

Statistical bulletin

Producer price inflation, UK: August 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).



Release date: 16 September 2020 Next release: 21 October 2020

Table of contents

- 1. Main points
- 2. Things you need to know about this release
- 3. Producer price inflation summary
- 4. The annual output inflation rate shows negative growth for the fifth consecutive month
- 5. The annual rate of input inflation continues to display negative growth for the seventh consecutive month
- 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 0.9% on the year to August 2020, unchanged from June 2020.
- The price for materials and fuels used in the manufacturing process displayed negative growth of 5.8% on the year to August 2020, down from negative growth of 5.7% in July 2020.
- Petroleum products was the largest downward contributor to the annual rate of output inflation.
- The largest downward contribution to the annual rate of input inflation was from crude oil.
- November 2020 will see the first publication of the producer price inflation figures on a gross basis; we encourage the use of gross sector indices where available, as the net versions will no longer be produced; Section 6: Gross and net producer price indices has more information on this change.
- The Office for National Statistics (ONS) has released a <u>public statement</u> on the coronavirus (COVID-19) and production of statistics; <u>Section 8: Quality and Methodology</u> describes the situation in relation to producer price inflation (PPI).
- In November 2020, we will also be implementing important methodological improvements to PPI by moving
 to an annually chain-linked basis; <u>Section 2: Things you need to know about this release</u> describes this in
 more detail.

2. Things you need to know about this release

Coronavirus in August 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 August 2020, was via paper questionnaires that were sent to businesses on 23 July 2020, asking to return prices that were applicable on or around 1 August 2020.

Although there has been a gradual reopening of workplaces and premises since May 2020, as a result of the lifting of government restrictions, the response for August 2020 is lower in comparison with pre-lockdown months. The response for August 2020 was 73.7%, down from a pre-lockdown 87.4% in February 2020. 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 <u>Business Impact of Coronavirus (COVID-19) Survey (BICS)</u> and anecdotal evidence from responders to both the BICS and/or PPI surveys.

Merging SPPI with PPI

To ensure the accessibility of producer prices to users, we will be implementing a new bulletin that collates information from the Services Producer Price Index (SPPI) and Producer Price Index (PPI) in October 2020 – Producer price inflation including services, UK. The methodology, data collection and production of the PPI and SPPI will not be affected as a result of this change.

Annual chain linking

We will be implementing important methodological improvements to the PPI and SPPI in November 2020. Articles published on 20 July 2020 have detailed changes in methodology, <u>Producer price indices methods changes</u> and the move to an annual chain-linked business prices structure, <u>Annual chain-linking in business prices</u>.

Further articles explain moving from fixed-base weights to annual chain-linking, which will improve the accuracy of these statistics; <u>Producer price weight changes</u> and <u>Services producer price weight changes</u>.

Moving from net to gross

As we introduce annual chain-linking, we will be implementing <u>changes to the level of detail</u> of the data we publish and <u>classification changes</u> alongside changes to our producer price inflation headline figure from net to gross in line with international best practice. The net sector indices will cease to be included in our published data.

To support users with the transition to the new headline definition, <u>Section 6: Gross and net sector price indices</u> includes a comparison between the existing measures of output and input producer price inflation on a net and gross basis.

The move to gross sector inputs will also see a shift in composition of the headline input rate. Where currently around 67% of the net sector input is made up of imports, the gross sector input series is composed of 76% domestic inputs and 24% imported inputs. This is because of the inclusion of intra-industry transactions, which are included within the gross sector input series.

Classification change

The November 2020 PPI bulletin will be published for the first time using Classification of Products by Activity 2.1 (CPA 2.1) framework. The PPI data are currently aggregated using a CPA 2008 classification system, CPA 2.1 is the most up-to-date international product classification system, reflecting product change over time.

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 <u>Standard Industrial</u> <u>Classification 2007 (SIC 2007)</u> code appropriate to the index, and a four-character alpha-numeric code (series ID), which can be used to find series when using the <u>time series dataset</u> 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

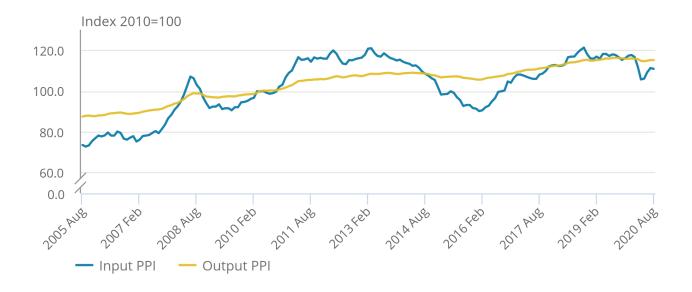
Figure 1 shows input and output Producer Price Indices (PPIs) over the past 15 years. Input producer price inflation is driven mostly by commodity prices, which tend to be more volatile over time, compared with prices for finished goods (output producer price inflation). Input producer price inflation 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 (PPI) is more volatile over time than output inflation

Input and output PPI, UK, August 2005 to August 2020

Figure 1: Input producer price inflation (PPI) is more volatile over time than output inflation

Input and output PPI, UK, August 2005 to August 2020



Source: Office for National Statistics – Producer Price Index

4. The annual output inflation rate shows negative growth for the fifth consecutive month

The annual rate of inflation for goods leaving the factory gate (output prices) remains at negative 0.9%, unchanged from June 2020 (Table 1). This is the fifth consecutive month that the rate has been negative, following 45 consecutive months of positive annual inflation.

On the month, the rate of output inflation was a flat 0.0% in August 2020, a decrease of 0.3 percentage points from July 2020.

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

All manufactured products (JVZ7)

	PPI Index (2010=100)	1-month rate	12-month rate	Change in the 12-month rate (percentage points)
2019 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	114.5	-0.2	-1.2	-0.5
June	114.8	0.3	-0.9	0.3
July	115.1	0.3	-0.9	0.0
Aug	115.1	0.0	-0.9	0.0

Source: Office for National Statistics

Notes

1. Series are not seasonally adjusted

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, three provided negative contributions to the output annual rate.

Petroleum provided the largest downward contribution of 1.26 percentage points to the annual rate (Figure 2) and had negative annual price growth of 17.7% on the year to August 2020 (Table 2). This is the seventh consecutive month that the annual rate for petroleum has been negative. The negative rate in August 2020 was driven by diesel and gas oil, which at negative 14.3% on the year was down 0.4 percentage points from July 2020.

Price movements for petroleum products broadly follow trends seen in crude oil over recent months and likely reflect both demand and supply side factors during the ongoing coronavirus (COVID-19) pandemic. These include continued weak global demand for crude oil and petroleum products compared with a year ago, which have been partially offset by cuts to crude oil output.

Chemicals and pharmaceuticals displayed the second-largest negative contribution, of 0.12 percentage points to the annual rate, with negative annual growth of 1.8% in August 2020. The annual rate for this product group has remained negative for 14 consecutive months and is driven by basic chemicals, fertilisers and nitrogen compounds; plastics and synthetic rubber in primary forms, which had negative growth of 3.6% in August.

Of the seven product groups that provided a positive contribution to the annual rate, tobacco and alcohol provided the largest, at 0.24 percentage points. The annual rate for tobacco and alcohol rose by 2.7% on the year to August 2020.

