

Research and Library Service Briefing Note

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Fuel Prices

1 Introduction

The following paper provides comparative detail on current fuel prices and how these prices are determined in different regions – Northern Ireland, Great Britain and the Republic of Ireland.

Road fuel and home heating oil prices are both investigated. The level of detail available on home heating oil pricing is limited. Certain data in this paper should be read as indicative only.

The paper is intended to complement NIAR paper 210-10 *Major Fuel Suppliers in Northern Ireland.*

2 Pump prices

2.1 Average pump prices May 2010

The AA Fuel Report for May 2010 outlines average pump prices in Northern Ireland, UK and the Republic of Ireland. These are set out in Table 1, all prices are in pence per litre (ppl).ⁱ

Based on these figures, during May, the difference in average pump price between Northern Ireland and the Republic of Ireland was:

- Unleaded Northern Ireland price was 8.99ppl higher; and
- Diesel Northern Ireland price was 19ppl higher.

There is greater correlation between Northern Ireland and the rest of the UK:

- Unleaded Northern Ireland price was 0.6ppl higher; and
- Diesel Northern Ireland price was 0.8ppl higher.

Table 1: AA Fuel report May 2010 – Average pump price NI, UK and ROI (ppl)

	NI	UK	ROI	Difference NI & UK	Difference NI & ROI
Unleaded (ppl)	122.1	121.5	113.11	0.6	8.99
Diesel (ppl)	123.7	122.9	104.7	0.8	19

2.1 Pump price determination

The price a consumer pays for fuel at the pump is made up of three elements:

- Government fuel duty and VAT;
- The cost of petrol and diesel on the open market; and
- The costs and profit of the wholesaler.ⁱⁱ

2.1a UK

In 2009, the average pump price was 100p, of which 67.45% went to the government, 27.43% on the cost of the product and 5.12% on retailer/wholesaler costs and profits.ⁱⁱⁱ

Government excise duty on petrol and diesel is currently set a 57.19ppl (an increase of 1.7% on pre April 2010 prices), although this is set to increase to 58.19ppl on 1 October 2010 (an increase of 1.7%, subject to the outcome of the budget 22 June 2010) and 58.95ppl on 1 January 2011 (a 1.2% increase, subject to the forthcoming budget).^{iv}

Throughout 2009 VAT was set at the reduced rate of 15%, this has since returned to 17.5% (from 1 January 2010).

The cost of the product on the open market is based upon the market price of crude oil, the internationally traded price of petrol and diesel, and the dollar to sterling exchange rate. Figures 1 and 2 plots the historical price (excluding duty and VAT) of crude oil, petrol/diesel and pump prices throughout the period 2006 to 2009, in both figures there are occasions where the price of petrol and diesel move independently of crude price, although, the difference is more marked with petrol prices.^v

The final wholesaler/retailer element of cost consists of:

- transport cost to storage and distribution to filling stations;
- operating costs (filling station running costs and staff); and
- marketing and promotion cost.^{vi}

Wholesale/retailer costs are influenced by market conditions. Since 1993 fuel retailing has increasingly become a low margin business. Profit which is determined by the level of final pump price with the above costs deducted. Retailer pricing decisions are affected by a number of factors – wholesale prices, and local and national market conditions.

Over the last eight years, the UK market has become increasingly competitive, reflecting in part the growth of supermarket market share (from 11% in 1992 to 40% in 2008). Within the market, petrol price competition has become *'particularly fierce because of [a] ready availability of supply from within the UK or from the near continent, which means that barriers for entry into the market are low'.* Conversely, increased demand, restrained supply and greater competition from other sources (aviation fuel and heating oil) has led to increased seasonal variation in the price of diesel.^{vii}

