



Department
of Energy &
Climate Change

Energy Prices

Iain MacLeay

May 2014

Contents

- Wholesale prices
- Domestic prices
- Power generation prices
- Industrial prices
- Petrol prices
- Data users

Quarterly Energy Prices



The screenshot shows the GOV.UK website interface. At the top, there is a black navigation bar with the GOV.UK logo on the left and a search bar. To the right of the search bar are links for Departments, Topics, Worldwide, How government works, Get involved, Policies, Publications, Consultations, Statistics (highlighted in green), and Announcements. Below the navigation bar, the page title 'Statistics' is followed by the main heading 'Quarterly Energy Prices: March 2014'. Underneath, there is a metadata section with the following information: Organisation: Department of Energy & Climate Change; Page history: Published 27 March 2014; Collections: Quarterly energy prices, + 4 others. A short description follows: 'Quarterly statistical publication.' Below this, under the 'Documents' section, there is a document card for 'Quarterly Energy Prices: March 2014'. The card includes a thumbnail image of the document cover, the reference number 'Ref: 14D/276A', the file size and page count 'PDF, 1.33MB, 88 pages', and a note: 'This file may not be suitable for users of assistive technology. Request a different format.'

GOV.UK

Search

Departments Topics Worldwide How government works Get involved
Policies Publications Consultations **Statistics** Announcements


Statistics

Quarterly Energy Prices: March 2014

Organisation: [Department of Energy & Climate Change](#)
Page history: [Published 27 March 2014](#)
Collections: [Quarterly energy prices](#), + 4 others

Quarterly statistical publication.

Documents

 **Quarterly Energy Prices: March 2014**

Ref: 14D/276A
PDF, 1.33MB, 88 pages

This file may not be suitable for users of assistive technology.
[Request a different format.](#)

<https://www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics>

Drivers of wholesale prices

Supply

- Production problems (maintenance, outages)
- Extreme weather events (hurricanes)
- Global markets - imports

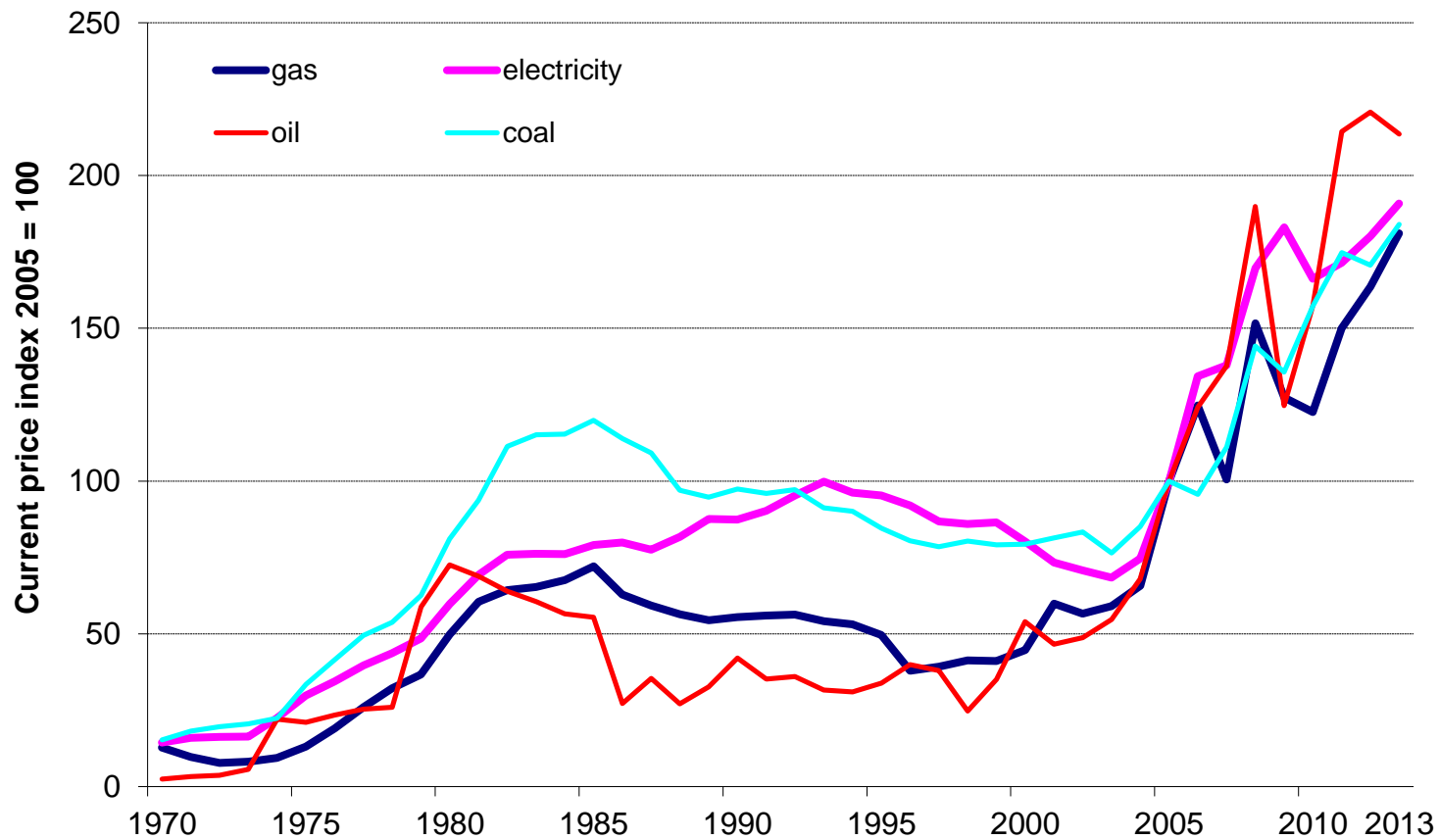
Demand

- China/developing countries
- Weather
- Credit crunch

Storage

- Low UK stores = price goes up

Wholesale prices



Domestic prices - headlines

Millions face 'eat or heat'
dilemma as energy bills soar

Daily Express, 11 October 2013

**Gas and electricity bills could rise by £140
before winter (despite energy companies
making £3.3bn profits since last election)**

Daily Mail, 10 August 2013

Annual Energy Bills 'To Rocket By 2020'

Sky News, 14 March 2014

More than 5m angry at energy giants: List
of gripes against big six revealed for the
first time

Metro, 14 February 2014

Data produced - Domestic prices

Fuel prices (CPI)

Gas, electricity, solid fuel, liquid fuel, motor fuel & oil

Source: ONS

Gas and electricity bills

By region, country, and home vs non-home supplier

Source: DECC – Domestic Fuel Inquiry

Customer numbers

Payment method splits, home vs non-home supplier splits

Source: DECC - Domestic Fuel Inquiry

Transfer statistics

Number of transfers of gas and electricity supplier in a given period

Source: Ofgem

Data for Eurostat

Data on volumes and values of gas and electricity sold to domestic consumers

Source: DECC – Price Transparency survey

Spend on energy

Total and average household spend on energy

Source: ONS – Consumer Trends

Domestic market history

- Gas – rolled out between April 1996 and May 1998
- Electricity – rolled out between September 1998 and May 1999
- 12 Local Distribution Zones (LDZ) regions for gas and 15 Public Electricity Supply (PES) regions for electricity
- Each PES originally had a different supplier
- Market integration has occurred – now the “Big 6” supply most gas and electricity in Great Britain
- Northern Ireland only recently opened up to competition

