

Statistical bulletin

# UK producer price inflation: Jan 2017

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:  
James Wells  
ppi@ons.gsi.gov.uk

Release date:  
14 February 2017

Next release:  
21 March 2017

## Table of contents

1. [Main points](#)
2. [Things you need to know about this release](#)
3. [Producer price inflation summary](#)
4. [Recent changes to the price of food products have contributed a relatively small share towards movements in output producer prices](#)
5. [Links to related statistics](#)
6. [Quality and methodology](#)

# 1 . Main points

- Both the annual and monthly rate of producer price inflation increased in January 2017.
- Factory gate prices (output prices) rose 3.5% on the year to January 2017, which is the seventh consecutive period of annual price increases and the highest they have been since December 2011.
- Prices for materials and fuels paid by UK manufacturers for processing (input prices) rose 20.5% on the year, which is the fastest rate of annual growth since September 2008.
- Prices of imported materials and fuels increased 20.2% on the year, largely a result of sterling depreciation and a recovery in global crude oil prices.

## 2 . Things you need to know about this release

The format and content of this publication changed from January 2016 to improve 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](#). Please provide us with your feedback on the new style bulletin using our [short online survey](#).

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

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

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.

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) is included, except where labelled otherwise.

Each Producer Price Index (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.

Every 5 years, producer price indices are rebased and their weights updated to reflect changes in the industry.

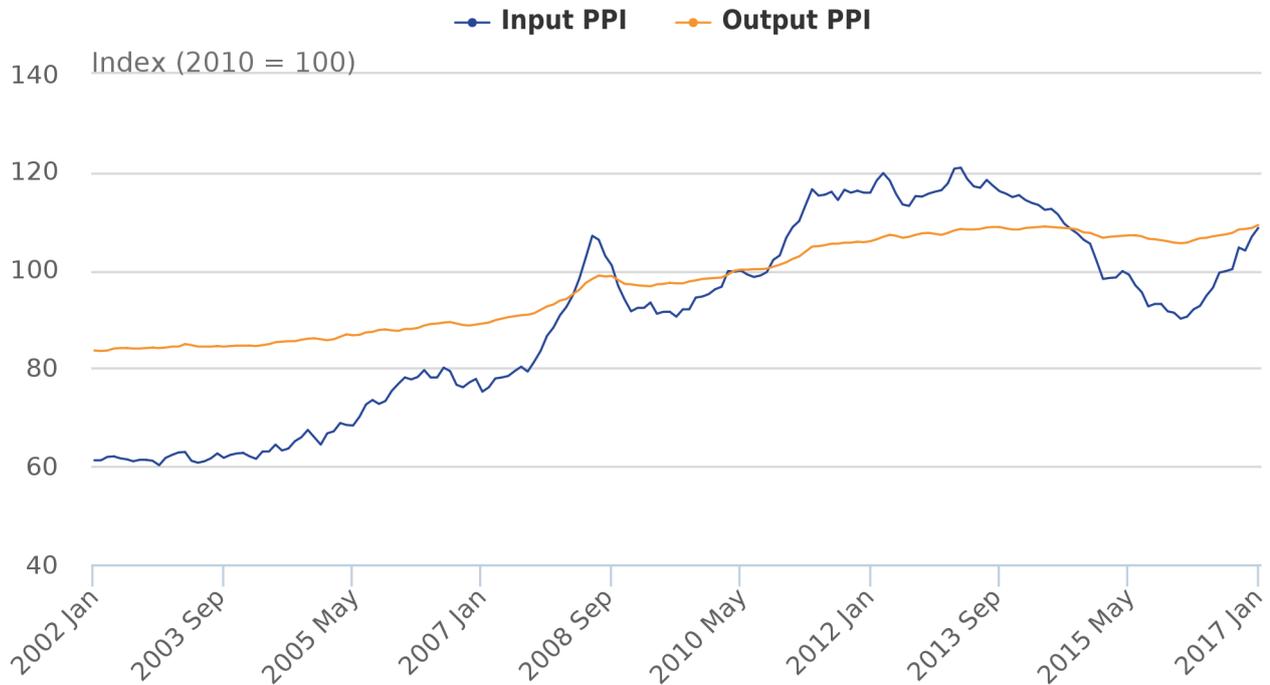
Figures for the latest 2 months are provisional and the latest 5 months are subject to revisions in light of (a) late and revised respondent data and (b) for the seasonally adjusted series, revisions to seasonal adjustment factors are re-estimated every month. A routine seasonal adjustment review is normally conducted in the autumn each year.