2.1b Republic of Ireland

In the Republic of Ireland tax on fuel is the largest proponent of final price. As of April 2009, excise duty on petrol was 50.88 cent per litre (cpl) (equivalent to 42.51ppl 16/06/2010) and on diesel it was 40.93ccl (equivalent to 34.20ppl 16/06/2010). The National Oil Reserve Agency (NORA) imposed a levy of 2ccl on both fuel types. In addition, a carbon tax was introduced in December 2009, adding an additional 4.18cpl to the price of petrol (equivalent to 3.49ppl 16/06/2010) and 4.86cpl to the price of diesel (equivalent to 4.06ppl 16/06/2010). Both of these were subsequently reduced by 0.02ccl in January 2010. VAT rates in the Republic of Ireland stand at 21%, reduced from 21.5% in January 2010. VAT is paid on carbon tax which accounts for the 0.02ccl decrease in carbon tax rate during January. Excluding its contribution to carbon tax, VAT accounts for approximately 23.33cpl (equivalent to 19.49ppl 16/06/2010) on petrol (based on a pre tax price of 57.35cpl). The combination of the above taxes increased a pre tax price of petrol from 54.75cpl to 134.4cpl and a pre tax price of diesel from 57.35cpl to 125.5cpl.^{viii}

2.1c Comparative figures

Figure 3 provides a visualisation of pump price breakdown of UK petrol based on an 119.9ppl final price. Figure 4 provides the same information for diesel at a final price of 120.9ppl. Table 1 presents a breakdown of Republic of Ireland pump price for both petrol and diesel, based on a 133.9cpl and 124.9cpl final price respectively. In each case it is evident that the largest contribution to final cost is government taxation.

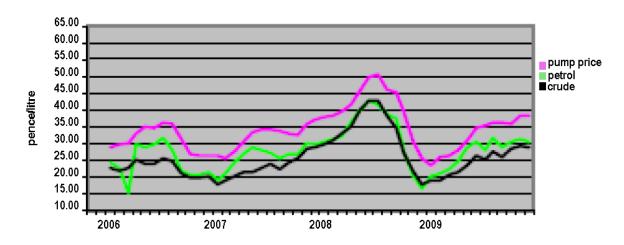


Figure 1: Crude, petrol, pump prices (2006-2009)

Figure 2: Crude, diesel, pump price (2009-2009)

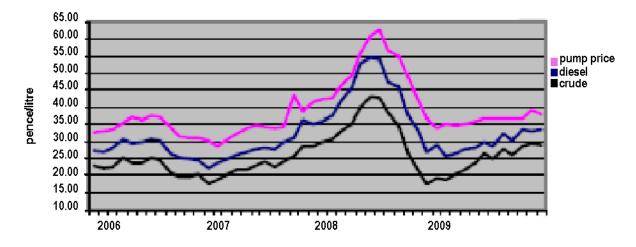
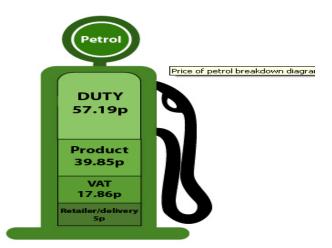


Figure 3: Breakdown of UK petrol pump price, based on final price of 119.9ppl^{ix}



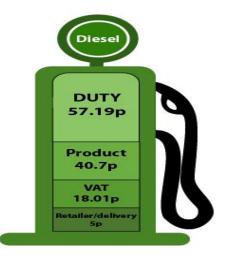


Figure 4: Breakdown of UK diesel pump price, based on final price of 120.9ppl^x



	Petrol (cpl)	Diesel (cpl)
Current average price	133.9	124.9
Current VAT	23.69	22.1
Fixed duty*	56.48	47.02
Government take	80.17	69.12
Cost before tax &duty	53.73	55.78
Retailer & distributor margin (est.)	11	11
Base petrol price (est.)	42.73	44.78

*Includes Excise, Carbon Tax and NORA levy.

3 Home heating oil prices

3.1 Home heating oil prices

Data on home heating oil is limited. The Consumer Council NI does, however, track home heating oil prices, measuring the cheapest, dearest and average oil prices around Northern Ireland every Monday, Wednesday and Friday.