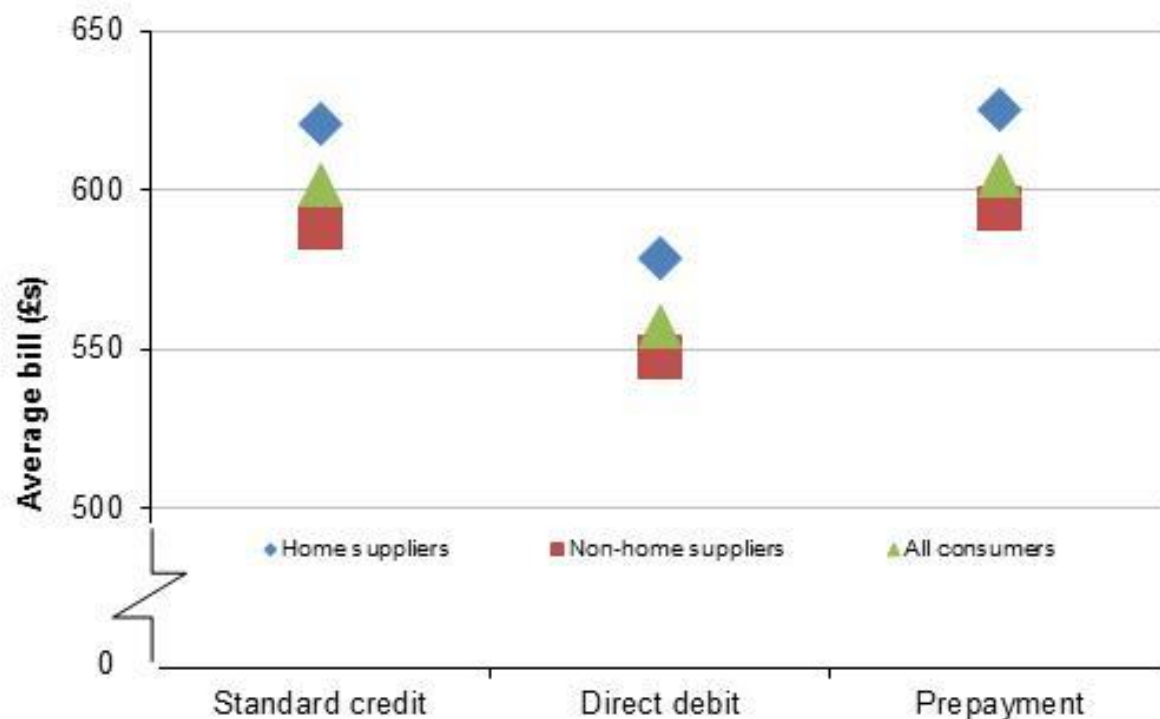
Domestic energy price components

- Wholesale price
- VAT / taxes
- Environmental costs
- Meter provision
- Transmission
- Distribution
- Margins / profits

Domestic Fuels Inquiry (DFI)

- Surveys the 7 largest energy suppliers in GB electricity and gas markets (around 95% market share): *British Gas, EDF, e.on, Npower, Scottish Power, SSE, Good Energy*
- Plus *Power NI* and *Phoenix Gas* for Northern Ireland
- Quarterly survey asking for tariff level data on prices and customer numbers.
- Not household level data
- Bills published annually – provisional bills in December, final bills in March
- Bills based on fixed assumptions of gas and electricity consumption:
15,000 kWh per year for gas and 3,800 kWh per year for electricity
- So bills are not sensitive to weather fluctuations

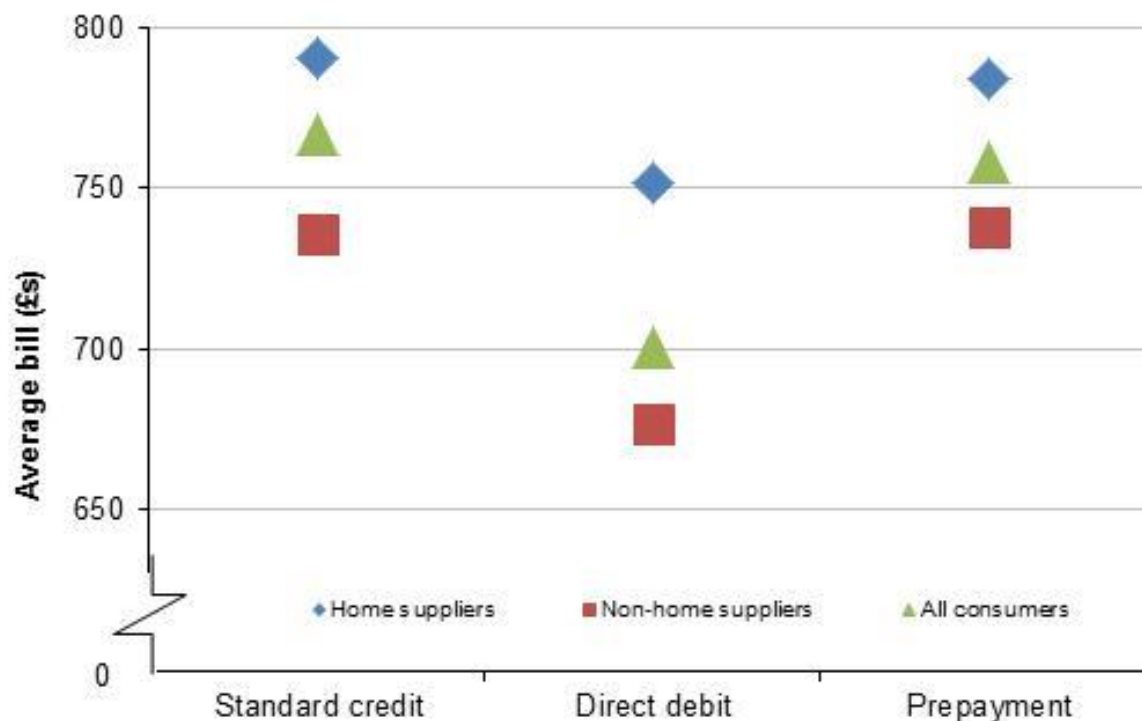
Bills – Electricity 2013



Average electricity bills up £35 on 2012

- Standard credit and pre-payment bills up £37 on 2012, Direct Debit bills up £36
- Standard credit consumers with a non-home supplier paid £33 less than customers who had not switched; Direct Debit and pre-payment customers saved £31