Full definitions of the terms used within this analysis can be found in the Quality and methodology section within this bulletin.

### 3 . Producer price inflation summary

Figure 1: Input and output PPI

UK, January 2002 to January 2017



Source: Office for National Statistics

Figure 1 looks at input and output PPI and shows that input PPI has experienced larger peaks and troughs over the past 15 years compared with output PPI. The largest contributor to growth from 2004 to 2008 for input PPI came from rising crude oil prices, driven by rising global demand on the back of economic growth in Asia. From early 2004 to the pre-downturn peak in June 2008, input PPI grew more than 70%, while output prices rose 17%.

**Table 1: Input prices**

UK, August 2016 to January 2017

		Percentage change			
		All materials and fuels purchased		Imported materials and fuels purchased	
		1 month	12 months	1 month	12 month
2016	Aug	0.3	7.8	0.3	9.2
	Sep	0.4	7.6	0.2	8.9
	Oct	4.4	12.4	4.5	14.0
	Nov	-0.6	13.5	-1.4	14.7
	Dec	2.7	17.0	1.8	17.6
2017	Jan	1.7	20.5	2.1	20.2

Source: Office for National Statistics

Notes:

1. Both series are not seasonally adjusted.

Input producer prices grew 20.5% on the year to January 2017 and 1.7% between December 2016 and January 2017. This is the seventh consecutive period of annual growth and the highest increase seen since September 2008.

Prices of imported materials and fuels rose 20.2% on the year to January 2017, which is largely the result of a 13.1% sterling depreciation and an 82.1% annual growth rate for imported inputs of crude oil. Imported materials and fuels is the main driver of input PPI inflation as its weight accounts for around 68% of the input price index.

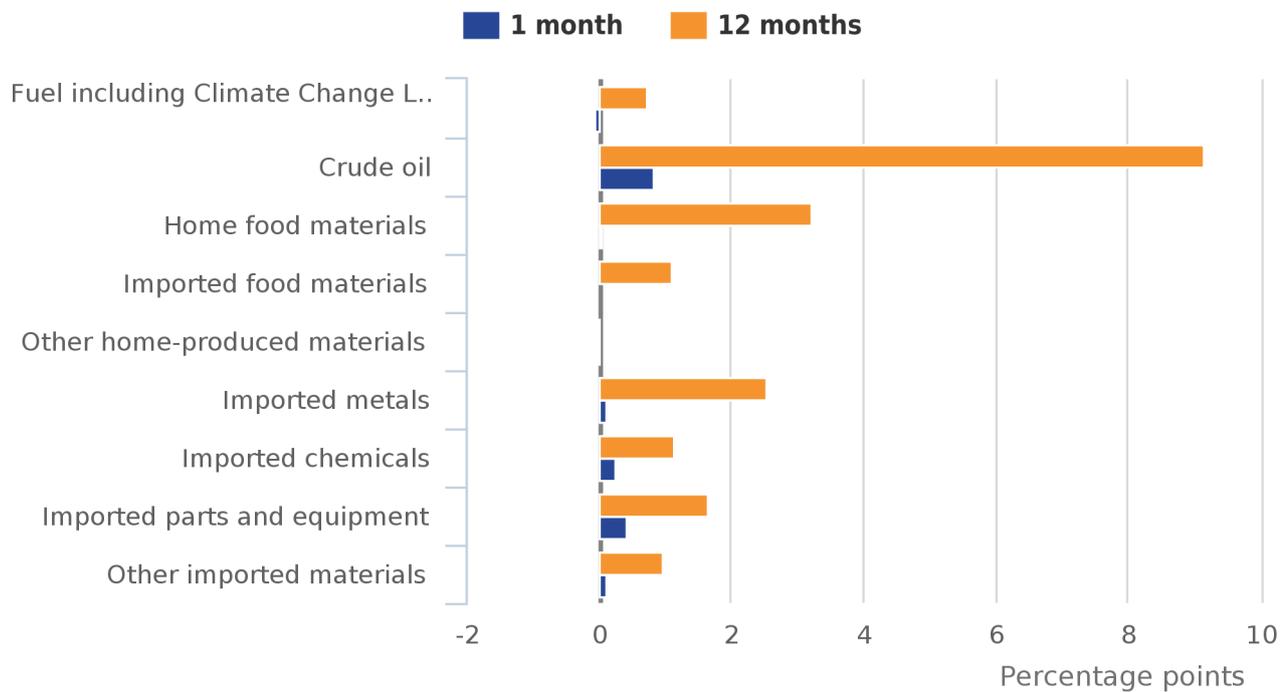
**Table 2: Input prices, 1 and 12 month percentage change to January 2017**