Table 2, present the average yearly total price and ppl for different volumes during 2010 (up to and including 16 June 2010). As would be expected the ppl decreases the larger the volume of oil purchased – at 300L the ppl is 51.88, at 900L the ppl is 44.37, a difference of 7.15ppl.^{xii}

Figures 5 plots the average price of oil on the specific dates it was recorded by the Consumer Council, the three lines respond to different volumes of oil. Figure 6 presents similar information, although it plots average ppl rather than total price. In both figures there are noticeable peaks in price during January, February, March and May, with price entering a period of decline around the 5 May 2010.^{xiii}

Consumer agencies in the UK and Rol do not record equivalent information. Correspondence with these agencies suggests that such data is not held by any central body. For this reason it has been necessary to rely on price comparison sites to collate similar information. Figures 7^{xiv} and 8^{xv}, sourced from the UK and Rol 'Boiler juice' websites, show variation in average price of 1000L over a six month period, beginning the 16 December 2010. Comparing the figures, which start a month prior to the corresponding graph for Northern Ireland, we again see price peaks in January, February, April and May. It is notable that, the UK's average price peaked at a much higher rate in January than the Rol.

The data provided by 'Boiler Juice' is not presented in tabular form; as such it is not possible to calculate an average ppl for the period covered. To achieve broadly comparable information it is necessary to calculate ppl based on average prices on a specific date (16/06/2010), again sourcing UK and RoI data from price comparison sites. This information is presented in Table 3 (figures of the RoI have been converted to sterling based on the exchange rate c. $16/06/2010 - \epsilon 1 = \pm 0.8355^{xvi}$). The table shows, of the three regions, Northern Ireland had the lowest total and ppl price on that particular date. These figures purely indicative and do not account for daily price fluctuations. They are also representative of a period of relative price lows rather than a price peak.

Table 2: Northern Ireland home heating oil price 2010 – average total price and averageppl

_	Average total price			Average ppl		
	300L	500L	900L	300L	500L	900L
	155.64	233.01	402.56	51.88	46.60	44.73

Table 3: UK, NI & Rol home heating oil price 16 June 2010 – average total price and ppl

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	Average total price 500L	Average ppl 500L
NI*	233.49	46.70
UK**	244.93	49.00
Rol*** *data sourced from Const	295.18 umer Council NI Oil price survey	59.07

**data source from http://www.oilpricecheck.co.uk/latest.htm

*** data sourced from http://www.cheapestoil.ie based on average of 55 suppliers across the region

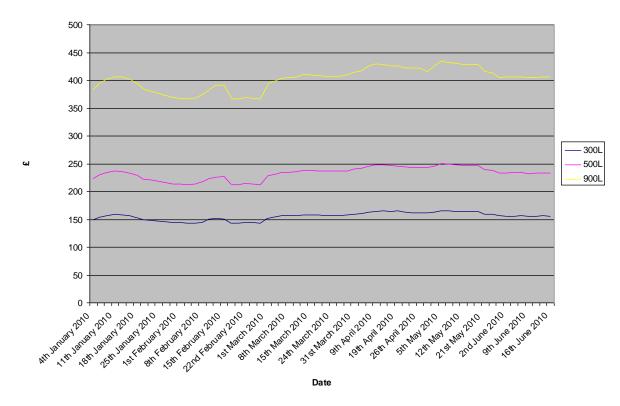
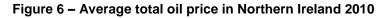


Figure 5 – Average total oil price in Northern Ireland 2010



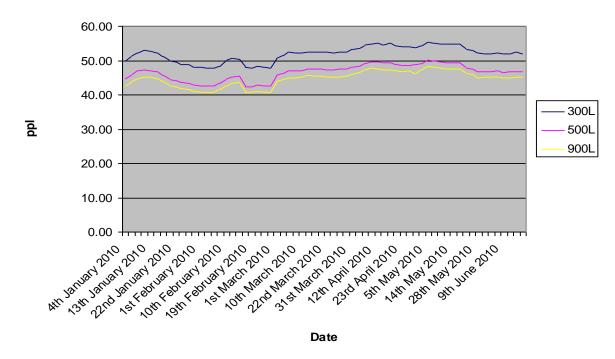
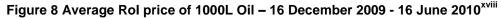




Figure 7: Average UK price of 1000L Oil – 16 December 2009 - 16 June 2010^{xvii}





3.2 Home heating oil price determination

With regard to the factors determining the price consumers pay for home heating oil, again detailed information is not readily available. However, the following overview of price determination in the UK is available:

- Price paid by refinery as determined by Platts;
- Price paid by the supplier to refinery approximately 2ppl higher than Platts;
- Cost of running the back office, including staff cost, office lease, rates, advertising and infrastructure – up to 3ppl;

- Cost of fuel delivery approximately 5ppl;
- VAT paid by supplier;
- VAT paid by customer;
- Profit made by supplier.xix

During winter it is often difficult to get heating oil to depots, during such periods *'the price is sometimes increased dramatically purely to stop any further sales'.*^{xx}

Transport costs are also variable. Increases in fuel duty and VAT for petrol and diesel impact supplier transport costs and are likely to drive up the price paid by the consumer.

The above overview does not outline fuel duty. In HM Revenue and Customs terminology home heating oil falls under the broad category of 'Fuel Oils', defined as:

The heavy oils from the refining process; used as fuel in furnaces and boilers of power stations, industry, in domestic and industrial heating, ships, locomotives, metallurgic operations, and industrial power plants etc.^{xxi}

Prior to the 2010 budget duty on fuel oil was 10.37ppl (see Annex 1). The budget increased this by 0.18pp to 10.55ppl as of April 1, 2010. The 2010 budget also outlined future increases: an increase of 0.19ppl on 1 October 2010, bringing the duty to 10.74ppl; and an increase of 0.14ppl on 1 January 2011, bringing the duty to 10.88ppl. These planned increases are subject to the outcome of the Budget due on 22 June 2010.^{xxii}

In the Republic of Ireland the excise duty on Fuel oil is €60.73 per 1,000 litres or 6.07cpl (5.07ppl 16/06/2010).^{xxiii} Carbon tax was levied on home heating oil from 26 April 2010 onwards. This caused average home heating oil prices to rise by €50 per 1,000 litres, or 5cpl (equivalent to 4.78ppl 16/06/2010).^{xxiv} As is the case with petrol and diesel, home heating oil is subject to 2cpl levy payable to NORA.^{xxv}

4 The role of currency fluctuations

During the summer of 2008 petrol prices hit 120ppl, which was attributed to significant increases in the per barrel price of oil. The per barrel price of oil hit \$147 during this period. When petrol price hit similar levels this year, the price of oil was approximately \$80 per barrel (March 2010). In the case of 2010, it has been the price of the dollar, rather than the price of a barrel of oil that has lead to increased petrol and diesel prices. During 2008 £1 could buy approximately \$2. During 2010 this had fallen £1 to around \$1.5. Therefore, the high price of petrol during 2010, is, in part, the result of a chain of events, as follows: a stronger dollar results in oil being more expensive for holders of other currencies, this leads to an increase in wholesale petrol price as refineries pass cost down the supply chain, and an increase in the retail price of petrol as wholesalers pass cost on to retailers, with the ultimate upshot of the consumer paying more.^{xxvi}

Product	Previous rate (ppl)	On or after 1 April 2010 (ppl)	On or after 1 Oct 2010 (ppl)	On or after 1 Jan 2011 (ppl)
Unleaded petrol	56.19	57.19	58.19	58.95
Heavy oil (diesel)	56.19	57.19	58.19	58.95
Light oil (other than unleaded petrol or aviation gasoline)	65.91	66.97	67.91	68.67
Aviation gasoline	34.57	38.35	-	-
Light oil delivered to an approved person for use as furnace oil	10.37	10.55	10.74	10.88
Marked gas oil	10.80	10.99	11.18	11.33
Fuel oil*	10.37	10.55	10.74	10.88
Heavy oil other than fuel oil, gas oil or kerosene used as fuel	10.37	10.55	10.74	10.88
Kerosene to be used as motor fuel off-road or in an expected vehicle	10.80	10.99	11.18	11.33
Biodiesel for non-road use	10.80	10.99	11.18	11.33
Biodiesel blended with gas oil for non-road use	10.80	10.99	11.18	11.33
Biodiesel	36.19	57.19	58.19	58.95
Bioethanol	36.19	57.19	58.19	58.95
Road fuel natural gas (NG), including biogas	22.16	23.60	25.05	26.15
Road fuel gas other than NG - e.g. liquefied petroleum gas (LPG)	27.67	30.53	31.95	33.04