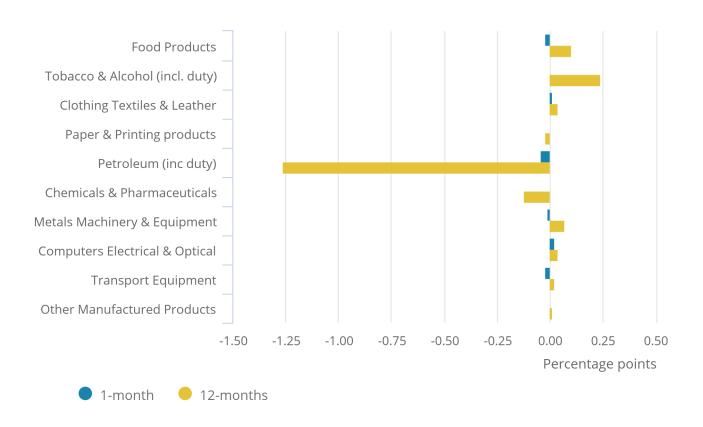
On the month, output inflation was a flat 0.0%. Petroleum products displayed the largest contribution, at negative 0.04 percentage points, with prices decreasing by 0.6% on the month in August 2020. This is the first time the rate has been negative since May 2020 for this product group.

Figure 2: Three of the ten product groups provided downward contributions to the annual rate, the largest coming from petroleum

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

Figure 2: Three of the ten product groups provided downward contributions to the annual rate, the largest coming from petroleum

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

Product group	Percenta	ge Change
	1-month rate	12-month rate
Food products	-0.2	0.8
Tobacco and alcohol (incl. duty)	0.1	2.7
Clothing, textile and leather	0.1	0.3
Paper and printing	0.0	-0.6
Petroleum products (incl. duty)	-0.6	-17.7
Chemical and pharmaceutical	0.0	-1.8
Metal, machinery and equipment	-0.1	1.1
Computer, electrical and optical	0.1	0.3
Transport equipment	-0.1	0.2
Other manufactured products	0.0	0.1
All manufacturing	0.0	-0.9

Source: Office for National Statistics - Producer Price Index

Figure 3 shows contributions to the change in the annual rate for factory gate prices (output prices). In August 2020, these contributions offset each other leading to no change in the annual rate.

Of the 10 product groups, four displayed positive contributions to the change in the rate, with food products providing the largest, at 0.06 percentage points (Figure 3) while other manufactured products, paper and printing, and computer, electrical and optical made up the rest.

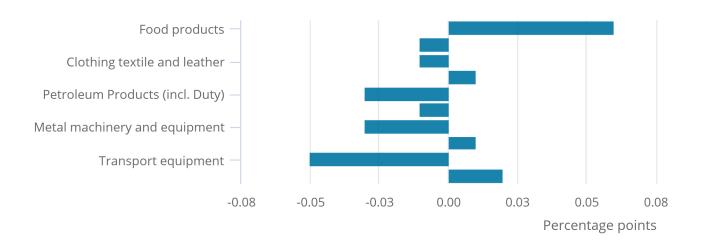
These were offset by negative contributions from six other industry sectors, the largest coming from transport equipment, petroleum products, and metal, machinery and equipment.

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

Output PPI, contribution to change in the annual rate, UK, August 2020

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

Output PPI, contribution to change in the annual rate, UK, August 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. The annual rate of input inflation continues to display negative growth for the seventh consecutive month

The annual rate of input inflation fell to negative 5.8% in August 2020, down from negative 5.7% in July 2020 (Table 3).

The monthly rate for materials and fuels purchased was negative 0.4% in August 2020, down 2.2 percentage points from 1.8% in July 2020.

Table 3: Input prices, index values, growth rates and percentage point change to the 12-month rate, UK, August 2019 to August 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 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	111.9	-4.0	-3.4	-3.2
Apr	105.6	-5.6	-10.6	-7.2
May	106.0	0.4	-10.2	0.4
Jun	109.2	3.0	-6.7	3.5
July	111.2	1.8	-5.7	1.0
Aug	110.8	-0.4	-5.8	-0.1

Source: Office for National Statistics - Producer Price Index

Notes

1. Series are not seasonally adjusted.

The annual rate of inflation for imported materials and fuels was negative 6.6% in August 2020 (Table 4), down 0.8 percentage points from July 2020 when it was negative 5.8%. The monthly rate was negative 0.4% in August 2020, which has decreased 2.4 percentage points from 2.0% in July 2020. Imported materials and fuels roughly represent two-thirds of materials and fuels purchased (input prices) in terms of index weight.

The <u>Sterling effective exchange rate index (ERI)</u> rose 1.6% on the month in August 2020. On the year, the ERI displayed positive growth of 4.5% in August 2020, which is up 3.2 percentage points from 1.3% in July 2020, and is the highest we have seen since December 2019. All else being equal, a rise in the value of sterling would be expected to make the cost of imports less expensive.

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

Imported materials and Sterling effective exchange fuels purchased (K64F) rate - month average (BK67) Change in Sterling PPI the 12-1-month 12-month Index 1-month 12-month Index month rate (Jan 2005 rate rate rate rate (2010=100)(percentage =100) points) 2019 Aug 115.9 0.5 0.1 -0.5 74.8 -1.6 -3.2Sept 115.0 -0.8 -0.9 -1.0 76.6 2.4 -1.9 Oct 112.8 -1.9 -3.7 -2.8 78.2 2.1 -0.51.5 Nov 112.1 -0.6 -2.2 79.6 1.8 1.8 5.1 Dec 112.3 0.2 -0.1 2.1 80.6 1.3 2020 Jan 113.1 0.7 1.5 1.6 80.3 -0.4 3.3 Feb 113.1 0.0 0.9 -0.6 80.7 0.5 2.4 109.6 -3.1-2.2 -3.1 76.9 -4.7 -3.8 Mar Apr 102.7 -6.3 -9.8 -7.6 78.2 1.7 -1.5 May 103.7 1.0 -9.4 0.4 77.3 -1.2 -1.8 June 106.5 2.7 -6.6 2.8 77.0 -0.4 -0.1 July 108.6 2.0 -5.8 8.0 77.0 0.0 1.3

Source: Office for National Statistics - Producer Price Index

-0.4

Notes

Aug

1. Series are not seasonally adjusted.

108.2

2. The sterling effective exchange rate measures changes in the strength of sterling relative to a basket of other currencies

-0.8

78.2

1.6

4.5

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.

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, seven provided negative contributions to the input annual rate.

-6.6

The largest negative contribution to the annual rate came from crude oil, which contributed 5.22 percentage points (Figure 4) and had negative annual price growth of 30.8% (Table 5). This is the seventh consecutive month that the rate has been negative.

PPI prices for crude oil typically reflect a range of factors, including geopolitical events around the world as well as local refineries' market conditions. Prices for crude oil fell on the year in August 2020 at negative 30.8% and followed the trend of a slowdown in negative growth of the 12-month rate seen since April 2020. This reflected several market conditions including limited supply and increased global demand for crude oil as trade and travel restrictions were relaxed. Crude oil prices fell slightly between July and August 2020, having previously risen each month since April 2020, likely reflecting that market conditions were broadly unchanged on the month.

Imported chemicals provided the second-largest negative contribution to the annual rate, at 0.88 percentage points, with negative price growth of 6.5%. The annual rate for this product group has remained negative for 14 consecutive months. This was driven by imported products used in the manufacture of petrochemicals, which displayed negative growth of 8.6% in August 2020.

Other imports provided the third-largest negative contribution to the annual rate, with a contribution of 0.52 percentage points and negative price growth of 5.8%.

