5p	112.9p		1.3	0.4	5.8	6.3
Bakery & farinaceous products	MC3Z	6107310700	108.1r	107.8r	108.2	110.2p	110.2p		1.8	-	2.9	3.5
Other food products	MB4Y	6107310800	107.5	107.6	108.1	109.6p	109.9p		1.4	0.3	3.3	3.9
Animal feeds	MC42	6107310900	111.2r	111.2r	111.8	113.2p	113.1p		1.3	-0.1	5.4	5.6
Alcoholic Beverages	MB55	6107411016	107.2	107.1	107.3	109.3p	109.3p		1.9	-	3.0	3.6
Soft drinks; mineral waters & other bottled waters	MC4D	6107411070	106.3r	106.5r	106.7	108.0p	108.0p		1.2	-	2.1	2.5
Tobacco products	MC3M	6107212000	144.9	144.8	146.0	146.5p	148.7p		0.3	1.5	4.2	4.6
Manufacture of textiles & textile products; clothing	MC36	6107113140	108.8r	109.0r	109.2	110.6p	110.6p		1.3	-	2.3	2.6
Textiles	MB4P	6107213000	107.2r	107.4r	107.6	109.3p	109.2p		1.6	-0.1	2.5	2.9
Wearing apparel	MC3N	6107214000	111.2r	111.5r	111.6	112.7p	112.5p		1.0	-0.2	2.2	2.2
Manufacture of leather & related products	MC3O	6107215000	110.4r	110.8r	111.3	112.6p	112.5p		1.2	-0.1	2.6	3.2
Manufacture of wood & wood products	MC3P	6107216000	110.8r	111.1r	111.1	113.1p	113.0p		1.8	-0.1	2.8	3.2
Manufacture of pulp, paper & paper products, recording media & printing services	MC39	6107117180	105.9	105.8	105.9	107.4p	107.5p		1.4	0.1	2.2	2.6
Pulp, paper & paper products	MB4Q	6107217000	105.5	105.3	105.5	107.4p	107.6p		1.8	0.2	2.2	2.8
Printing & recording services	MC3Q	6107218000	106.4	106.4	106.5	107.5p	107.4p		0.9	-0.1	2.4	2.4
Manufacture of coke & refined petroleum products	MC3R	6107219000	73.5	73.6	75.7	83.1p	77.8p		9.8	-6.4	21.7	20.2
Manufacture of chemicals, chemical products & man-made fibres	MC3B	6107120000	98.8	98.9r	99.3	101.9p	101.8p		2.6	-0.1	3.7	4.8
Paints, varnishes & similar coatings, printing ink & mastics	MC43	6107320300	101.7	101.7r	101.9	104.1p	103.9p		2.2	-0.2	3.3	4.3
Soaps, detergents, cleaning & polishing preparations perfumes & toilet preparations	MC44	6107320400	104.2r	104.4r	104.6	105.9p	106.1p		1.2	0.2	2.8	3.5
Other chemical products	MC45	6107320500	102.3r	102.2r	102.5	105.1p	105.0p		2.5	-0.1	3.6	4.6
Industrial gases; other basic inorganic chemicals; fertilisers & nitrogen compounds	MC4E	6107420910	102.4	102.1r	102.2	105.3p	105.1p		3.0	-0.2	3.3	4.4
Petrochemicals & man made fibres	MC4F	6107420920	96.7	96.8	97.3	100.1p	99.9p		2.9	-0.2	3.7	5.0
Dyes & pigments: pesticides & other agrochemical products	MC4G	6107420930	99.6	99.7r	100.1	103.8p	103.3p		3.7	-0.5	5.5	6.9
Manufacture of basic pharmaceutical products & pharmaceutical preparations	MC3S	6107221000	104.5	104.6	104.8	106.2p	106.1p		1.3	-0.1	4.6	4.9
Manufacture of rubber & plastic products	MB4R	6107222000	102.0	102.3	102.5	104.7p	104.6p		2.1	-0.1	4.1	4.8
Manufacture of cement, lime & plaster	MC46	6107323560	111.0	110.7	110.5	113.1p	113.1p		2.4	-	4.0	4.2
Manufacture of glass, refractory, clay, other porcelain, ceramic stone products	MB4Z	6107323990	106.9	106.6r	106.4	109.5p	109.7p		2.9	0.2	3.5	4.5