Annex 1: Hydrocarbon oils – duty rates (p/l)

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ⁱ AA *May fuel price report* (May 2010) <u>http://www.theaa.com/onlinenews/allaboutcars/fuel/2010/may2010.pdf</u> (accessed 15/06/2010)

ⁱⁱ UK Petrol Industry Association Understanding pump prices (March 2010) http://www.ukpia.com/Portals/0/Repository/Documents/UKPIA%20Briefing%20Understanding%20Pump%20P rices%20year%202009.pdf (accessed 15/06/2010)

^v UK Petrol Industry Association *Understanding pump prices* (March 2010)

ⁱⁱⁱ Ibid

^{iv} HM Revenue and Customs *Hydrocarbon Oils: Duty Rates*, 24 March 2010 (BN58)

http://www.ukpia.com/Portals/0/Repository/Documents/UKPIA%20Briefing%20Understanding%20Pump%20P rices%20year%202009.pdf (accessed 15/06/2010)

^{vi} Ibid

^{vii} Ibid

viii Irish Petroleum Industry Association What determines pump prices (May 2010)

http://www.ipia.ie/Issues/upload/What determines pump prices.pdf (accessed 15/06/2010)

^{ix} Petrolprices.com *The price of petrol* <u>http://www.petrolprices.com/price-of-petrol.html</u> (accessed 15/06/10) ^x *Ibid*

^{xi} Pumps.ie *Fuel price breakdown* <u>http://www.pumps.ie/FAQPricesExplained.php</u> (accessed 15/06/2010)

^{xii} Consumer Council for Northern Ireland *Oil Price Archive* <u>http://www.consumercouncil.org.uk/oil-price-watch/oil-price-archive/</u> (accessed 17/06/2010)

- xiv Boiler Juice UK Heating Oil Prices http://www.boilerjuice.com/heatingOilPrices.php (accessed 17/06/2010)
- ^{xv} Juice Rol Heating Oil Prices http://www.boilerjuice.ie/heatingOilPriceHistory.php (accessed 17/06/2010) ^{xvi} Reuters *Currency quote*

http://uk.reuters.com/business/currencies/quote?srcAmt=1.00&srcCurr=EUR&destAmt=&destCurr=GBP&histo ricalDate=06162010 (accessed 17/06/2010)

^{xvii} Boiler Juice UK Heating Oil Prices http://www.boilerjuice.com/heatingOilPrices.php (accessed 17/06/2010) xviii Boiler Juice Rol Heating Oil Prices http://www.boilerjuice.ie/heatingOilPriceHistory.php (accessed 17/06/2010)

xix Taxation Web How is the Heating Oil Price determined? (04 March 2010)

http://www.taxationweb.co.uk/personal-finances/general/how-is-the-heating-oil-price-determined.html (accessed 15/06/2010)

^{xx} Ibid

xxi BERR Annex B Glossary and Definitions http://www.berr.gov.uk/files/file19274.pdf (accessed 16/06/2010)

xxii HM Revenue and Customs Hydrocarbon Oils: Duty Rates, 24 March 2010 (BN58)

xxiii Irish Tax and Customs Excise duty rates http://www.revenue.ie/en/tax/excise/duties/excise-duty-rates.html (accessed 17/06/2010)

xxiv Sunday Business Post Carbon Tax will hit heating bills (25 April 2010) http://www.thepost.ie/story/eyididcwql/ (accessed 17/06/2010)

xxv Statutory Instruments S.I. No. 220 of 2009 National oil reserves agency act 2007 (returns and Levy) (amendment) (no. 2) regulations 2009 ^{xxvi} Live Oil Prices *Brent oil price drops but UK petrol price to shoot higher* (March 2010)

http://www.liveoilprices.co.uk/oil/brent_oil_prices/03/2010/brent-oil-price-drops-but-uk-petrol-price-to-shoothigher.html (accessed 16/06/10)

^{xiii} Ibid