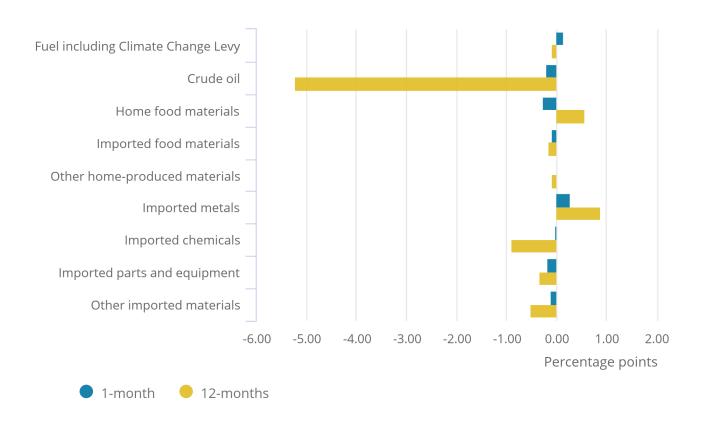
On the month, six of the nine product groups provided downward contributions to the rate. Home food materials provided the largest downward contribution of 0.26 percentage points. Two product groups provided positive contributions to the rate with imported metals providing the largest upward contribution of 0.28 percentage points.

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

Input PPI, contribution to 1-month and 12-month growth rate, UK, August 2020

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

Input PPI, contribution to 1-month and 12-month growth rate, UK, August 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, August 2020

Product group

Percentage change

		99
	1-month rate	12-month
Fuel including Climate Change Levy	1.3	-0.8
Crude oil	-1.6	-30.8
Home food materials	-1.8	4.1
Imported food materials	-1.1	-2.0
Other home-produced materials	0.0	-2.4
Imported metals	2.8	9.9
Imported chemicals	-0.1	-6.5
Imported parts and equipment	-0.9	-1.8
Other imported materials	-1.2	-5.8
All manufacturing	-0.4	-5.8

Source: Office for National Statistics - Producer Price Index

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

Of the nine product groups, five displayed negative contributions to the change in the annual rate.

The annual rate for input prices fell by 0.1 percentage points, from negative 5.7% in July 2020 to negative 5.8% in August 2020.

Inputs of other imported parts and equipment provided the largest negative contribution to the change in the rate, with 0.38 percentage points. The annual rate for this product group fell 2.3 percentage points, from 0.5% in July 2020 to negative 1.8% in August 2020.

Other imported materials provided the second-largest negative contribution to the change in the rate, at 0.22 percentage points, falling from negative 3.1% in July 2020 to negative 5.8% in August 2020.

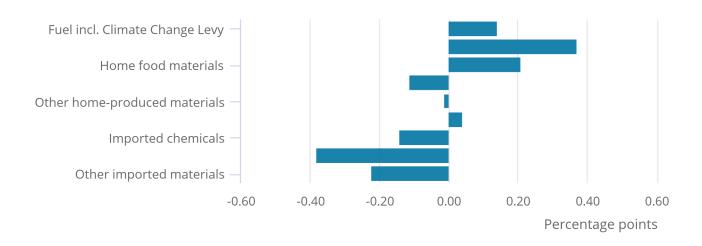
Further negative contributions came from imported chemicals, imported food materials and other home-produced materials. The downward contributions to the change in the rate were offset by positive contributions from the remaining product groups, with crude oil providing the largest contribution at 0.37 percentage points. This upward contribution to the change in the rate from crude oil reflects a base effect, as whilst crude oil fell by 1.6% between July and August 2020, it fell by a much bigger amount between the same months last year.

Figure 5: Other imported parts and equipment provided the largest downward contribution to the change in the annual rate in August 2020

Input PPI, contribution to change in the annual rate, UK, August 2020

Figure 5: Other imported parts and equipment provided the largest downward contribution to the change in the annual rate in August 2020

Input PPI, contribution to change in the annual rate, UK, August 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.

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 November 2020, in line with international best practice.

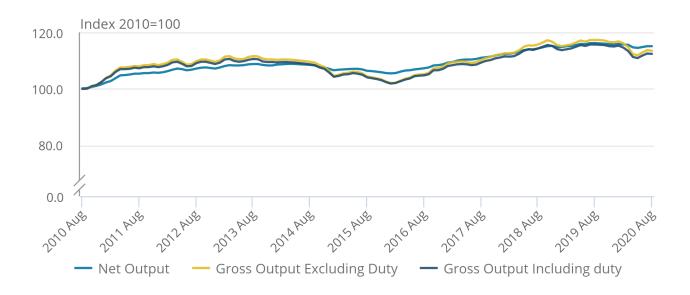
Figure 6 shows net and gross output PPIs over the past 10 years. In August 2020, the net output PPI was 115.1 while the gross output excluding duty PPI was 113.5.

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

Net output versus gross output indices, UK, August 2020

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

Net output versus gross output indices, UK, August 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).

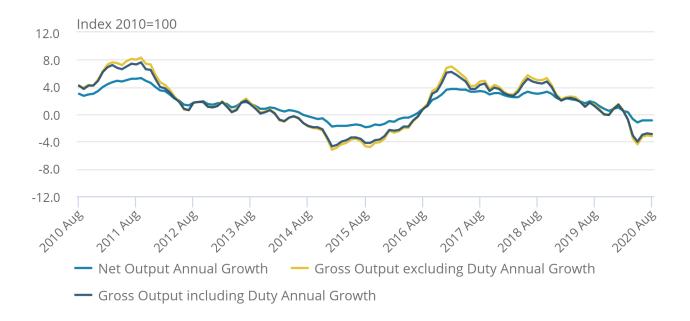
For the net output PPI, the annual growth fell to negative 0.9% in August 2020, no change from negative 0.9% in July 2020. For the gross output excluding duty PPI, the annual growth in August 2020 was negative 3.2%, down from negative 3.1% in July 2020.

Figure 7: Gross output shows greater volatility over time

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

Figure 7: Gross output shows greater volatility over time

Net output versus gross output annual growth, UK, August 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 August 2020, the net input PPI was 110.8 while the gross input PPI was 113.3.

Figure 8: Net input shows greater volatility but displays similar trends to gross input

Net input versus gross input indices, UK, August 2020

Figure 8: Net input shows greater volatility but displays similar trends to gross input

Net input versus gross input indices, UK, August 2020



Source: Office for National Statistics - Producer Price Index

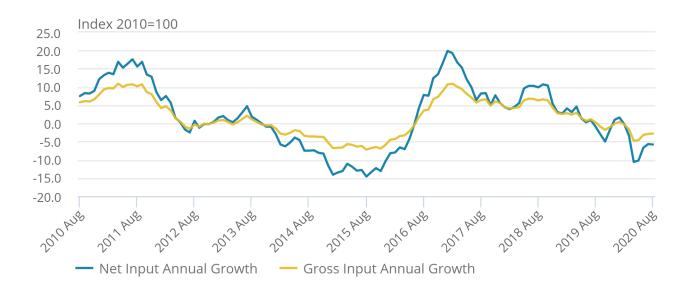
Figure 9 also shows that the annual growth rates for the net input PPI are more volatile than for the gross input PPI. For the net input PPI, the annual growth was negative 5.8% in August 2020, down from negative 5.7% in July 2020. For the gross input PPI, the annual growth in August 2020 was negative 2.8%, up from negative 2.9% in July 2020.

Figure 9: Net input growth displays more volatility than gross input growth

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

Figure 9: Net input growth displays more volatility than gross input growth

Net input versus gross input annual growth, UK, August 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 <u>Producer price inflation</u> <u>records: monthly figures</u>.

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 <u>Consumer Prices Index (CPI)</u> and the <u>Services Producer Price Index (SPPI)</u>.