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	
			2016 Jul	2016 Aug	2016 Sep	2016 Oct	2016 Nov	2016 Oct	2016 Nov	2016 Oct	2016 Nov
Manufacture of basic metals & fabricated products	MC3F	6107124250	98.7	100.3	100.2	103.0p	103.6p	2.8	0.6	10.8	12.9
Basic iron, steel & alloys: tubes, pipes, hollow profiles	MC47	6107324130	96.1	97.0	97.2	100.8p	101.2p	3.7	0.4	13.3	16.2
Other basic metals & casting	MB52	6107324450	95.2r	98.0	97.7	101.4p	101.8p	3.8	0.4	13.5	15.6
Weapons & ammunition	MC48	6107325400	105.0	105.4	105.3	106.6p	106.7p	1.2	0.1	3.6	4.0
Fabricated metal products, excluding machinery & equipment & weapons & ammunition	MB53	6107325990	100.7	102.2	102.0	104.2p	104.9p	2.2	0.7	9.3	11.2
Manufacture of computer, electronic and optical products, electrical equipment	MC3G	6107126270	105.1	105.7	105.6	107.4p	107.4p	1.7	–	5.9	6.2
Computer, electronic & optical products	MB4S	6107226000	105.8	106.3	106.2	108.0p	107.9p	1.7	–0.1	5.8	5.9
Electrical equipment	MB4T	6107227000	104.0	104.8	104.7	106.6p	106.7p	1.8	0.1	6.2	6.8
Manufacture of machinery & equipment n.e.c	MB4U	6107228000	105.6	106.4	106.3	108.0p	108.1p	1.6	0.1	6.6	7.3
Manufacturing of motor vehicles & other transport equipment	MC3I	6107129300	104.4	104.9	104.4	106.1p	105.7p	1.6	–0.4	5.5	5.7
Motor vehicles, trailers & semi trailers	MB4V	6107229000	102.4	102.8	102.2	103.8p	103.3p	1.6	–0.5	4.8	5.2
Ships & boats	MC49	6107330100	108.0	108.4	108.3	109.9p	110.0p	1.5	0.1	4.7	5.2
Aircraft & spacecraft & related machinery	MC4A	6107330300	112.0	112.5r	112.3	114.8p	114.7p	2.2	–0.1	8.5	8.3
Other transport equipment	MB54	6107330990	107.0r	107.3	107.2	108.2p	108.3p	0.9	0.1	3.2	4.2
Manufacture of other manufactured goods n.e.c	MC3J	6107131330	109.7r	110.2r	110.0	112.2p	112.1p	2.0	–0.1	6.9	7.1
Furniture	MC3T	6107231000	105.9	106.5	106.5	108.2p	108.2p	1.6	–	4.9	5.5
Other manufacturing	MB4W	6107232000	107.0	107.6	107.4	109.3p	109.3p	1.8	–	5.9	6.2
Repair of maintenance of ships & boats	MC4H	6107433150	109.1	109.5	109.3	110.9p	111.0p	1.5	0.1	4.4	4.8
Repair & maintenance services of aircraft & spacecraft	MC4I	6107433160	124.2	124.5r	124.3	128.3p	127.8p	3.2	–0.4	12.4	11.6
Other repair; installation	MB56	6107433990	105.4	105.9	105.7	107.4p	107.3p	1.6	–0.1	5.6	6.0

