



Road Fuel Price Statistics – data sources and methodologies

1. Introduction

BEIS's road fuel price statistics provide average UK retail ('pump') prices on a weekly, monthly and annual basis. The data is used to monitor road fuel prices in the UK, and to compare UK road fuel prices with other EU countries. The data is published in a very timely manner, with weekly prices publically available the day after collection, and provisional monthly prices published at the end of the same month. Final monthly prices are published at the end of the following month.

2. Publications

BEIS produces fuel price statistics tables on a weekly, monthly and annual basis. Weekly fuel prices are used to produce the BEIS website weekly fuel price table and to update the EU Eurostat website. Monthly prices are used to update Table 4.1.1 on the BEIS website, whilst the monthly EU prices are used to update Tables 5.1.1 and 5.2.1. Annual UK prices are published in Table 4.1.2.

3. Weekly statistics

Data Sources

There are six companies (four oil companies and two supermarkets) that take part in the weekly fuel price survey, providing ULSP (unleaded petrol), ULSD (Diesel) and super unleaded fuel prices. These cover around 65% of the market. Gas oil and kerosene prices are also provided by three oil companies.

Methodology and data quality

The fuel companies are contacted by email every Monday morning asking for their fuel prices for that day. Prices are entered onto a spreadsheet that calculates the average weighted price for each fuel, with the weights determined by annual sales. In general, all companies supply data when requested. On the rare occasion when we are unable to contact a company, an estimated value is calculated for that company. In general, prices follow a similar pattern so the average price change will normally be suitable for estimation purposes, though the nature of the supply company is also considered.

The average prices are entered onto the weekly fuel price table and ULSP & ULSD prices are published on the BEIS website the following day. The prices are also reported to the EU for publication in the 'Oil Bulletin': http://ec.europa.eu/energy/oil/index_en.htm. Data on tax and duty rates is also provided to the EU.

The estimates for the average price of unleaded petrol and diesel have low standard errors. It is estimated, based on data for the first six months of 2015, that the standard error for petrol is 0.30% (0.33p against an average price of 118.3p) and for diesel 0.36% (0.42p against an average price of 118.3p). The standard errors on monthly estimates (see section

4 below) are slightly lower due to a larger sample size, at 0.23% for petrol and 0.28% for diesel, again based on the first 6 months of 2014.

A daily price survey using an alternative methodology is produced by a private sector company. Periodically, normally every three months or when data is at record or near record levels, the data are compared to ensure that both series are moving in similar directions. In addition, the weekly data closest to the 15th of the month is regularly compared against the mid-month prices collected for the monthly statistics (Table 4.1.1).

4. Monthly statistics

There are 2 sets of monthly road fuel price tables published by BEIS: average UK petrol & diesel prices (Table 4.1.1), and average EU petrol & diesel prices (Tables 5.1.1/5.2.1).

Data sources

1. Table 4.1.1

There are twelve companies (eight oil companies and four supermarkets) currently providing monthly road fuel price data and price data on domestic heating oil, covering over 80% of the road fuel market and around 50% of the domestic heating oil market.

2. Tables 5.1.1/5.2.1

The EU sends BEIS an email each week containing the weekly prices for all 27 EU member states. This is the same survey that BEIS supplies the weekly price data to. The price data is provided with and without tax and duty.

Methodology and data quality

1. Table 4.1.1

The monthly prices are collected from twelve data suppliers shortly after the 15th of the month for fuel prices as of the 15th of the month (see Annex A). To reduce the burden on business, BEIS does not request data from the companies that supply weekly price data. Instead, the weekly data for the date closest to the 15th of the month for those 6 companies is combined with data specifically requested from the other eight suppliers.

Not all of the fuels specified on the questionnaire have prices published by BEIS. This is usually due to insufficient data, leading to concerns over the robustness of any calculated price, or of potential disclosure of individual company prices. For these reasons, price data on LPG (as a road fuel and for home heating), heavy fuel oil, and lead replacement petrol is not currently published.

The prices are entered onto a spreadsheet that calculates the average weighted price for each fuel. The average prices are entered into the Table 4.1.1 spreadsheet, where prices excluding VAT and excluding VAT & duty are also calculated - the retail ('pump') price = (basic price + duty rate) x VAT rate. Commentary and analysis is produced on price changes and reasons for changes. An initial estimate of petrol and diesel prices is also published at the end of each month for the current month, using the weekly data.

The prices are also used to produce Table 4.1.3, which has average prices for January of each year. The prices are also used to produce price indices for the monthly PPI (Producer Price Index) that BEIS prepares for ONS (Office of National Statistics).

2. Tables 5.1.1/5.2.1

The EU weekly data for the date closest to the 15th of the month is used to produce Tables 5.1.1 and 5.2.1. Data is published on prices for EU member states with and without tax and duty, and the percentage of tax/duty that makes up the total price. See Annex B for an example of the EU data.