8. Quality and methodology

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the <u>Producer Price Indices (PPIs) QMI</u>.

If you would like more information about the reliability of the data, a <u>PPI standard errors article</u> 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.

<u>Guidance on using indices in Indexation Clauses (PDF, 197KB)</u> 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 <u>producer price</u> <u>inflation dataset Tables 4 and 6</u>.

The detailed input indices of prices of materials and fuels purchased by industry (<u>producer price inflation dataset Table 6</u>) 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

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, May, June, July and August 2020 compared with other months. Response rates for the EPI and IPI show a small improvement in August 2020 compared with July 2020. However, response rates for the main PPI show there was a slight fall of around 0.5 percentage points in August 2020 compared with July 2020.

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

Weighted response

	PPI (domestic)	IPI	EPI
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	57.7	54.4
June 2020	71.3	62.8	66.8
July 2020	74.2	69.8	65.4
August 2020	73.7	70.5	67.0

Source: Office for National Statistics - Producer Price Index

Notes

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

The low response rates in August 2020 are 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 <u>standard internationally (PDF, 5.87MB)</u> and recommended by international organisations specifically for <u>treatment of missing producer prices because of the coronavirus pandemic (PDF, 52KB)</u>.

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)
- Coronavirus and the impact on output in the UK economy, UK: July 2020 (published 11 September 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 <u>public statement</u> on the coronavirus and the production of statistics, and any specific queries on this can be directed to the <u>Media Relations Office</u>.

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.

			Net Sec	tor					Gross S	Sector		
	Output of man	ufactured p	products	All manufact food, bever and p		bacco	Food products tobacco, ii	,	,	Coke and refined petroleum products, including duty		
	Index		entage le over	Index		entage ge over	Index		entage ge over	Index	•	entage ige over
	(2010=100)	1 mth	12 mths	(2010=100)	1 mth	12 mths	(2010=100)	1 mth	12 mths	(2010=100)	1 mth	12 mths
	7200700000			7200799000			7111101280			7112190080		
	JVZ7			K3BI			K65A			K37Y		
2020 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	114.7	0.2	0.8	120.6	0.6	1.3	94.1	-7.4	-9.3
Apr	114.7	-0.8	-0.7	114.8	0.1	0.7	120.4	-0.2	0.9	83.2	-11.6	-21.4
May	114.5	-0.2	-1.2	114.8	_	0.6	120.4	_	0.6	80.9	-2.8	-25.3
Jun	114.8	0.3	-0.9	114.8	-	0.5	120.4	-	0.6	85.8	6.1	-19.1
Jul	115.1p	0.3	-0.9	114.7p	-0.1	0.1	120.5p	0.1	0.8	89.0p	3.7	-17.3
Aug	115.1p	-	-0.9	114.8p	0.1	-	120.4p	-0.1	1.0	88.5p	-0.6	-17.7

p = provisional
r = revised

Source: Office for National Statistics

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

2010=100. SIC2007

		anufacturing and fuel purch	ased)		als purchase acturing ind			I purchased acturing ind	ustry
	la da		entage ge over	r		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
	6207000050			6207000010			6207000060		
	K646			K644			K647		
2020 Feb	116.6	-0.9	-0.2	113.8	-0.7	-0.3	140.8	-2.1	-0.1
Mar	111.9	-4.0	-3.4	109.2	-4.0	-4.3	135.9	-3.5	4.0
Apr	105.6	-5.6	-10.6	102.6	-6.0	-11.7	131.7	-3.1	-2.5
May	106.0	0.4	-10.2	103.9	1.3	-11.0	124.1	-5.8	-4.3
Jun	109.2	3.0	-6.7	107.3	3.3	-7.3	125.3	1.0	-3.7
Jul	111.2p	1.8	-5.7	109.4p	2.0	-6.2	127.1p	1.4	-2.2
Aug	110.8p	-0.4	-5.8	108.7p	-0.6	-6.5	128.8p	1.3	-0.8

¹ The Climate Change Levy was introduced in April 2001.

p = provisional
r = revised

	Output of r	manufactured	products		ufacturing excludes, tobacco and		All manufac	turing, excludi	ing duty ¹
			entage ge over		perce chang				entage ge over
	Index (2010=100)	1 month	12 months	Index (2010=100)	1 month	12 months	Index (2010 = 100)	1 month	12 months
	7200700000			7200799000			7200700010		
	JVZ7			КЗВІ			JVZ8		
2017 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	110.2	0.4	3.4
May	110.4	0.5	3.6	109.5	0.1	2.8	110.7	0.4	3.5
Jun	110.4	0.1	3.3	109.7	0.1	2.9	110.7	-	3.2
Juli	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
0010 lan	114.8	_	2.1	113.7	0.3	2.4	115.0	0.1	2.1
2019 Jan	115.1	0.3	2.4					0.1	
Feb Mar	115.1	0.3	2.4	113.9 113.8	0.2 -0.1	2.3 2.2	115.2 115.3	0.2	2.2 2.1
	115.2	0.1	2.2 2.1	114.0	-0.1 0.2	2.2	115.3	0.1	2.1
Apr	115.5	0.3		114.0	0.2 0.1		116.0	0.3	
May	115.8	-0.3 -0.1	1.9 1.6	114.1	0.1	2.0 1.7	115.9	-0.1	1.9 1.6
Jun	113.0	-0.1	1.0	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	8.0	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	114.7	0.2	0.8	116.0	-	0.6
Apr	114.7	-0.8	-0.7	114.8	0.1	0.7	115.2	-0.7	-0.4
May	114.5	-0.2	-1.2	114.8	-	0.6	115.0	-0.2	-0.9
Jun	114.8	0.3	-0.9	114.8	-	0.5	115.2	0.2	-0.6
11	445 4	0.0	-0.9	4447-	0.1	0.4	445 /	0.0	0.0
Jul	115.1p	0.3	-0.9 -0.9	114.7p	-0.1	0.1	115.4p	0.2	-0.9 -0.9
Aug	115.1p	_	-0.9	114.8p	0.1	_	115.4p	_	-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