Product group	Percentage change	
	1 month	12 month
Fuel including Climate Change Levy	-0.4	5.8
Crude oil	5.3	88.2
Home food materials	0.3	22.9
Imported food materials	0.2	13.6
Other home-produced materials	-0.9	-0.2
Imported metals	1.2	36.7
Imported chemicals	1.8	7.7
Imported parts and equipment	2.4	8.4
Other imported materials	1.1	10.0
All manufacturing	1.7	20.5

Source: Office for National Statistics

**Figure 2: Input PPI, contribution to 1 month and 12 month growth rate**

UK, January 2017



Source: Office for National Statistics

Figure 2 shows the contributions by sector to the annual and monthly input price inflation rate. Most sectors showed only modest contributions to the monthly rate, with crude oil providing the largest contribution of 0.83 percentage points to the monthly rate and 9.16 percentage points to the annual rate. Crude oil prices have increased by 88.2% on the year to January 2017 and 5.3% on the month. It is the highest annual increase seen since June 2000.

Home food materials and imported metals prices were the second and third largest contributors to the annual rate, with annual growth rates of 22.9% and 36.7% respectively.

Prices of home food materials have been growing for the past 9 months, the January figure is the highest annual increase seen since July 2008. The main contributor to the rise in home food materials was crop and animal production, which has increased mainly on the back of a rise in the price of wheat.

The annual rate of inflation for imported metals has now seen 7 months of consecutive growth following 17 months of falling prices. The annual growth rate of 36.7% has decreased slightly compared with December 2016.

**Table 3: Output prices**

UK, August 2016 to January 2017

	Percentage change	
	All manufactured products	
	1 month	12 months
2016 Aug	0.2	0.8
Sep	0.3	1.2
Oct	0.7	2.1
Nov	0.1	2.4
Dec	0.2	2.8
2017 Jan	0.6	3.5

Source: Office for National Statistics

Notes:

1. Series is not seasonally adjusted

The annual rate of inflation for factory gate prices continued to grow on the year to January 2017 with prices increasing by 3.5%. It is the seventh consecutive rise after 2 years of falls and the largest increase since January 2012.

Month-on-month prices were also up with an increase of 0.6% between December 2016 and January 2017. This is the second largest monthly increase seen in the last year, which peaked at 0.7% in October 2016. Monthly inflation has now been growing since February 2016, which is the longest continuous period of growth since the end of 2011.