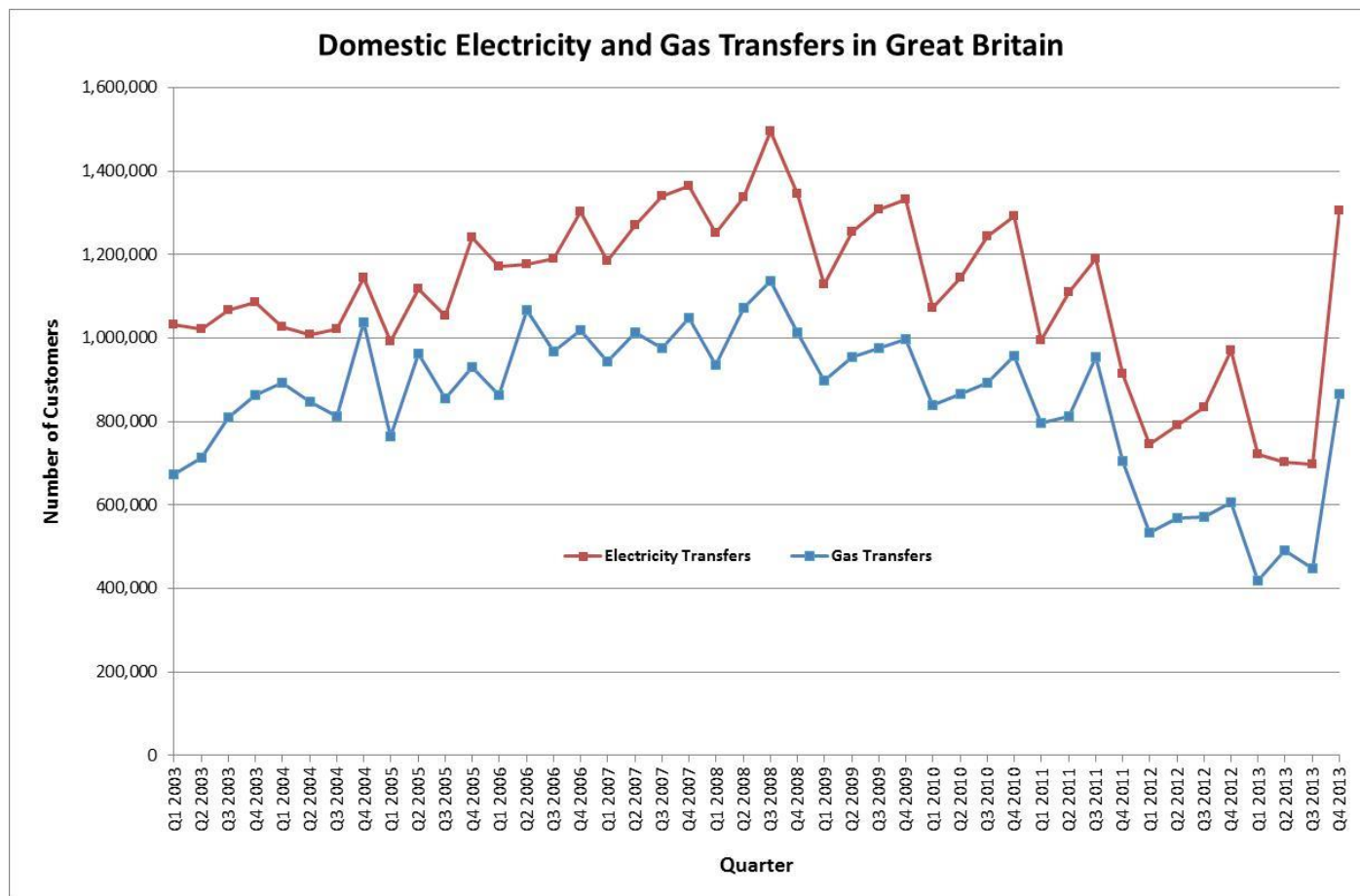
Bills – Gas 2013



Average gas bills up £43 on 2012

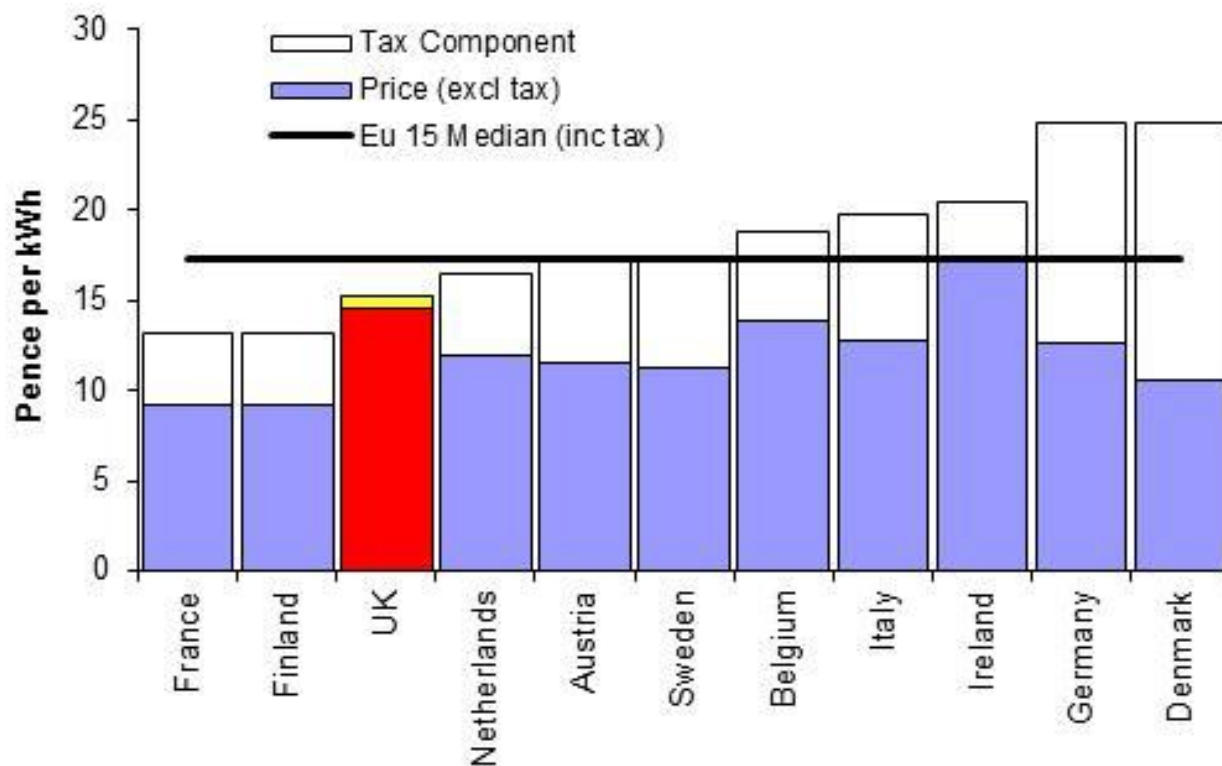
- Standard credit bills up £47, Direct Debit up £40 & pre-payment up £48
- Standard credit consumers with a non-home supplier paid £55 less than customers who had not switched; Direct Debit and pre-payment customers saved £75 and £46 respectively.