										2010=100,	5102007
								Percentage 1 mon		Percentage 12 mor	
			2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Jul	2020 Aug	2020 Jul	2020 Aug
Net sector											
Output of manufactured products	JVZ7	7200700000	114.7	114.5	114.8	115.1p	115.1p	0.3	-	-0.9	-0.9
All manufacturing, excluding duty	JVZ8	7200700010	115.2	115.0	115.2	115.4p	115.4p	0.2	_	-0.9	-0.9
All manufacturing, excluding food, beverages, tobacco and petroleum	кзві	7200799000	114.8	114.8	114.8	114.7p	114.8p	-0.1	0.1	0.1	-
Gross Sector											
Food products, beverages and tobacco, including duty	K65A	7111101280	120.4	120.4	120.4	120.5p	120.4p	0.1	-0.1	0.8	1.0
Food products	K37L	7112100000	118.9	118.9r	119.1	119.4p	119.2p	0.3	-0.2	0.3	0.8
Tobacco products, including duty	K37Q	7112120080	184.0	184.0	184.0	184.0p	184.0p	_	_	4.8	4.8
Alcoholic beverages, including duty	MC6A	7229110080	116.7 I	3116.7	B114.4	B114.6pl	3114.7pB	0.2	0.1	1.2	1.1
Soft drinks, mineral waters and other bottled waters	JU5C	1107000000	108.9 I	3108.2	B110.3	B109.9pl	3110.3pB	-0.4	0.4	2.2	3.0
Textiles	K37R	7112130000	118.9	119.3	119.4	119.4p	119.9p	_	0.4	1.2	1.5
Wearing apparel	K37S	7112140000	119.8	119.8	119.8	119.6p	119.6p	-0.2	_	0.3	0.2
Leather and related products	К37Т	7112150000	123.3	123.3	123.3	123.7p	123.7p	0.3	_	-0.4	-0.4
Wood and products of wood and cork, except furniture	K37U	7112160000	129.3	130.0	130.3	130.8p	130.7p	0.4	-0.1	-0.2	-0.2
Paper and paper products	K37V	7112170000	113.0	113.0	112.5	112.5p	112.4p	_	-0.1	-1.7	-1.5
Printing and recording services	K37W	7112180000	105.3r	105.3	105.3	104.9p	104.8p	-0.4	-0.1	0.2	0.3
Coke and refined petroleum products, including duty	к37Ұ	7112190080	83.2	80.9	85.8	89.0p	88.5p	3.7	-0.6	-17.3	-17.7
Chemicals and chemical products	K37Z	7112200000	111.1	111.6r	111.4	111.1p	111.5p	-0.3	0.4	-1.9	-1.6
Basic pharmaceutical products and pharmaceutical preparations	K382	7112210000	112.0	112.0	112.0	112.1p	111.6p	0.1	-0.4	-1.2	-1.8
Rubber and plastic products	K383	7112220000	117.8	117.7	117.8	117.8p	117.8p	_	_	0.3	0.2
Other non-metallic mineral products	K384	7112230000	125.0r	124.5r	124.1	124.2p	124.3p	0.1	0.1	0.9	1.1
Basic metals	K385	7112240000	117.0	118.2r	116.5	117.1p	117.7p	0.5	0.5	0.3	0.6
Fabricated metal products, except machinery and equipment	K386	7112250000	119.4	119.7	119.7	119.7p	119.7p	_	_	2.3	2.0
Computer, electronic and optical products	K387	7112260000	105.7	105.7	106.0	106.1p	106.1p	0.1	_	0.5	0.5
Electrical equipment	K388	7112270000	111.8r	111.6	111.7	112.1p	112.7p	0.4	0.5	-0.4	0.1
Machinery and equipment n.e.c.	K389	7112280000	120.7	120.6	120.3	120.6p	120.3p	0.2	-0.2	0.8	0.3
Motor vehicles, trailers and semi-trailers	K38A	7112290000	109.8	110.1	110.1	110.3p	110.3p	0.2	_	0.3	_
Other transport equipment	К38В	7112300000	122.4r	122.5r	122.9	122.7p	122.0p	-0.2	-0.6	1.6	0.7
Furniture	K38C	7112310000	117.0r	117.0	117.0	117.0p	117.2p	-	0.2	-	0.3
Other manufactured goods	K38D	7112320000	113.6	112.3	113.2	112.1p	111.8p	-1.0	-0.3	-1.8	-1.7
Repair and installation services of machinery and equipment	K38E	7112330000	130.9	131.5	131.0	131.1p	130.7p	0.1	-0.3	0.7	-

p = provisional r = revised

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

	All	manufacturir	ng	All man	ufacturing exclu	ding food, bevera	ges, tobacco and pe	etroleum indust	ries
	not sea	asonally adju	usted	not se	asonally adjuste	ed	seas	onally adjusted	
	la dec		entage ge over	la dan	perce chang		la da	perce chang	ntage e 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		
2017 Feb Mar Apr May Jun	K646 108.0 107.5 106.9 106.3 105.9	- -0.5 -0.6 -0.6 -0.4	19.3 16.8 15.3 12.1 9.9	K655 109.6 109.7 108.8 108.7	- 0.1 -0.8 -0.1 0.6	11.3 10.8 9.6 9.9 9.8	K658 109.2 109.2 109.1 109.4 109.9	0.3 - -0.1 0.3 0.5	11.2 11.0 10.0 9.9 9.7
Jul Aug Sep Oct Nov Dec	105.9 108.0 108.5 109.8 112.0 112.5	2.0 0.5 1.2 2.0 0.4	6.4 8.2 8.3 5.0 7.7 5.6	109.3 111.1 110.7 111.6 112.7 112.8	-0.1 1.6 -0.4 0.8 1.0 0.1	5.2 6.7 6.5 3.4 4.7 4.5	109.9 111.3 110.9 111.1 112.0 112.4	- 1.3 -0.4 0.2 0.8 0.4	5.2 6.5 6.4 3.3 4.8 4.7
2018 Jan Feb Mar Apr May Jun	112.7 112.2 112.3 112.9 116.5 116.8	0.2 -0.4 0.1 0.5 3.2 0.3	4.4 3.9 4.5 5.6 9.6 10.3	112.7 113.0 113.0 112.6 114.6 115.4	-0.1 0.3 - -0.4 1.8 0.7	2.8 3.1 3.0 3.5 5.4 5.5	112.2 112.8 113.0 113.5 115.6 116.1	-0.2 0.5 0.2 0.4 1.9 0.4	3.0 3.3 3.5 4.0 5.7 5.6
Jul Aug Sep Oct Nov Dec	116.8 118.7 120.1 121.2 118.1 116.0	- 1.6 1.2 0.9 -2.6 -1.8	10.3 9.9 10.7 10.4 5.4 3.1	115.7 117.3 118.0 118.0 117.4 118.1	0.3 1.4 0.6 - -0.5 0.6	5.9 5.6 6.6 5.7 4.2 4.7	116.3 117.0 117.9 117.5 117.0 117.7	0.2 0.6 0.8 -0.3 -0.4 0.6	5.8 5.1 6.3 5.8 4.5 4.7
2019 Jan Feb Mar Apr May Jun	115.7 116.8 115.8 118.1 118.1 117.1	-0.3 1.0 -0.9 2.0 - -0.8	2.7 4.1 3.1 4.6 1.4 0.3	117.8 118.0 116.3 117.4 117.0 117.8	-0.3 0.2 -1.4 0.9 -0.3 0.7	4.5 4.4 2.9 4.3 2.1 2.1	117.4 117.8 116.5 118.5 118.0 118.4	-0.3 0.3 -1.1 1.7 -0.4 0.3	4.6 4.4 3.1 4.4 2.1 2.0
Jul Aug Sep Oct Nov Dec	117.9 117.6 116.5 115.2 116.0 117.2	0.7 -0.3 -0.9 -1.1 0.7 1.0	0.9 -0.9 -3.0 -5.0 -1.8 1.0	119.1 120.4 118.9 118.1 117.8 117.9	1.1 1.1 -1.2 -0.7 -0.3 0.1	2.9 2.6 0.8 0.1 0.3 -0.2	119.3 119.6r 118.5 117.7 117.7	0.8 0.3 -0.9 -0.7 - -0.2	2.6 2.2 0.5 0.2 0.6 -0.2
2020 Jan Feb Mar Apr May Jun	117.6 116.6 111.9 105.6 106.0 109.2	0.3 -0.9 -4.0 -5.6 0.4 3.0	1.6 -0.2 -3.4 -10.6 -10.2 -6.7	119.0 120.1 120.2 116.6 115.8 116.7	0.9 0.9 0.1 -3.0 -0.7 0.8	1.0 1.8 3.4 -0.7 -1.0 -0.9	118.6 119.5 120.2 117.8r 117.1 117.4	0.9 0.8 0.6 -2.0 -0.6 0.3	1.0 1.4 3.2 -0.6 -0.8 -0.8
Jul Aug	111.2p 110.8p	1.8 -0.4	-5.7 -5.8	117.7p 117.9p	0.9 0.2	-1.2 -2.1	117.7p 117.0p	0.3 -0.6	-1.3 -2.2

¹ The Climate Change Levy was introduced in April 2001.