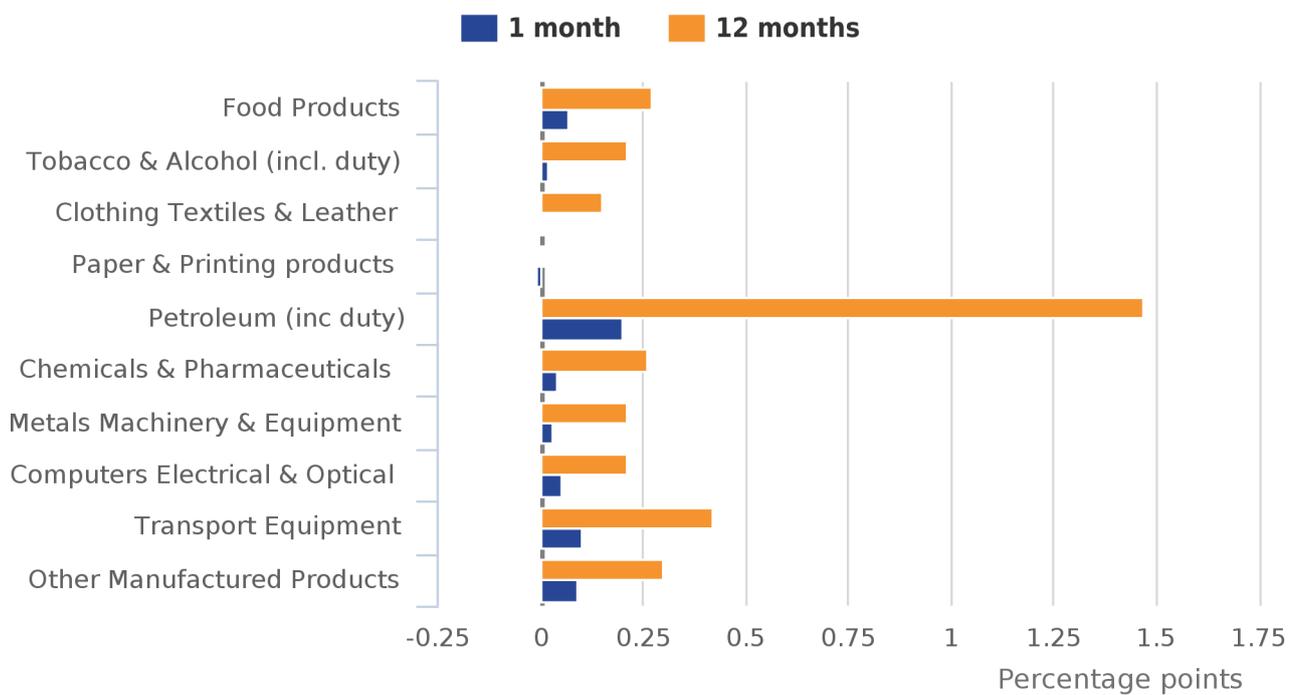
**Table 4: Output prices, 1 and 12 month percentage change to January 2017**

Product group	Percentage Change	
	1 month	12 month
Food products	0.5	1.7
Tobacco and alcohol (incl. duty)	0.2	2.2
Clothing, textile and leather	0.1	1.3
Paper and printing	-0.1	0.3
Petroleum products (incl. duty)	2.4	23.5
Chemical and pharmaceutical	0.5	3.5
Metal, machinery and equipment	0.4	2.9
Computer, electrical and optical	0.4	1.7
Transport equipment	0.8	3.4
Other manufactured products	0.5	1.9
All manufacturing	0.6	3.5

Source: Office for National Statistics

**Figure 3: Output PPI, contribution to 1 month and 12 month growth rate**

UK, January 2017



Source: Office for National Statistics

Petroleum products had an annual growth rate of 23.5% and showed an upward contribution of 1.47 percentage points to the PPI output annual rate (Figure 3), which was driven by diesel and gas oil which increased 24.1%. This was the largest annual rise to prices of petroleum products since April 2010 and the fifth consecutive increase after 3 years of falling prices.