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	
			2016 Jul	2016 Aug	2016 Sep	2016 Oct	2016 Nov	2016 Oct	2016 Nov	2016 Oct	2016 Nov
Fuel incl. CCL¹	K647	6207000060	108.7	107.2	106.9	114.5p	116.7p	7.1	1.9	0.5	2.1
Domestic coal & lignite incl. CCL	MC78	7167205005	100.2	102.7	102.5	107.8p	107.8p	5.2	–	–6.9	–21.1
Imported coal & lignite incl. CCL	MC8U	7169205005	86.9	71.9	79.6	76.5p	76.5p	–3.9	–	11.4	5.8
Electricity incl. CCL	MC8F	7167335105	116.1	117.5	117.3	121.6p	122.6p	3.7	0.8	5.8	4.8
Gas incl. CCL	MC8H	7167335235	96.9	90.8	90.0	103.4p	107.9p	14.9	4.4	–8.6	–1.7
Fuel excl. CCL	K645	6207000020	108.4	107.1	106.5	114.1p	116.4p	7.1	2.0	0.1	2.1
Domestic coal & lignite excl. CCL	MC77	7167205000	98.7	101.4	101.2	107.1p	104.1p	5.8	–2.8	–7.6	–25.1
Imported coal & lignite excl. CCL	MC8T	7169205000	86.5	71.3	79.1	76.1p	76.1p	–3.8	–	12.2	6.6
Electricity excl. CCL	MC8E	7167335100	116.1	117.3	117.0	121.3p	122.4p	3.7	0.9	5.4	4.5
Gas excl. CCL	MC8G	7167335230	96.6	91.2	89.9	103.6p	108.0p	15.2	4.2	–8.7	–1.3
Crude petroleum oils & metal ores	MC4P	6207008700	68.6	68.9	71.1	78.6p	72.4p	10.5	–7.9	24.2	22.3
Domestic crude oil & metal ores	MC79	7167206070	65.8	66.3	68.7	77.6p	70.7p	13.0	–8.9	27.8	26.2
Imported crude oil & metal ores	MC8V	7169206070	69.9	70.1	72.3	79.1p	73.3p	9.4	–7.3	22.6	20.8
Food manufacturing:											
Home produced food materials	MB57	6207008100	110.0r	111.9r	113.0	113.1p	114.5p	0.1	1.2	12.5	13.4
Agricultural crop products	MC74	7167201000	110.7r	112.6	113.7	113.4p	114.4p	–0.3	0.9	12.1	13.2
Fish & other fish products	MC76	7167203000	99.4r	99.6r	102.1	108.9p	114.9p	6.7	5.5	22.8	15.8
Imported food materials	MC4O	6207008600	117.0r	116.1r	115.6	120.7p	120.6p	4.4	–0.1	11.1	11.5
Agricultural crop products	MC8Q	7169201000	124.1r	124.9r	124.3	129.1p	129.4p	3.9	0.2	11.3	9.2
Fish & fish products	MC8S	7169203000	152.9	154.2	153.7	164.4p	164.6p	7.0	0.1	29.8	30.6
Meat & meat products	MC9F	7169310100	100.9	99.9	102.4	107.3p	107.4p	4.8	0.1	8.2	10.8
Processed fish & fish products; fruit & vegetables	MC9G	7169310230	117.9	117.8	117.7	124.2p	123.8p	5.5	–0.3	7.8	8.9
Vegetable, animal oils & fats	MC9H	7169310400	116.0	108.6	103.0	107.9p	106.4p	4.8	–1.4	17.3	21.5
Dairy products	MC9I	7169310500	103.1	101.8	103.0	107.4p	107.2p	4.3	–0.2	8.6	11.2
Grain mill products & starches	MC9J	7169310600	113.1	111.6	112.1	117.5p	117.2p	4.8	–0.3	9.1	11.2
Bakery & farinaceous products	MC9K	7169310700	106.9	105.5	106.6	111.2p	111.0p	4.3	–0.2	8.7	11.1
Other food products	MC9L	7169310800	111.0	109.6	110.2	115.2p	114.9p	4.5	–0.3	8.9	10.9
Prepared animal feeds	MC9M	7169310900	107.8	106.4	107.3	112.1p	111.9p	4.5	–0.2	8.8	11.2
Other home produced materials	MC4J	6207008200	119.2r	118.6r	117.8	118.0p	117.9p	0.2	–0.1	–0.1	–0.3
Forestry products	MC75	7167202000	145.4r	145.4r	145.4	145.4p	145.4p	–	–	–5.1	–5.1
Other mining & quarrying products	MC7A	7167208000	118.0r	117.1r	115.9	116.2p	116.0p	0.3	–0.2	0.1	–0.4
Water collection, treatment & supply	MC7R	7167236000	116.2	116.2	116.2	116.2p	116.2p	–	–	1.2	1.2
Imported metals	MC4K	6207008300	93.7	96.2	96.2	101.6p	105.0p	5.6	3.3	26.2	35.3
Basic iron, steel & ferro alloys, tubes & pipes	MC9S	7169324130	95.7	97.3	98.2	104.3p	108.7p	6.2	4.2	26.0	35.7
Other basic metals & casting	MC9T	7169324450	92.7	95.6	95.2	100.3p	103.1p	5.4	2.8	26.3	35.1
Imported chemicals	MC4L	6207008400	104.9r	105.5r	105.6	108.3p	107.5p	2.6	–0.7	8.1	9.7
Paints, varnishes & coatings, printing inks & other mastics	MC9N	7169320300	104.6r	105.7r	105.6	109.1p	107.5p	3.3	–1.5	13.5	15.1
Soap, detergents, cleaning & polishing preparations, perfumes & toilet preparations	MC9O	7169320400	102.5r	104.8r	104.7	106.9p	106.2p	2.1	–0.7	13.7	14.9