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

									-	2010=100, S	IC2007
									ange onth		ange onths
			2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Jul	2020 Aug	2020 Jul	2020 Aug
Gross sector											
Other mining & quarrying products ²	мсзк	6107208000	124.2	123.8	123.8	124.0p	123.5p	0.2	-0.4	-2.1	-3.1
Manufacture of food products, beverages, tobacco	MC35	6107110120	122.0	122.0	121.9	122.3p	121.5p	0.3	-0.7	0.2	0.4
Preserved meat & meat products	MC3V	6107310100	124.9	124.8r	124.9	125.5p	124.4p	0.5	-0.9	1.6	2.1
Fish, crustaceans, molluscs, fruit & vegetables	MB4X	6107310230	120.5	122.8	121.3	120.6p	118.8p	-0.6	-1.5	-4.0	-3.4
Vegetable & animal oils and fats	MC3W	6107310400	130.8	129.8	128.7	130.0p	129.4p	1.0	-0.5	2.7	3.1
Dairy products	MC3X	6107310500	126.5	126.4	126.5	127.2p	125.8p	0.6	-1.1	1.2	1.9
Grain mill products, starches & starch products	MC3Y	6107310600	122.5	122.4	122.3	122.9p	122.1p	0.5	-0.7	0.3	0.7
Bakery & farinaceous products	MC3Z	6107310700	117.7	117.2	117.4	117.9p	117.7p	0.4	-0.2	-1.1	-1.3
Other food products	MB4Y	6107310800	118.1	117.8	117.9	118.3p	117.8p	0.3	-0.4	0.1	-
Animal feeds	MC42	6107310900	122.1r	121.8	121.7	122.3p	121.7p	0.5	-0.5	0.7	0.7
Alcoholic Beverages	MB55	6107411016	116.4	115.6	115.6	116.0p	115.9p	0.3	-0.1	-1.4	-1.7
Soft drinks; mineral waters & other bottled waters	MC4D	6107411070	114.5	114.4	114.6	115.0p	114.7p	0.3	-0.3	-0.4	-1.0
Tobacco products	мсзм	6107212000	155.8	155.3	155.4	155.6p	155.5p	0.1	-0.1	-0.7	-0.8
Manufacture of textiles & textile products; clothing	MC36	6107113140	116.8	116.9r	117.9	117.9p	118.0p	_	0.1	-0.3	-0.5
Textiles	MB4P	6107213000	115.6	115.7r	116.6	116.6p	116.8p	_	0.2	-0.9	-0.9
Wearing apparel	MC3N	6107214000	118.6	118.7	119.8	119.9p	119.8p	0.1	-0.1	0.6	0.1
Manufacture of leather & related products	MC30	6107215000	119.0	119.0	119.4	119.5p	119.4p	0.1	-0.1	-0.3	-0.3
Manufacture of wood & wood products	MC3P	6107216000	125.9	125.9	126.3	126.8p	126.8p	0.4	_	-2.2	-2.3
Manufacture of pulp, paper & paper products, recording media & printing services	MC39	6107117180	114.4	113.8	113.9	114.1p	114.0p	0.2	-0.1	-1.8	-2.1
Pulp, paper & paper products	MB4Q	6107217000	114.7	113.9	114.0	114.3p	114.4p	0.3	0.1	-2.4	-2.5
Printing & recording services	MC3Q	6107218000	114.0	113.7	113.7	113.8p	113.6p	0.1	-0.2	-1.2	-1.6
Manufacture of coke & refined petroleum products	MC3R	6107219000	51.2r	54.6	68.3	74.7p	73.7p	9.4	-1.3	-29.3	-28.3
Manufacture of chemicals, chemical products & man-made fibres	MC3B	6107120000	108.6	108.7r	109.0	109.2p	109.6p	0.2	0.4	-5.0	-4.8
Paints, varnishes & similar coatings, printing ink & mastics	MC43	6107320300	112.3r	112.6r	112.4	112.4p	112.7p	-	0.3	-3.1	-3.1
Soaps, detergents, cleaning & polishing preparations perfumes & toilet preparations	MC44	6107320400	113.4r	113.3r	113.4	113.4p	113.5p	-	0.1	-1.6	-1.7
Other chemical products	MC45	6107320500	112.3r	111.9r	112.4	112.8p	113.0p	0.4	0.2	-3.2	-3.3
Industrial gases; other basic inorganic chemicals; fertilisers & nitrogen compounds	MC4E	6107420910	112.2	112.0r	112.1	112.4p	112.3p	0.3	-0.1	-5.1	-5.6
Petrochemicals & man made fibres	MC4F	6107420920	106.6r	106.9r	107.2	107.4p	107.9p	0.2	0.5	-5.6	-5.3
Dyes & pigments: pesticides & other agrochemical products	MC4G	6107420930	106.6	106.5r	108.5	109.5p	109.6p	0.9	0.1	-6.2	-6.0
Manufacture of basic pharmaceutical products & pharmaceutical preparations	MC3S	6107221000	110.3	110.2	110.4	110.6p	110.5p	0.2	-0.1	-2.0	-2.4
Manufacture of rubber & plastic products	MB4R	6107222000	111.5	111.5r	112.0	112.1p	112.6p	0.1	0.4	-3.1	-2.8
Manufacture of cement, lime & plaster	MC46	6107323560	121.4	120.7r	120.8	121.0p	121.0p	0.2	-	-2.0	-2.3
Manufacture of glass, refractory, clay, other porcelain, ceramic stone products	MB4Z	6107323990	116.9	116.1r	116.3	116.3p	116.6p	_	0.3	-2.4	-2.6

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.

continued 2010=100, SIC2007

									ange onth		ange onths
			2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Jul	2020 Aug	2020 Jul	2020 Aug
Manufacture of basic metals & fabricated products	MC3F	6107124250	115.3	115.2r	116.0	117.4p	118.2p	1.2	0.7	-0.2	0.1
Basic iron, steel & alloys: tubes, pipes, hollow profiles	MC47	6107324130	109.8	109.6r	110.1	111.2p	111.7p	1.0	0.4	-6.8	-6.4
Other basic metals & casting	MB52	6107324450	113.1	113.3	116.4	119.4p	120.8p	2.6	1.2	2.8	3.6
Weapons & ammunition	MC48	6107325400	119.7	119.4	119.6	120.1p	120.2p	0.4	0.1	5.0	4.7
Fabricated metal products, excluding machinery & equipment & weapons & ammunition	MB53	6107325990	117.8	117.7r	117.6	118.4p	119.1p	0.7	0.6	0.3	0.4
Manufacture of computer, electronic and optical products, electrical equipment	MC3G	6107126270	115.0	115.0	115.2	115.6p	115.6p	0.3	-	0.1	-0.4
Computer, electronic & optical products	MB4S	6107226000	114.8	114.9	115.0	115.3p	115.2p	0.3	-0.1	0.2	-0.4
Electrical equipment	MB4T	6107227000	115.1	115.2r	115.4	116.0p	116.3p	0.5	0.3	-	-0.3
Manufacture of machinery & equipment n.e.c	MB4U	6107228000	117.0	117.0	117.0	117.4p	117.5p	0.3	0.1	0.2	-0.3
Manufacturing of motor vehicles & other transport equipment	MC3I	6107129300	114.5	114.7	114.8	115.0p	115.0p	0.2	_	0.5	-
Motor vehicles, trailers & semi trailers	MB4V	6107229000	112.2	112.4	112.5	112.7p	112.9p	0.2	0.2	0.7	0.4
Ships & boats	MC49	6107330100	118.0	117.7	117.3	118.1p	118.1p	0.7	-	-	-0.3
Aircraft & spacecraft & related machinery	MC4A	6107330300	123.3r	123.6	123.6	124.1p	123.7p	0.4	-0.3	0.3	-0.6
Other transport equipment	MB54	6107330990	114.7	114.9r	114.8	115.0p	114.9p	0.2	-0.1	-0.1	-0.6
Manufacture of other manufactured goods n.e.c	MC3J	6107131330	120.2	120.4r	120.4	120.7p	120.6p	0.2	-0.1	-0.2	-0.7
Furniture	MC3T	6107231000	117.4	117.6r	117.7	118.1p	118.2p	0.3	0.1	-1.2	-1.3
Other manufacturing	MB4W	6107232000	117.3	117.3	117.5	117.9p	117.9p	0.3	-	0.3	-0.3
Repair of maintenance of ships & boats	MC4H	6107433150	118.5	118.2r	117.6	118.6p	118.6p	0.9	-	-0.2	-0.5
Repair & maintenance services of aircraft & spacecraft	MC4I	6107433160	135.3	135.6r	135.5	135.6p	134.9p	0.1	-0.5	1.0	-0.1
Other repair; installation	MB56	6107433990	114.5	114.5	114.5	114.8p	114.8p	0.3	-	-0.1	-0.6