Transfers



- In Q4 2013, electricity transfers were at the highest level since 2009, up 34% on Q4 2012
- Gas transfers were at the highest level since 2011, up 43% on Q4 2012, but lowest annually

International comparisons – domestic electricity

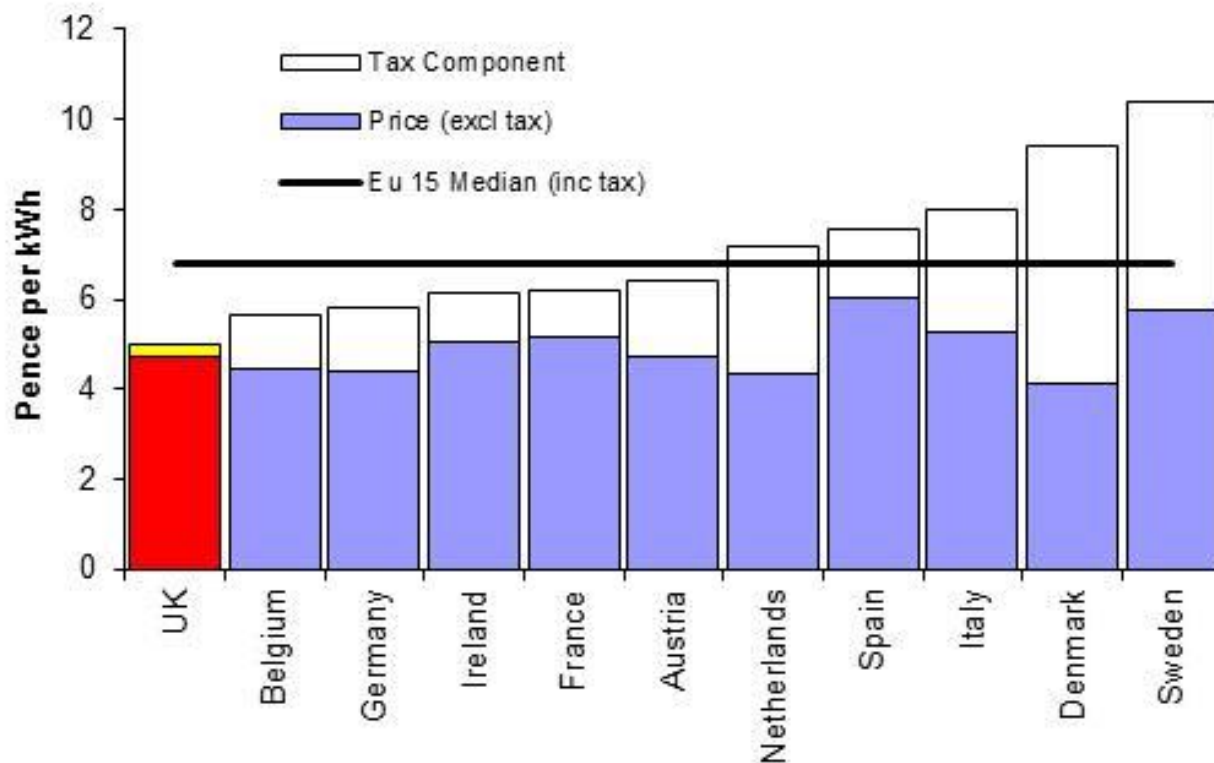


For July – December 2013, medium consumers including tax

- UK electricity prices 5th lowest in EU15, 12% below EU median

Not all countries had reported at time of publication

International comparisons – domestic gas



For July – December 2013, medium consumers including tax

- UK gas prices lowest in EU15, 4% lower than EU median

Not all countries had reported at time of publication

Industrial prices - headlines

Increase in energy prices wipes out company efficiency savings

Financial Times, 17 February 2014

British Gas reports dip in profits as energy costs rise

BBC, 24 February 2014

Britain orders anti-trust probe into energy suppliers

Reuters, 27 March 2014

CBI chief warns high energy costs 'a real danger to jobs'

BBC, 11 April 2014

Data produced - Industrial prices

Producer Price Indices (PPI)

Gas, electricity, coal, crude oil, petroleum products

Source: DECC – PPI survey (for ONS)

Quarterly Fuels Inquiry (QFI)

Prices of gas, electricity, coal, gas oil, heavy fuel oil purchased by manufacturing industry

Source: DECC – QFI survey (run by ONS)

Generators Survey

Prices of input fuels used for power generation – gas, coal, oil

Source: DECC – GQ survey

Data for Eurostat

Data on volumes and values of gas and electricity sold to non-domestic consumers

Source: DECC – Price Transparency survey

Energy Price Indices

Indices of industrial prices – electricity, gas, coal, heavy fuel oil

Source: DECC

Key Policy Interests

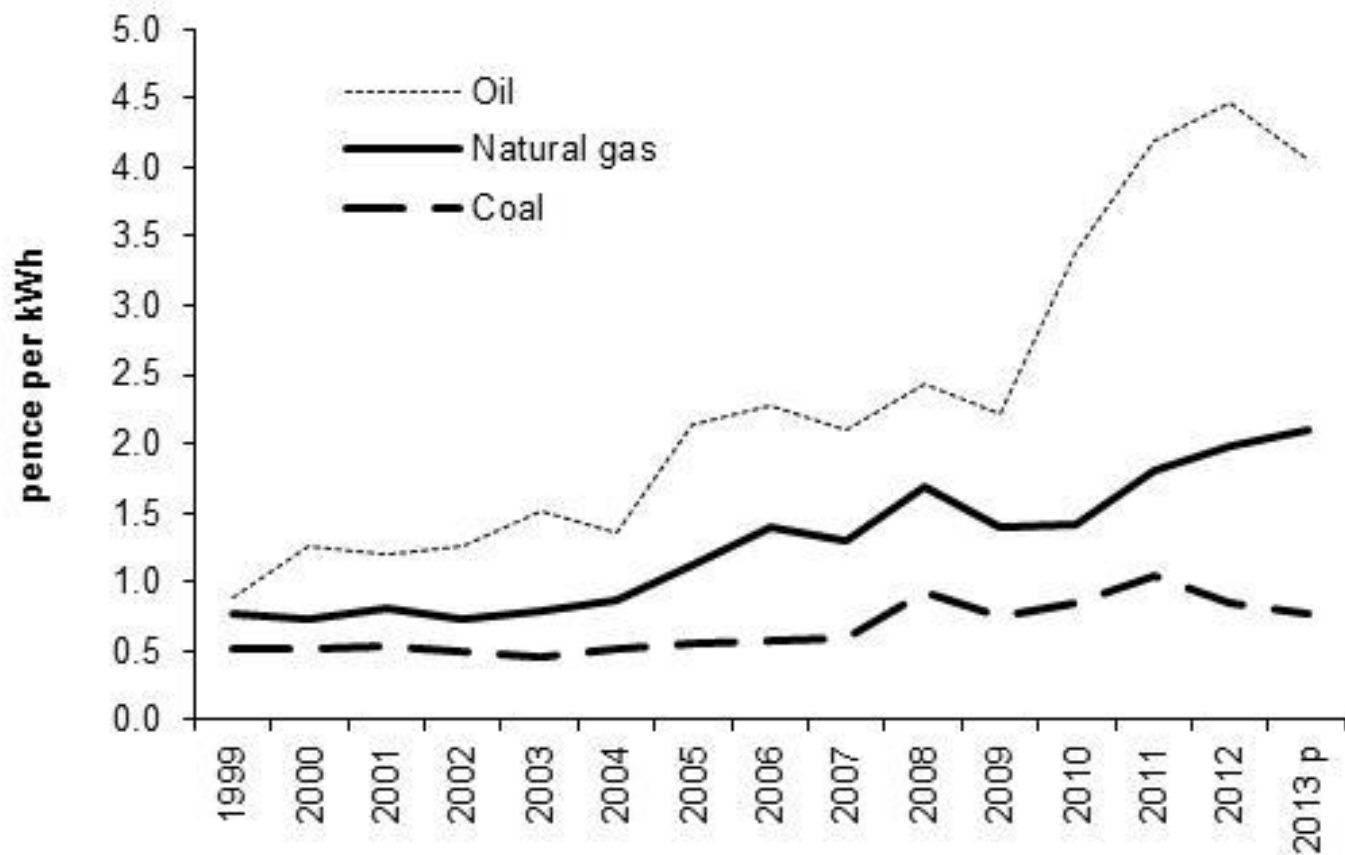
- Potential savings from switching supplier and/or payment method
- Number of consumers switching supplier
- Trends in fuel prices and bills over time
- Market share of the 'big 6' suppliers/small suppliers & new entrants
- Number of tariffs available to customers

Statisticians attend fortnightly meetings with the policy team to discuss these issues.