1 The Climate Change Levy was introduced in April 2001.

Source: Office for National Statistics

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

continued

2010=100, SIC2007

								% change 1 month		% change 12 months	
			2016 Jul	2016 Aug	2016 Sep	2016 Oct	2016 Nov	2016 Oct	2016 Nov	2016 Oct	2016 Nov
Other chemical products	MC9P	7169320500	105.1	105.8	105.7	108.3p	107.2p	2.5	-1.0	7.8	8.6
Industrial gases, inorganic chemicals, fertilisers & nitrogen compounds	MCA3	7169420910	103.5	104.0r	103.8	107.6p	105.2p	3.7	-2.2	-2.1	2.5
Petrochemicals & man made fibres	MCA4	7169420920	102.8	103.4r	103.7	106.4p	105.8p	2.6	-0.6	9.8	11.4
Dyes & pigments; pesticides & other agro-chemical products	MCA5	7169420930	118.1r	119.4	119.2	123.7p	122.5p	3.8	-1.0	23.6	25.8
Basic pharmaceutical products & pharmaceutical preparations	MC97	7169221000	97.0	97.4r	97.3	99.3p	98.3p	2.1	-1.0	7.9	7.9
Rubber & plastic products	MC98	7169222000	111.8	112.4	112.4	114.5p	114.2p	1.9	-0.3	6.0	6.5
Other imported parts & equipment	MC4N	6207008520	103.7	103.6r	102.2	106.1p	104.4p	3.8	-1.6	11.3	10.5
Computer, electronic & optical products	MC99	7169226000	122.6	123.2	123.0	128.2p	127.4p	4.2	-0.6	15.2	14.2
Electrical equipment	MC9A	7169227000	109.6	110.4	110.2	114.1p	113.2p	3.5	-0.8	15.1	14.8
Machinery & equipment n.e.c	MC9B	7169228000	110.2	111.1	110.9	115.4p	113.5p	4.1	-1.6	16.9	16.3
Motor vehicles, trailers & semi-trailers	MC9C	7169229000	93.1	90.2	84.9	88.0p	84.4p	3.7	-4.1	-3.1	-5.2
Weapons & ammunition	MC9U	7169325400	85.1	86.0	85.4	88.8p	87.7p	4.0	-1.2	15.9	15.5
Fabricated metal products	MC9V	7169325990	83.8	84.7	84.1	87.5p	86.3p	4.0	-1.4	16.5	16.2
Ships & boats	MC9W	7169330100	106.7r	106.8r	106.8	108.4p	108.1p	1.5	-0.3	3.0	3.0
Aircraft, spacecraft & related machinery	MC9X	7169330300	106.0r	105.5r	105.4	108.3p	107.9p	2.8	-0.4	9.3	8.4
Other transport equipment	MC9Y	7169330990	105.1r	104.4r	104.3	106.6p	106.2p	2.2	-0.4	5.9	5.4
Other imports	MC4M	6207008510	113.8r	114.3r	114.1	117.9p	116.6p	3.3	-1.1	12.9	12.8
Forestry products	MC8R	7169202000	112.6	113.8	115.2	117.6p	116.5p	2.1	-0.9	6.7	5.8
Other mining & quarrying products	MC8W	7169208000	142.4	140.4	139.8	148.7p	147.0p	6.4	-1.1	19.0	19.1
Tobacco products	MC8X	7169212000	98.8	100.2	99.9	82.4p	80.7p	-17.5	-2.1	-2.9	-1.9
Textiles	MC8Y	7169213000	117.2	118.1r	118.1	123.2p	121.8p	4.3	-1.1	14.8	14.5
Wearing apparel	MC8Z	7169214000	119.7	121.5	121.4	123.5p	120.7p	1.7	-2.3	16.2	16.8
Leather & related leather products	MC92	7169215000	112.7	115.2	115.0	118.3p	117.1p	2.9	-1.0	9.7	10.0
Wood & wooden products	MC93	7169216000	103.6r	105.3r	105.2	108.9p	107.4p	3.5	-1.4	11.0	11.3
Paper & paper products	MC94	7169217000	101.8	102.0	102.3	103.3p	102.9p	1.0	-0.4	5.2	5.4
Printing & recording services	MC95	7169218000	103.3	104.6	104.4	109.3p	106.7p	4.7	-2.4	20.0	20.7
Coke & refined petroleum products	MC96	7169219000	143.3	144.8	144.4	152.4p	149.6p	5.5	-1.8	26.0	25.4
Furniture	MC9D	7169231000	60.5r	60.8r	60.8	61.8p	61.2p	1.6	-1.0	7.5	7.2
Glass, refractory, clay other porcelain, ceramic stone & abrasive products	MC9R	7169323990	109.1	109.9	109.5	112.8p	111.0p	3.0	-1.6	12.0	11.9
Cement, lime, plaster & articles of concrete, cement & plaster	MC9Q	7169323560	109.0	109.9	109.5	112.7p	111.0p	2.9	-1.5	12.0	12.0
Alcoholic beverages	MC9Z	7169411016	107.8r	108.1	112.5	117.7p	115.1p	4.6	-2.2	25.6	25.8
Soft drinks, mineral water & other bottled waters	MCA2	7169411070	116.1	116.4	122.6	128.4p	125.1p	4.7	-2.6	28.8	29.9
Other manufactured goods n.e.c	MC9E	7169232000	106.8	106.3	105.0	107.5p	106.6p	2.4	-0.8	9.6	7.6
Imported materials											
All imported materials - total (incl Crude Oil)	K64F	6207008500	98.5	98.9	98.9	103.5p	101.9p	4.7	-1.5	14.0	14.6