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

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

p = provisional

r = revised

										2010=100, SIC2007	
									nange ionth	% change 12 months	
			2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Jul	2020 Aug	2020 Jul	2020 Aug
Fuel incl. CCL ¹	K647	6207000060	131.7	124.1	125.3	127.1p	128.8p	1.4	1.3	-2.2	-0.8
Domestic coal & lignite incl. CCL	MC78	7167205005	116.9	116.9	116.9	116.9p	116.9p	-	-	-3.7	-3.7
Imported coal & lignite incl.CCL	MC8U	7169205005	133.2	124.4	120.0	120.0p	120.0p	-	-	-13.8	-19.6
Electricity incl. CCL	MC8F	7167335105	147.3	140.1	142.5	148.9p	150.0p	4.5	0.7	4.4	5.1
Gas incl. CCL	MC8H	7167335235	106.0	97.6	96.7	91.2p	93.9p	-5.7	3.0	-16.3	-13.1
Fuel excl. CCL	K645	6207000020	127.9	120.8	122.5	124.4p	126.1p	1.6	1.4	-2.4	-0.9
Domestic coal & lignite excl. CCL	MC77	7167205000	116.5	116.5	116.5	116.5p	116.5p	_	-	-3.8	-3.8
Imported coal & lignite excl.CCL	MC8T	7169205000	131.7	123.0	118.5	118.5p	118.5p	-	-	-14.4	-18.8
Electricity excl. CCL	MC8E	7167335100	145.3	138.1	140.8	147.1p	148.3p	4.5	0.8	4.7	5.6
Gas excl. CCL	MC8G	7167335230	99.5	92.3	92.4	87.0p	89.7p	-5.8	3.1	-18.0	-15.0
Crude petroleum oils & metal ores	MC4P	6207008700	41.8	46.7	62.4	69.3p	68.2p	11.1	-1.6	-32.2	-30.8
Domestic crude oil & metal ores	MC79	7167206070	39.6	43.9	64.0	67.4p	66.5p	5.3	-1.3	-33.3	-32.1
Imported crude oil & metal ores	MC8V	7169206070	42.8	48.0	61.6	70.2p	69.0p	14.0	-1.7	-31.6	-30.2
Food manufacturing:											
Home produced food materials	MB57	6207008100	127.9	129.7	129.5	130.4p	128.1p	0.7	-1.8	2.4	4.1
Agricultural crop products	MC74	7167201000	129.6	130.5	130.9	132.3p	130.3p	1.1	-1.5	4.0	5.8
Fish & other fish products	MC76	7167203000	102.3	116.2r	108.0	101.6p	95.0p	-5.9	-6.5	-21.4	-20.4
Imported food materials	MC40	6207008600	129.1	127.8	126.5	126.8p	125.4p	0.2	-1.1	-0.4	-2.0
Agricultural crop products	MC8Q	7169201000	135.3	133.1	130.6	130.1p	128.2p	-0.4	-1.5	-2.4	-3.1
Fish & fish products	MC8S	7169203000	165.4	166.5	164.4	167.1p	163.3p	1.6	-2.3	-0.7	-5.2
Meat & meat products	MC9F	7169310100	126.6	125.8	125.1	125.1p	123.7p	_	-1.1	6.4	3.0
Processed fish & fish products; fruit & vegatables	MC9G	7169310230	136.0	135.4	134.6	134.0p	132.4p	-0.4	-1.2	-4.2	-6.6
Vegetable, animal oils & fats	мс9н	7169310400	116.2	112.4	112.3	113.9p	114.0p	1.4	0.1	_	-0.7
Dairy products	MC9I	7169310500	124.5	124.5	124.4	121.9p	121.7p	-2.0	-0.2	-3.6	-4.4
Grain mill products & starches	MC9J	7169310600	114.2	115.8	115.7	115.7p	115.3p	-	-0.3	-1.1	-3.4
Bakery & farinaceous products	MC9K	7169310700	116.1	117.4	118.7	119.8p	119.2p	0.9	-0.5	3.9	1.2
Other food products	MC9L	7169310800	123.1	123.5	123.3	126.0p	124.6p	2.2	-1.1	2.3	-0.1
Prepared animal feeds	мсэм	7169310900	116.9	117.6	118.0	119.0p	118.5p	0.8	-0.4	2.1	0.3
Other home produced materials	MC4J	6207008200	131.7	131.9	131.7	131.7p	131.7p	-	-	-2.1	-2.4
Forestry products	MC75	7167202000	237.1	237.1	237.1	237.1p	237.1p	-	-	-8.6	-8.6
Other mining & quarrying products	MC7A	7167208000	125.9	126.3	126.2	126.3p	126.3p	0.1	-	-1.3	-1.8
Water collection, treatment & supply	MC7R	7167236000	121.3	121.3	120.6	120.6p	120.6p	-	-	-0.6	-0.6
Imported metals	MC4K	6207008300	135.7r	133.1r	135.6	139.1p	143.0p	2.6	2.8	9.7	9.9
Basic iron, steel & ferro alloys, tubes & pipes	MC9S	7169324130	116.5r	116.4	118.6	121.0p	124.1p	2.0	2.6	-3.7	-3.3
Other basic metals & casting	MC9T	7169324450	145.2r	141.5r	144.1	148.1p	152.4p	2.8	2.9	16.3	16.3
Imported chemicals	MC4L	6207008400	109.0r	108.9r	108.6	108.9p	108.8p	0.3	-0.1	-5.5	-6.5
Paints, varnishes & coatings, printing inks & other mastics	MC9N	7169320300	117.1r	117.4r	116.9	117.3p	117.2p	0.3	-0.1	-4.1	-5.1
Soap, detergents, cleaning & polishing preparations, perfumes & toilet preparations	мС90	7169320400	112.0	112.8r	111.1	111.1p	110.4p	-	-0.6	-2.9	-4.7

¹ The Climate Change Levy was introduced in April 2001.