Generators Survey (GQ)

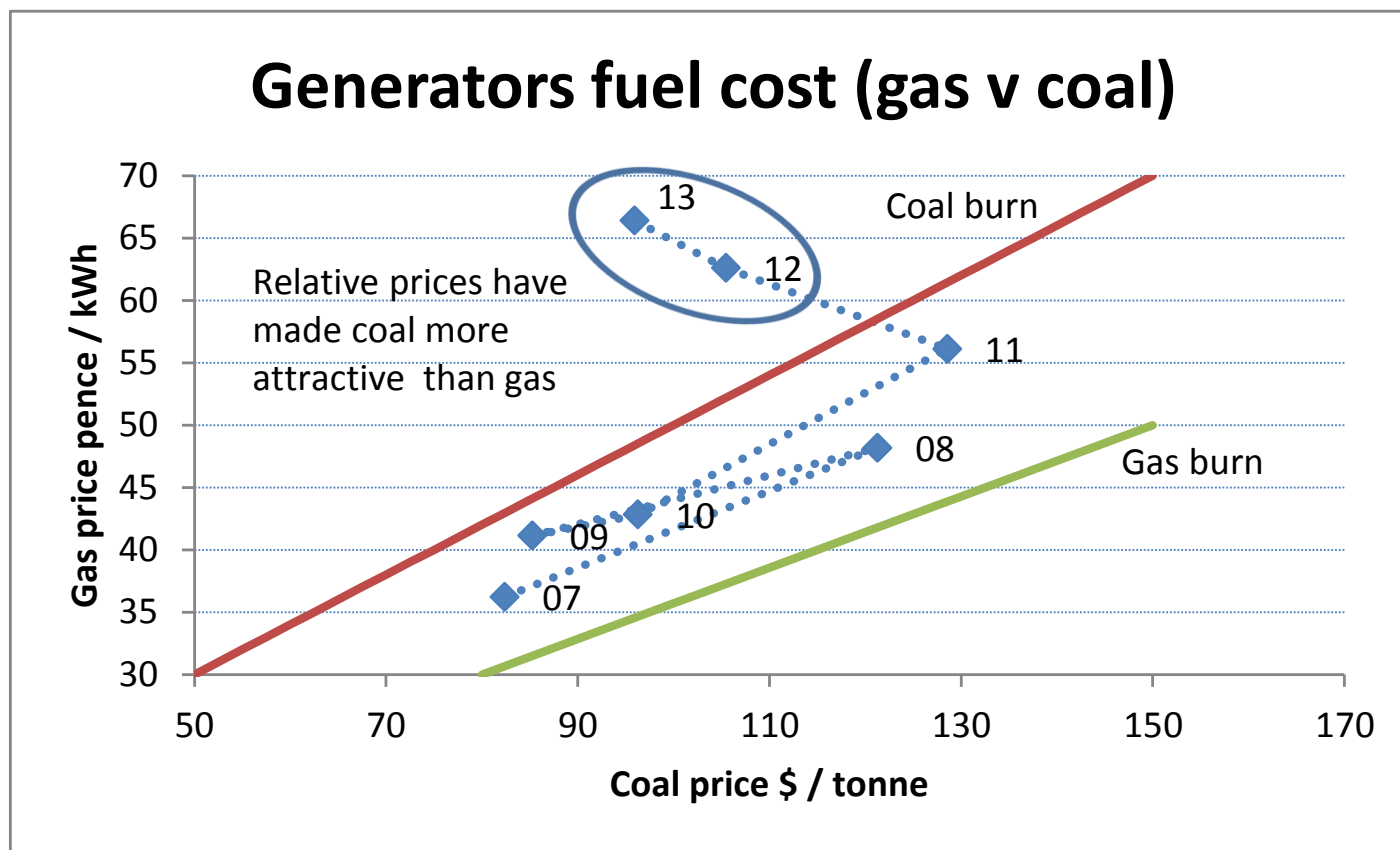
- Quarterly survey of around 20 major electricity generators
- Survey covers gas, coal and oil
- Survey collects data on how much fuel was purchased and the value of the purchase, from which average price derived
- Data published quarterly, and quarterly data combined to produce annual data.

Power generation prices



- In 2013, coal and oil prices fell 9% in real terms
- Gas prices in 2013 rose 6% in real terms to reach a new high

Coal/gas burn

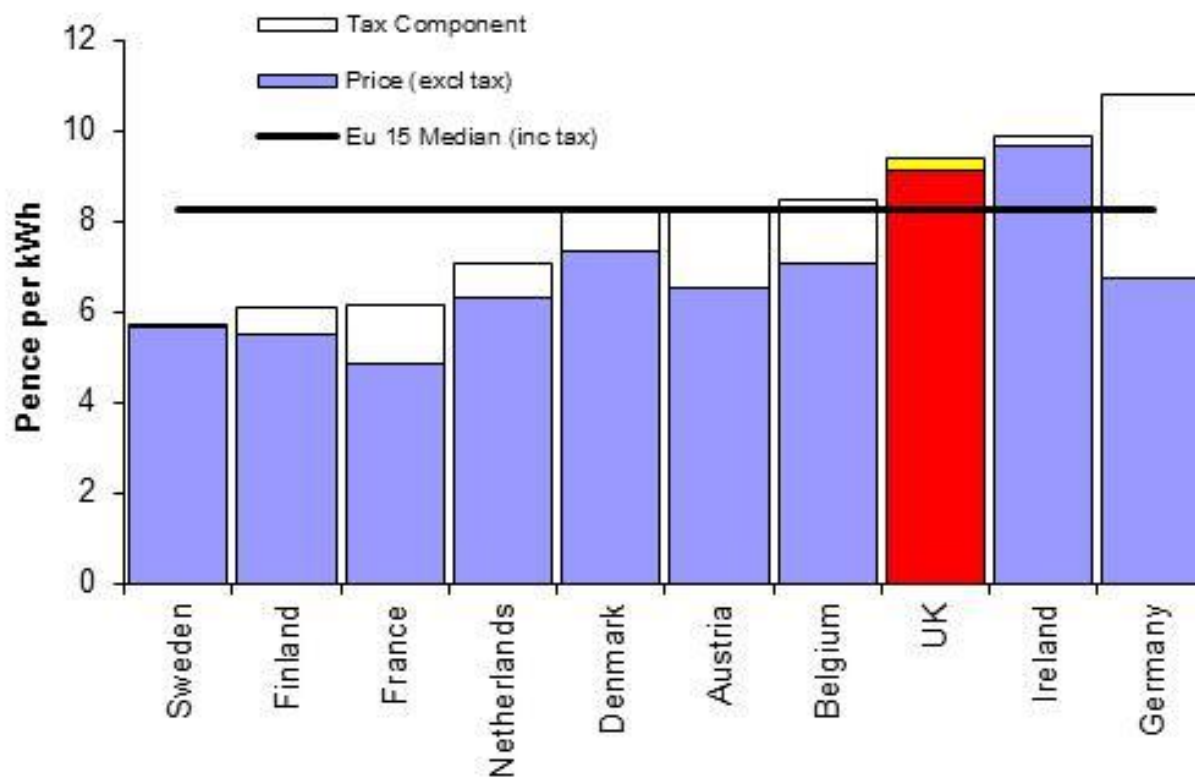


- Relative coal and gas prices in 2012 and 2013 have made coal more cost-efficient as a generation fuel