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		
2013 May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-0.2	-0.2	-0.2	-	-	-
Aug	-0.1	0.1	-0.1	-	-	-
Sep	-0.1	-	-0.1	-	-	-
Oct	-	0.1	-	0.1	0.1	0.1
Nov	..	..	..	..	..	..

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		
2013 May	—	—	—	—	—	—	—	—	—
Jun	—	—	—	—	—	—	—	—	—
Jul	—	—	—	—	—	—	—	—	—
Aug	—	—	—	—	—	—	—	—	—
Sep	—	—	—	—	—	—	—	—	—
Oct	—	—	—	—	—	—	—	—	—
Nov	—	—	—	—	—	—	—	—	—
Dec	—	—	—	—	—	—	—	—	—
2014 Jan	—	—	—	—	—	—	—	—	—
Feb	—	—	—	—	—	—	—	—	—
Mar	—	—	—	—	—	—	—	—	—
Apr	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—
Jun	—	—	—	—	—	—	—	—	—
Jul	—	—	—	—	—	—	—	—	—
Aug	—	—	—	—	—	—	—	—	—
Sep	—	—	—	—	—	—	—	—	—
Oct	—	—	—	—	—	—	—	—	—
Nov	—	—	—	—	—	—	—	—	—
Dec	—	—	—	—	—	—	—	—	—
2015 Jan	—	—	—	—	—	—	—	—	—
Feb	—	—	—	—	—	—	—	—	—
Mar	—	—	—	—	—	—	—	—	—
Apr	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—
Jun	—	—	—	—	—	—	—	—	—
Jul	—	—	—	—	—	—	—	—	—
Aug	—	—	—	—	—	—	—	—	—
Sep	—	—	—	—	—	—	—	—	—
Oct	—	—	—	—	—	—	—	—	—
Nov	—	—	—	—	—	—	—0.3	—0.3	—0.3
Dec	—	—	—	—	—	—	—	0.4	—
2016 Jan	—	—	—	—	—	—	—	—	—
Feb	—	—	—	—	—	—	—	—	—
Mar	—	—	—	—	—	—	—	—	—
Apr	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—
Jun	—	—	—	—	—	—	—	—	—
Jul	—	—	—	—	—	—	—0.1	—0.1	—0.1
Aug	0.1	0.1	0.1	—	—	—	—0.1	—	—0.1
Sep	0.2	0.1	0.2	0.1	0.1	0.1	—	0.1	—
Oct	0.1	—0.1	0.2	0.4	0.2	0.4	0.4	0.4	0.4
Nov	..	..	..	..	..	..	..	..	..

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