5. Quarterly and Annual Statistics

Average quarterly and annual UK road fuel prices are calculated as a simple average of the relevant monthly prices. Quarterly prices are available within the spreadsheet for Table 4.1.1, and annual prices are published in Table 4.1.2.

6. Users of the Data

The published weekly road fuel price statistics are used by a variety of groups for a variety of purposes, including:

- within BEIS (e.g. as base price assumptions used in modelling price projections);
- by other Government Departments and organisations, including HM Treasury, HMRC, DFT, ONS (e.g. as an input to the CPI); and the Bank of England.
- by academics, students and members of the public (e.g. to investigate recent and historic price changes, or to analyse how petrol prices change in comparison to oil prices).
- by industry and business consultants (e.g. to analyse price trends or to split out tax costs).
- Data is also submitted to the EU Website and used to produce the EU price statistics.

Annex A: Monthly fuel price return (Form C)

RESTRICTED - COMMERCIAL
(when completed)

EUROPEAN COUNCIL DECISION 1999/280/EC

COMPANY REPORTING FORM C - PRICES PAID BY FINAL CONSUMERS OF PETROLEUM PRODUCTS

MONTHLY ASSESSMENT BY
(name of reporting company)

Prices as at: 15 January 2014

Price including duty
and taxes

Units

Motor Fuels

| | | |
|-------------------------------------|--|-------------|
| (1) Lead replacement fuel | | pence/litre |
| (2) Super unleaded | | pence/litre |
| (3) Ultra low sulphur petrol (ULSP) | | pence/litre |
| (5) Ultra low sulphur diesel (ULSD) | | pence/litre |
| (6) LPG (for use as a road fuel) | | pence/litre |

Domestic Heating Fuels

| | | | VAT incl. | VAT excl. |
|-----------------------------|--|-------------|-----------|-----------|
| (7) Gas Oil | | pence/litre | | |
| (8) Regular Kerosene (SGBO) | | pence/litre | | |
| (9) LPG (used for heating) | | pence/litre | | |

Industrial Fuels

| | | | | |
|------------------------------------------|--|-------------|--|--|
| (10) Heavy fuel oil, low sulphur (< 1%S) | | pence/litre | | |
|------------------------------------------|--|-------------|--|--|

For queries consult:-

Name

Tel No

Please return completed form to :-

Annex B: Example of EU Price data



EUROPEAN COMMISSION
Directorate-General for Energy

Prix à la consommation des produits pétroliers hors droits et taxes
Consumer prices of petroleum products net of duties and taxes
Verbraucherpreise für Mineralölzeugnisse ohne Abgaben und Steuern

Prix en vigueur au
Prices in force on
Preise geltend am

19/04/2010

| En/In EURO | | | | | |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| | Euro-super 95 (I) 1000L | Gas oil automobile Automotive gas oil Dieselkraftstoff (I) 1000L | Gas oil de chauffage Heating gas oil Heizöl (II) 1000L | Fuel oil - Schweres Heizöl (III) Soufre <= 1% Sulphur <= 1% Schwefel <= 1% t | Fuel oil - Schweres Heizöl (III) Soufre > 1% Sulphur > 1% Schwefel > 1% t |
| Austria | 535.74 | 554.65 | 530.33 | 399.00 | |
| Belgium | 592.22 | 601.58 | 530.11 | 368.82 | |
| Bulgaria | 522.04 | 528.68 | 526.64 | | 380.92 |
| Cyprus | 584.27 | 575.75 | 551.50 | 490.72 | |
| Czech Republic | 553.63 | 580.53 | 507.92 | 323.92 | |
| Denmark | 606.50 | 603.41 | 608.97 | 411.95 | |
| Estonia | 531.11 | 544.07 | 509.58 | | |
| Finland | 561.46 | 609.82 | 543.44 | | |
| France | 539.28 | 540.16 | 548.17 | 413.78 | |
| Germany | 547.18 | 560.69 | 528.85 | | |
| Greece | 577.24 | 635.94 | 547.65 | 444.21 | |
| Hungary | 552.44 | 566.80 | 566.80 | 377.91 | |
| Ireland | 493.00 | 509.31 | 654.35 | 307.55 | |
| Italy | 596.10 | 596.34 | 591.47 | 424.77 | |
| Latvia | 548.05 | 574.15 | 574.15 | | |
| Lithuania | 547.89 | 564.38 | 513.10 | | 356.10 |
| Luxembourg | 565.77 | 574.96 | 533.91 | | |
| Malta | 578.57 | 520.48 | 479.27 | 473.98 | |
| Netherlands | 555.73 | 543.81 | 443.28 | 362.94 | |
| Poland | 539.76 | 548.32 | 510.09 | 432.99 | 338.96 |
| Portugal | 587.05 | 610.59 | 558.64 | 500.77 | |
| Romania | 540.50 | 547.82 | 402.30 | 430.52 | |
| Slovakia | 541.80 | 558.89 | 560.00 | 350.00 | 343.36 |
| Slovenia | 529.82 | 523.50 | 488.00 | 408.00 | |
| Spain | 578.81 | 588.88 | 516.86 | 411.17 | |
| Sweden | 513.10 | 568.06 | 506.66 | 458.45 | |
| United Kingdom | 515.73 | 527.21 | 484.72 | | |
| EE/EC/EG EUR 27 (IV) Moyenne pondérée Weighted average Gewichteter Durchschnitt | 549.85 | 565.54 | 538.50 | 421.26 | 357.50 |
| EE/EC/EG Euro Area 16 (€) (V) Moyenne pondérée € Weighted average € Gewichteter Durchschnitt € | 561.11 | 571.68 | 539.18 | 420.84 | 343.36 |