Price Transparency

- Data required by Eurostat directive
- Results required biannually by Eurostat - DECC carry out survey quarterly
- Sent to main energy suppliers to industry (not just the Big 6)
- Covers all non-domestic customers (tricky for companies to break out just industrial users)
- Split by consumption of customer supplied
- Report total volume and value of sales to derive average price per size band

International comparisons – non-domestic electricity

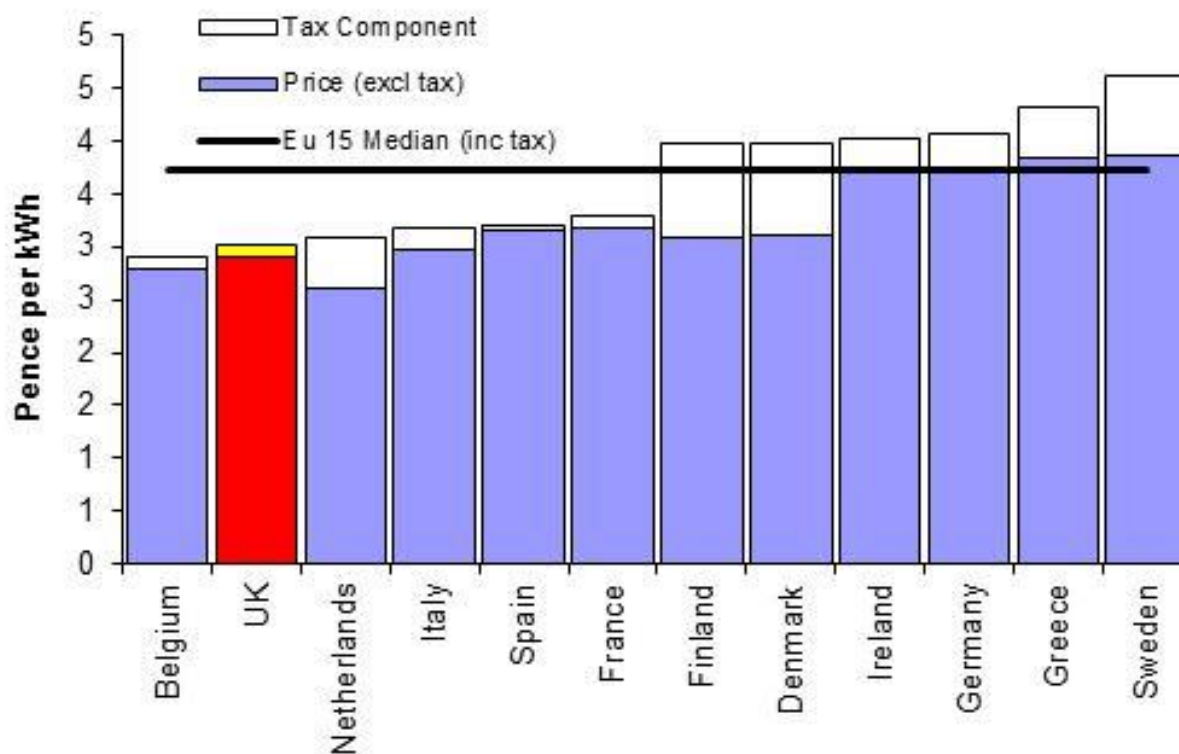


For July – December 2013, medium consumers including tax

- UK electricity prices fourth highest in EU15, 14% above EU median

Not all countries had reported by time of publication

International comparisons – non-domestic gas



For July – December 2013, medium consumers including tax

- UK gas prices second lowest in EU15, 19% below EU median

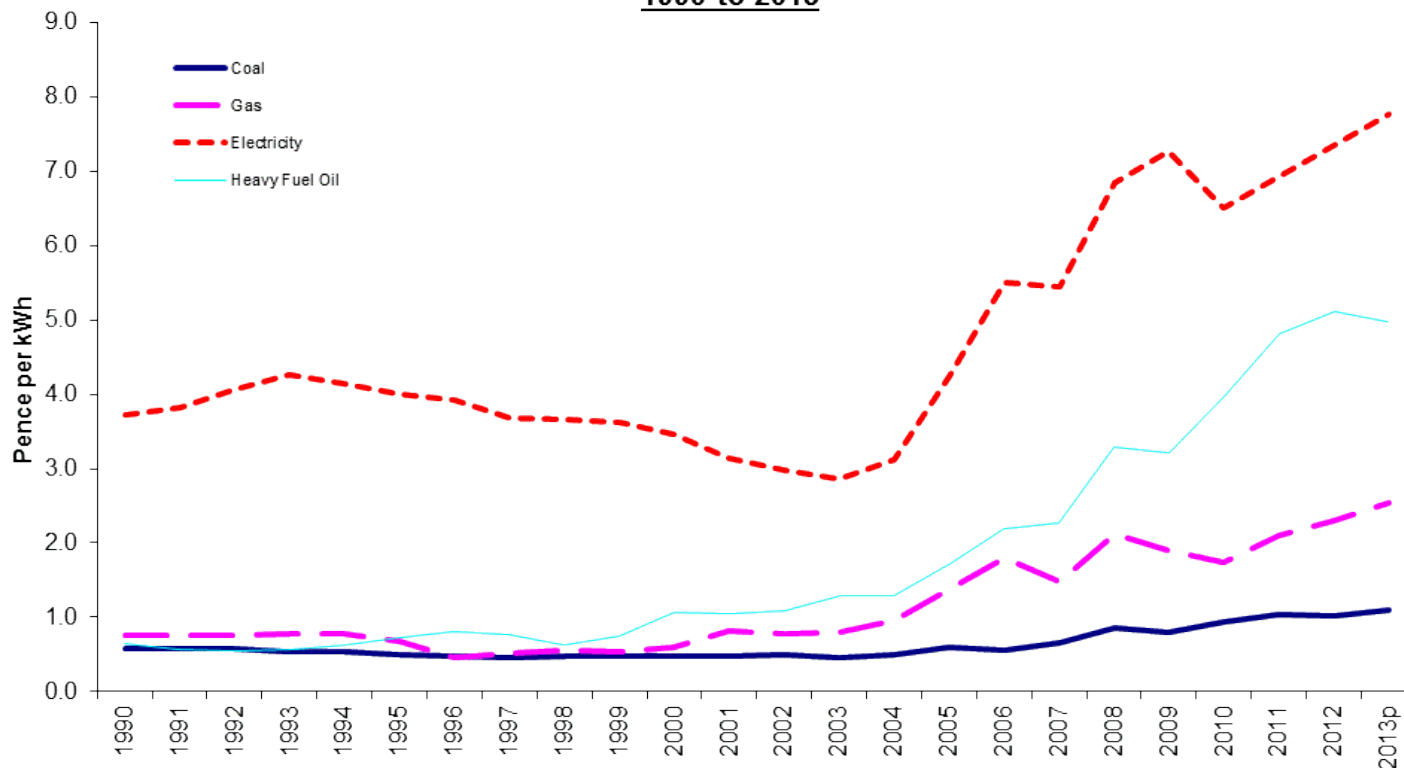
Not all countries had reported by time of publication