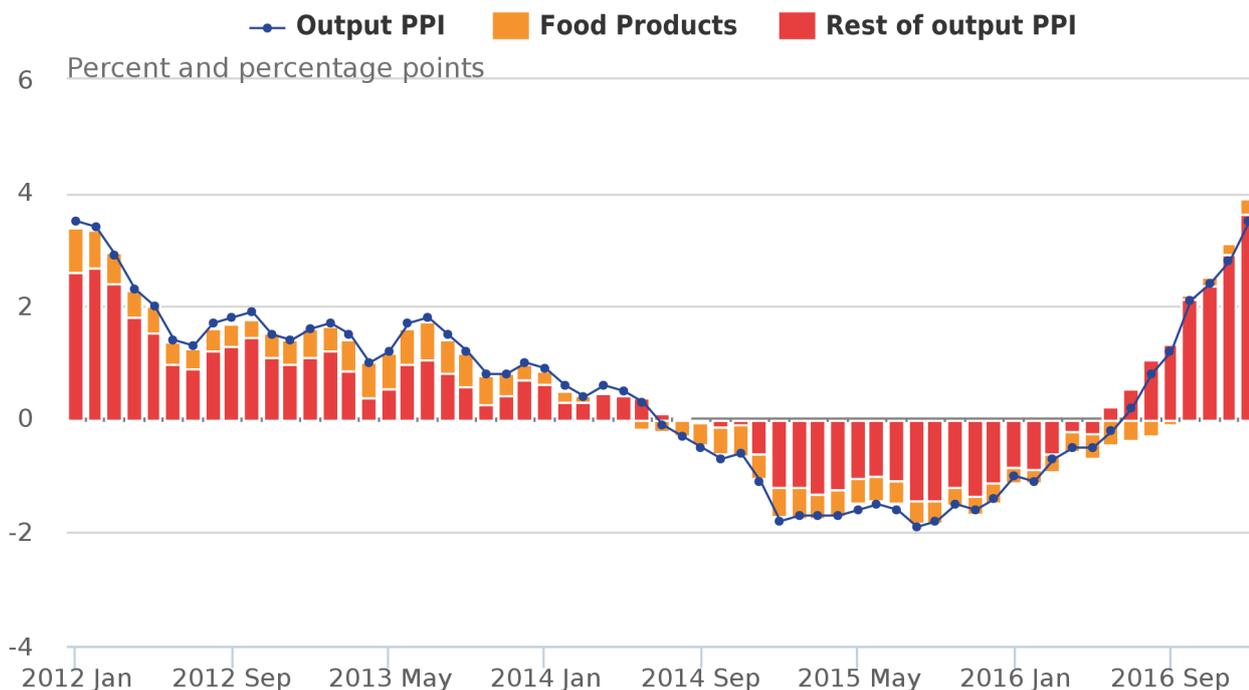
All sectors showed upward contributions to the annual rate with transport equipment being the second largest with an annual growth rate of 3.4%, driven by a 3.1% increase in the prices of motor vehicles, trailers and semi-trailers. The month-on-month increase of 0.8% was driven by the same.

## 4 . Recent changes to the price of food products have contributed a relatively small share towards movements in output producer prices

Figure 4 shows how much the change in prices for food products supplied by UK manufacturers contributes to overall output PPI price growth since January 2012. Price changes in food products contributed around half to two-thirds of the change in output price inflation between January 2012 and the end of 2014. The contribution to output PPI deflation from food stabilised at a smaller share during 2015 and most of 2016, but is now contributing a small share to positive output price growth. This is likely to be due to increased cost pressures from inputs used by food manufacturers being reflected in higher output prices.