EUROPEAN COMMISSION
Directorate-General for Energy

Prix en vigueur au
Prices in force on
Preise geltend am

Prix à la consommation des produits pétroliers droits et taxes compris
Consumer prices of petroleum products inclusive of duties and taxes
Verbraucherpreise für Mineralölerzeugnisse einschließlich Abgaben und Steuern

19/04/2010

| En/In EURO | | | | | |
|-------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| | Euro-super 95 (I) | Gas oil automobile Automotive gas oil Dieselkraftstoff (I) | Gasoil de chauffage Heating gas oil Heizöl (II) | Fuel oil - Schweres Heizöl (III) Sulfure <= 1% Sulphur <= 1% Schwefel <= 1% | Fuel oil - Schweres Heizöl (III) Sulfure > 1% Sulphur > 1% Schwefel > 1% |
| | 1000L | 1000L | 1000L | t | t |
| Austria | 1,225.00 | 1,129.00 | 767.41 | 466.70 | |
| Belgium | 1,459.00 | 1,171.00 | 663.80 | 383.82 | |
| Bulgaria | 1,046.73 | 1,002.56 | 1,000.10 | | 417.73 |
| Cyprus | 1,027.67 | 956.17 | 789.97 | 511.22 | |
| Czech Republic | 1,274.57 | 1,217.03 | 722.38 | 342.61 | |
| Denmark | 1,473.93 | 1,241.48 | 1,177.40 | 809.11 | |
| Estonia | 1,144.66 | 1,124.40 | 744.63 | | |
| Finland | 1,430.78 | 1,146.73 | 761.40 | | |
| France | 1,370.00 | 1,157.80 | 723.30 | 432.28 | |
| Germany | 1,430.00 | 1,227.00 | 702.34 | | |
| Greece | 1,450.00 | 1,245.00 | 698.00 | 470.23 | |
| Hungary | 1,271.54 | 1,182.22 | 1,182.22 | 406.17 | |
| Ireland | 1,278.00 | 1,184.00 | 819.14 | 342.78 | |
| Italy | 1,392.12 | 1,223.21 | 1,193.62 | 456.16 | |
| Latvia | 1,122.88 | 1,094.63 | 720.35 | | |
| Lithuania | 1,188.61 | 1,014.76 | 646.43 | | 371.16 |
| Luxembourg | 1,182.04 | 1,017.70 | 609.18 | | |
| Malta | 1,200.00 | 1,030.00 | 680.00 | 489.00 | |
| Netherlands | 1,518.00 | 1,168.00 | 830.00 | 396.00 | |
| Poland | 1,176.76 | 1,069.66 | 694.83 | 449.39 | 355.36 |
| Portugal | 1,404.00 | 1,170.00 | 823.00 | 516.07 | |
| Romania | 1,068.42 | 1,010.15 | 836.98 | 446.15 | |
| Slovakia | 1,257.00 | 1,103.00 | 697.99 | 376.55 | 369.91 |
| Slovenia | 1,204.00 | 1,125.00 | 711.00 | 474.02 | |
| Spain | 1,177.75 | 1,077.91 | 699.68 | 426.26 | |
| Sweden | 1,352.86 | 1,269.33 | 1,123.63 | 884.62 | |
| United Kingdom | 1,369.17 | 1,382.66 | 640.01 | | |
| CE/EC/EG EUR 27 (IV) Moyenne pondérée Weighted average Gewichteter Durchschnitt | 1,355.76 | 1,180.44 | 738.87 | 473.15 | 379.19 |
| CE/EC/EG Euro Area 16 (€) (V) Moyenne pondérée € Weighted average € Gewichteter Durchschnitt € | 1,381.15 | 1,165.94 | 728.43 | 443.28 | 369.91 |