QFI

- Run for DECC by the ONS
- Designed to get representative market prices for fuels used by industry
- Covers gas, electricity, heavy fuel oil & gas oil
- Panel of 600 manufacturers
- Voluntary – approx 90% response rate
- Stratified by consumption size bands
- Provisional data 3 months in arrears, final data 6 months in arrears
- Widely used for price uplifts in contracts by industry
- Millions of pounds rest on DECC QFI data
- Long time series available – quarterly data back to 1989

2013 annual prices - manufacturing

Chart of Fuel Prices for Manufacturing Industry, Cash Terms,
1990 to 2013



- Gas, electricity and coal prices at record levels in current terms
- Heavy fuel oil and gas oil prices slightly lower than record levels in 2012

PPI

- Producer prices published monthly by ONS (factory gate prices)
- Measures both input and output prices
- Early warning of inflationary pressures in the economy
- DECC collect energy volumes, values and prices and supply to ONS
- Covers gas (7 forms), electricity (11), crude oil (6) & petroleum products (5) including AVTUR (aviation turbine fuel)
- For coal use data from other DECC inquiries
- Compulsory inquiry – under Statistics of Trade Act (1947)

Petrol prices

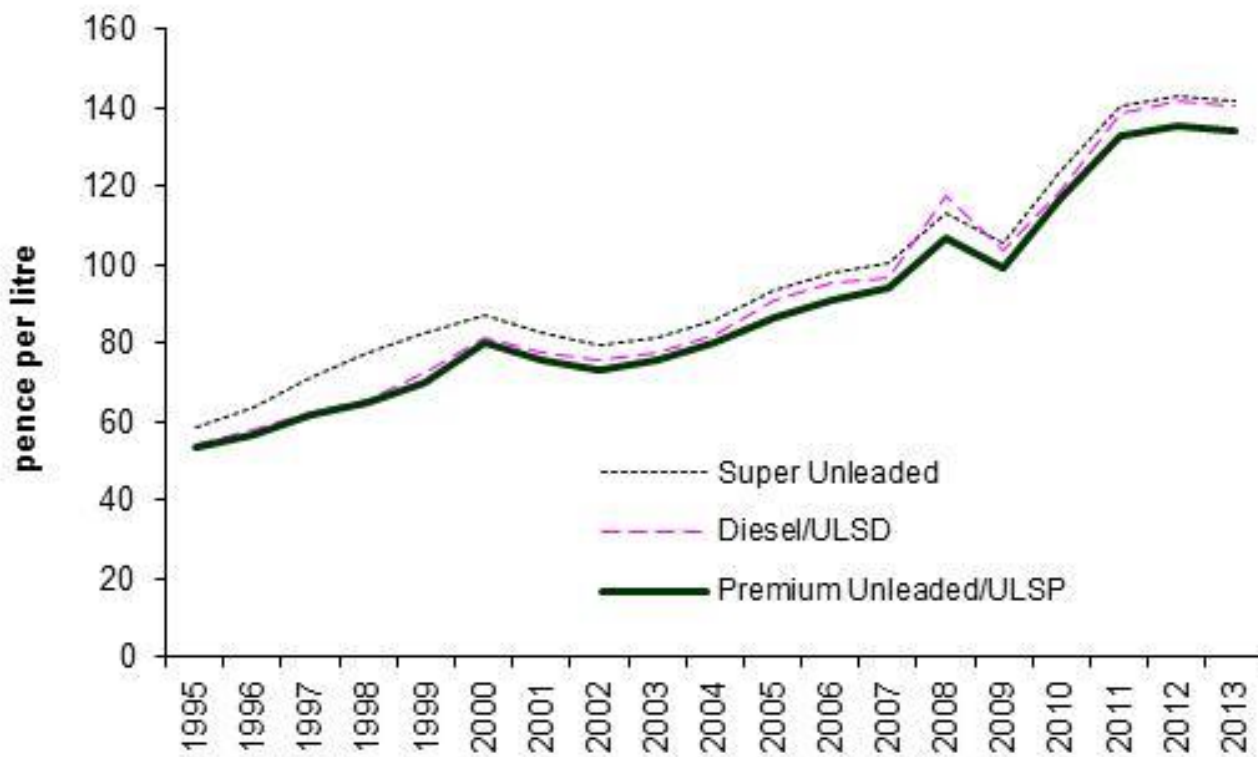
Monthly Petroleum Products survey

- Monthly and annual survey of volume and value of petroleum products
- Sample oil refiners
- Products include
 - Road fuels
 - Kerosene (burning oil)
 - Gas oil