**Figure 4: Output PPI annual rate and contributions to the output PPI annual rate from food products**

UK, January 2012 to January 2017



Source: Office for National Statistics

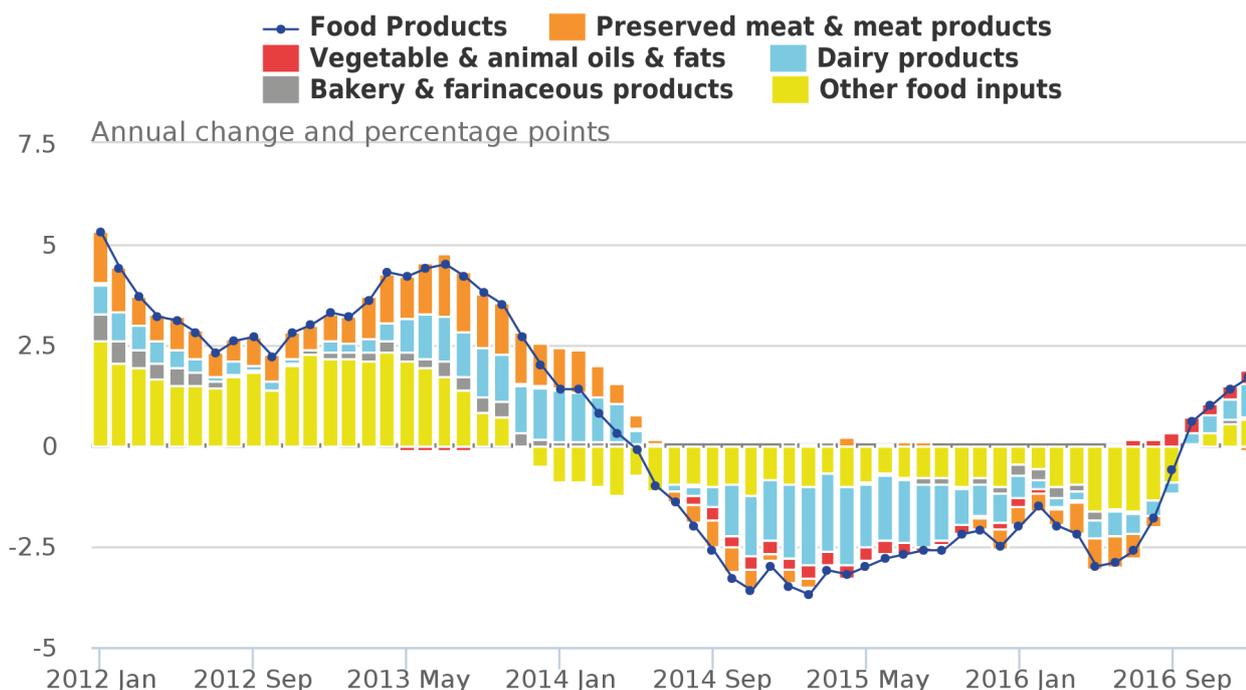
Notes:

- Contributions to the annual change rate may not add up to the rate exactly due to rounding.

Figure 5 shows the contributions to food output prices in more detail since January 2012 to consider which types of food products have been driving these changes.

**Figure 5: Food products annual rate and contributions to the food products annual rate**

UK, January 2012 to January 2017



Source: Office for National Statistics

Notes:

1. Contributions to the annual change rate may not add up to the rate exactly due to rounding.

Contributions to growth from the different food product types have varied over the last 5 years, with dairy and other food inputs driving much of the change. For example, much of the food output price deflation during 2015 was accounted for by falls in dairy product prices. The negative contribution from dairy products has since reduced and is accounting for a relatively large share of the recent growth in output food prices since October 2016.

## 5 . Links to related statistics

In addition to the data included within this statistical bulletin, the following detailed datasets are available: [PPI Aerospace and Electronic Indices](#) [PPI MM22 Producer Price Indices](#)

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

A summary of the revisions to PPI data are available in the PPI revision triangles: [PPI Revision triangle for total output \(12 months\)](#) [PPI Revision triangle for total output \(1 month\)](#) [PPI Revision triangle for total input \(12 months\)](#) [PPI Revision triangle for total input \(1 month\)](#)

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

## 6 . 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

If you would like more information about the reliability of the data, a [PPI standard errors article](#) was published with the [November 2015 release](#). The article presented the calculated standard errors of the Producer Price Index (PPI) during the period December 2014 to November 2015, for both month-on-month and 12-month growth.

[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 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.

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

The detailed input indices of prices of materials and fuels purchased by industry ([PPI 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.