continued

2010=100, SIC2007

continued									% change 1 month		% change 12 months	
			2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Jul	2020 Aug	2020 Jul	2020 Aug	
Other chemical products	MC9P	7169320500	120.0	120.8r	121.1	121.4p	121.0p	0.2	-0.3	1.3	-0.7	
Industrial gases, inorganic chemicals, fertilisers & nitrogen compounds	MCA3	7169420910	120.9	122.2r	122.6	123.0p	122.8p	0.3	-0.2	-4.0	-5.6	
Petrochemicals & man made fibres	MCA3	7169420910	102.9r	102.1r		·	102.6p	0.9	0.3	- 4 .0	-8.6	
Dyes & pigments; pesticides &		7.00.12020	.02.0.	.02		. од.ор	.02.00	0.0	0.0	3.2	0.0	
other agro-chemical products	MCA5	7169420930	109.0r	109.6r	109.3	109.8p	109.5p	0.5	-0.3	8.0	-0.7	
Basic pharmaceutical products & pharmaceutical preparations	MC97	7169221000	96.4	97.2	97.7	98.2p	97.9p	0.5	-0.3	-1.7	-3.7	
Rubber & plastic products	MC98	7169222000	121.0	121.5	121.2	120.1p	118.9p	-0.9	-1.0	-2.7	-4.9	
Other imported parts & equipment	MC4N	6207008520	110.4	111.6	111.8	111.7p	110.7p	-0.1	-0.9	0.5	-1.8	
Computer, electronic & optical products	MC99	7169226000	130.0	131.0r	130.1	129.9p	128.6p	-0.2	-1.0	-0.8	-3.3	
Electrical equipment	MC9A	7169227000	116.7r	117.8	117.9	119.9p	118.6p	1.7	-1.1	1.6	-1.1	
Machinery & equipment n.e.c	мсэв	7169228000	119.0	120.5	120.7	121.1p	119.9p	0.3	-1.0	1.3	-1.3	
Motor vehicles, trailers & semi-trailers	MC9C	7169229000	101.8	102.9	103.6	101.9p	101.4p	-1.6	-0.5	3.3	1.7	
Weapons & ammunition	MC9U	7169325400	90.5	91.8	91.8	92.0p	91.1p	0.2	-1.0	-0.3	-2.8	
Fabricated metal products	MC9V	7169325990	88.8	90.1	90.1	90.3p	89.4p	0.2	-1.0	-0.4	-2.9	
Ships & boats	MC9W	7169330100	116.1	117.0	117.4	117.7p	117.5p	0.3	-0.2	-1.2	-2.4	
Aircraft, spacecraft & related machinery	MC9X	7169330300	103.2	104.2r	105.0	106.0p	104.3p	1.0	-1.6	-4.1	-6.9	
Other transport equipment	MC9Y	7169330990	113.7r	114.4r	113.9	113.7p	112.2p	-0.2	-1.3	-0.1	-2.8	
Other imports	MC4M	6207008510	121.1r	121.8r	120.9	120.6p	119.2p	-0.2	-1.2	-3.1	-5.8	
Forestry products	MC8R	7169202000	137.0	137.3	136.6	136.3p	135.1p	-0.2	-0.9	-4.0	-5.8	
Other mining & quarrying products	MC8W	7169208000	148.2	149.7	147.0	145.7p	140.8p	-0.9	-3.4	-1.2	-6.9	
Tobacco products	MC8X	7169212000	99.4	99.4	99.4	99.5p	99.4p	0.1	-0.1	-4.7	-6.7	
Textiles	MC8Y	7169213000	123.7r	124.7r	131.0	130.6p	128.0p	-0.3	-2.0	4.1	0.3	
Wearing apparel	MC8Z	7169214000	122.8	124.3	124.1	124.7p	122.2p	0.5	-2.0	-2.3	-6.2	
Leather & related leather products	MC92	7169215000	124.3	124.7	125.8	126.0p	126.0p	0.2	-	-1.5	-2.5	
Wood & wooden products	MC93	7169216000	113.6r	114.1r	113.7	113.5p	114.5p	-0.2	0.9	-3.0	-2.4	
Paper & paper products	MC94	7169217000	113.2	114.2	114.4	114.8p	114.0p	0.3	-0.7	-2.6	-4.9	
Printing & recording services	MC95	7169218000	106.7	107.0	107.3	107.6p	107.1p	0.3	-0.5	-1.5	-2.3	
Coke & refined petroleum products	MC96	7169219000	146.5r	146.2r	138.3	136.4p	134.7p	-1.4	-1.2	-12.5	-15.1	
Furniture	MC9D	7169231000	69.2	69.8	69.7	69.7p	70.5p	_	1.1	6.2	5.7	
Glass, refractory, clay other porcelain, ceramic stone & abrasive products	MC9R	7169323990	117.7r	118.3r	118.6	119.1p	118.4p	0.4	-0.6	1.1	-0.8	
Cement, lime, plaster & articles of concrete, cement & plaster	MC9Q	7169323560	117.6r	118.3r	118.6	119.1p	118.4p	0.4	-0.6	1.1	-0.7	
Alcoholic beverages	MC9Z	7169411016	114.4	115.7	116.3	116.8p	116.4p	0.4	-0.3	2.9	0.9	
Soft drinks, mineral water & other bottled waters	MCA2	7169411070	119.7	121.3	122.4	123.3p	123.0p	0.7	-0.2	3.0	0.9	
Other manufactured goods n.e.c	MC9E	7169232000	102.2	103.3	102.2	101.9p	99.5p	-0.3	-2.4	-0.2	-5.5	
Imported materials												
All imported materials - total (incl Crude Oil)	K64F	6207008500	102.7	103.7r	106.5	108.6p	108.2p	2.0	-0.4	-5.8	-6.6	

¹ The Climate Change Levy was introduced in April 2001.

p = provisional
r = revised



	Output of I	manufactured prod	ucts	All manufacturing excluding food, beverages, tobacco and petroleum					
		percentage	change over		percentage change over				
	Index (2010=100)	1 month	12 months	Index (2010=100)	1 month	12 months			
	7200700000			7200799000					
	JVZ7			K3BI					
2017 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	_	_	_	_	_				
Apr	_	_	_		_				
Mari	_	_	_	_	_	-			
May Jun	_	_	_	_	_				
Juii	_	_	_	_	_	•			
Jul	_	_	_	_	_	-			
Aug									

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

	All manufacturing industries		All manufacturing excluding food, beverages, tobacco and petroleum industries							
	not sea	not seasonally adjusted		not sea	asonally adjust	ed	seasonally adjusted			
	la da		entage ge over	la da	perce chang	entage le over	la de		entage je over	
	Index (2010=100)	1 month	12 months	Index (2010=100)	1 month	12 months	Index (2010=100)	1 month	12 months	
	6207000050 K646			6207990050 K655			6207998950 K658			
2017 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	-	_	_	_	-	_	0.1	0.1	0.1	
Sep	_	-	-	_	_	-	-	-0.1	-	
Oct	-	_	_	_	-	_	_	-	-	
Nov	-	_	_	_	_	_	_	-	-	
Dec	_	-	_	_	-	-	_	-	-	
2020 Jan	_	_	_	_	_	_	_	_	_	
Feb	-	-	_	-	_	_	-	-	-	
Mar	_	_	_	_	-	_	_	-	-	
Apr	_	_	_	_	-	_	-0.1	-0.1	-0.1	
May	_	_	_	_	-	_	_	0.1	-	
Jun	_	-	_	_	-	_	_	-	-	
Jul	_	_	-	0.2	0.2	0.1	0.1	0.1	0.1	
Aug										

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