Weekly Prices survey

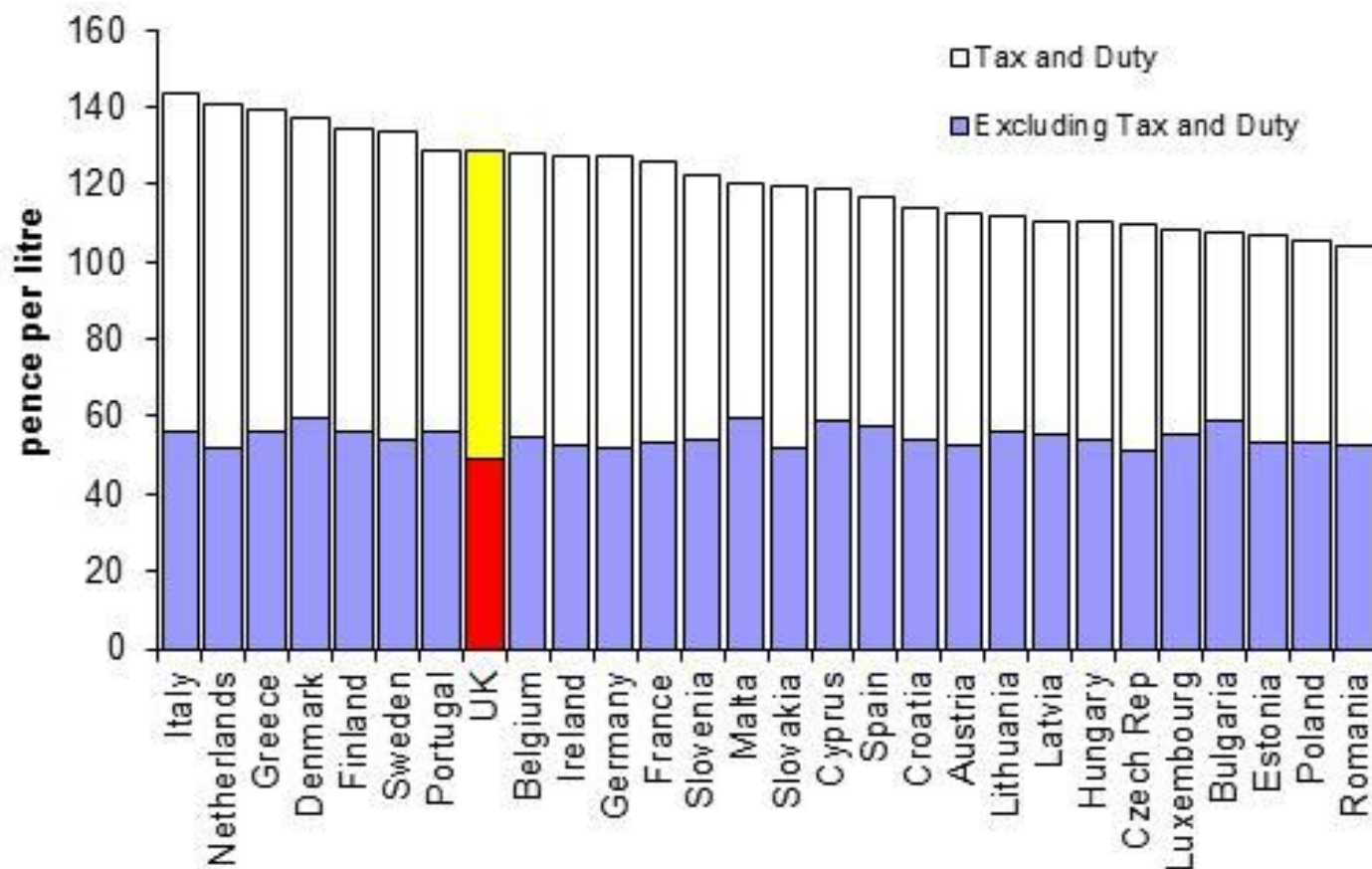
- Seven companies e-mail or phone in with data – each Monday
- Supply data under EU directive
- Results are supplied to Eurostat, DECC energy colleagues, ONS, Bank of England, HMRC, etc.
- Published on the web site 9:30am every Tuesday morning
- Probably the most timely National Statistic produced

Petrol prices



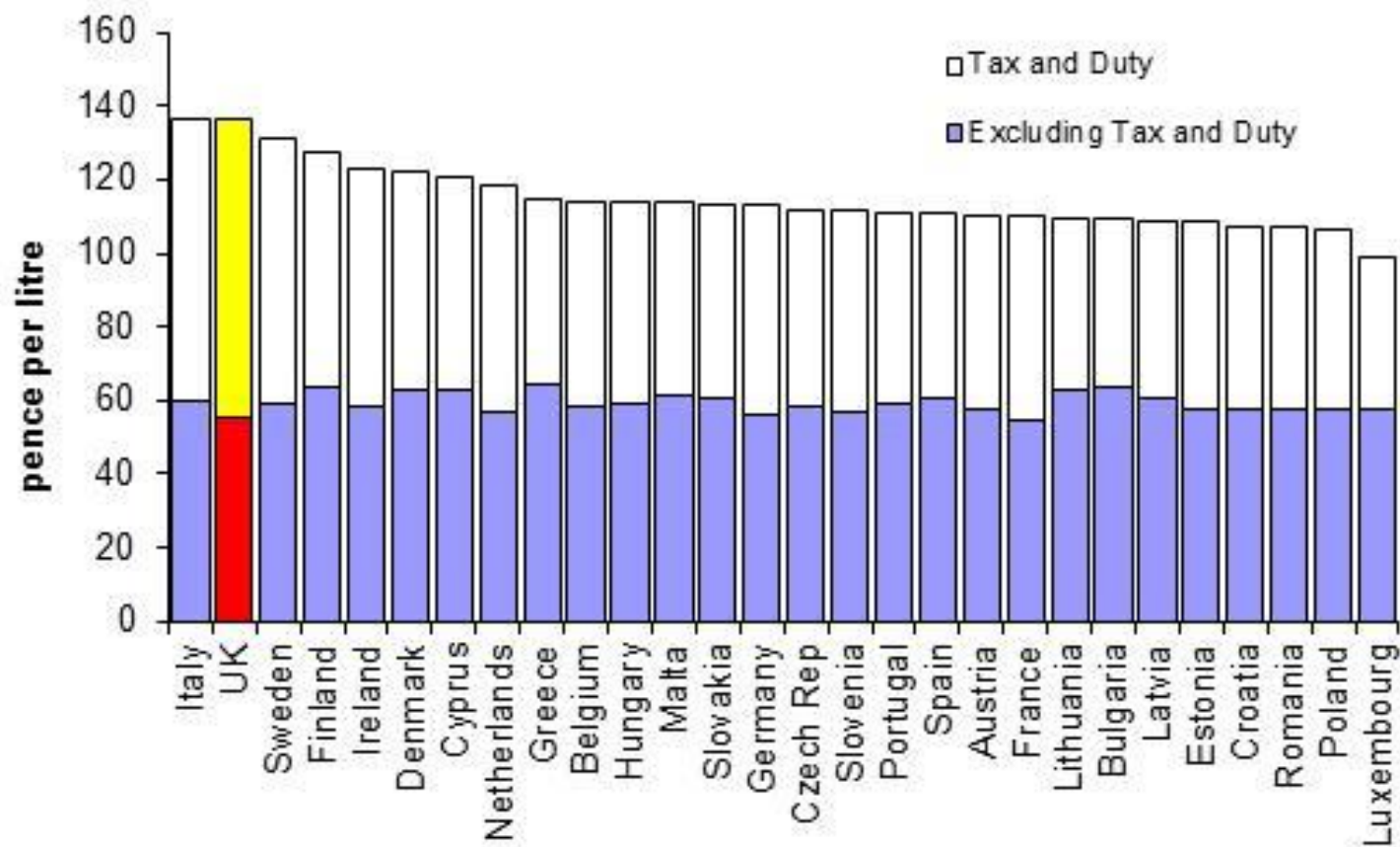
- In March 2014, prices of petrol & diesel around 6% lower than previous year
- In 2014, prices of petrol & diesel around 1% lower than 2013

International comparisons - petrol prices



- In March 2014, UK petrol prices 8th highest in EU

International comparisons - diesel prices



- In March 2014, UK diesel prices 2nd highest in EU

Data users

- DECC and other Government departments (eg as base price assumptions used in modelling price projections, to analyse potential price impacts of future policy, or as background to tools such as the 2050 calculator)
- by academics and students (queries have included data for research looking into the effects of the Climate Change Levy)
- by industry (eg in cost escalation clauses as a measure of price inflation; in contract negotiations as an indication of current price levels; and as evidence in disputes over historic charges)
- by business consultants (eg when estimating potential savings to business from switching fuel, introducing efficiency measures, or installing renewable micro-generation)
- DECC is obligated to submit data, including petrol prices, the price transparency, and certain oil statistics, to Eurostat and to the IEA which is then published by these organisations.

Conclusions/Issues

Conclusions

- Energy Prices are a key resource for the Department and wider
- Prices are a key link to energy policy challenges including tackling fuel poverty
- But also have some difficult statistical challenges
 - Demand for more information more quickly
 - Can we collect data more efficiently (i.e. more cheaply)

Issues

- wholesale prices
- Renewables
- subsidies/taxes