



Heating oil and other off-gas grid heating

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Four million UK households (15%) are off the mains gas grid, and use a range of other fuels to heat their homes including heating oil, liquefied petroleum gas (LPG), solid fuels, mains electricity, and microgeneration. The UK average cost of heating a typical three bedroom house is around 50% higher with heating oil and 100% higher with LPG than with mains gas but there is limited opportunity for such consumers to switch fuel source. Those living in park homes or who rely on bottled gas may experience particular issues.

The GB and NI energy regulators cover only the on-grid 'pipes and wires' market. The off-grid market is regulated by the Office of Fair Trading (OFT) enforcing consumer protection and competition law. An OFT investigation into the off-grid market published in October 2011 has not resulted in any major changes to regulation of this market.

Related standard notes include those on [Oil prices](#), [Fuel Poverty](#) and [Help with Energy Bills](#).

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1 Background

Four million households in the UK are not connected to the mains gas grid and therefore use other fuel sources for their heating. As the OFT says

The off-grid community is large, geographically dispersed and diverse: it covers all social grades, urban and rural communities, households in fuel poverty as well as households that are not, and embraces a wide range of fuels.¹

This is a cross-party issue, particularly for Members with rural constituencies.²

On average 15% of UK households are off-grid but this varies by country. In England, Wales and Scotland between 12 and 25% of the population are off-grid, with heating oil and electricity the main fuels used. In Northern Ireland (NI) 80% of households are off-grid and around 80% of these use heating oil, but mains gas is now being rolled out to a much larger extent and many off-grid homes are close to a possible mains connection.³

In 2010 just over a million households in Great Britain were estimated to have oil fired central heating; just over 4% of all households.⁴ In the same year 25% of households with oil fired central heating were thought to be in fuel poverty in England. This was two-thirds higher than the level across all households with central heating, but still below the estimated 52% among those using solid fuel and 52% of those without central heating.⁵

2 Regulation

Neither Ofgem/the Utility Regulator in NI nor Consumer Focus have a remit for 'off-grid' customers. Ofgem essentially deals with the on-grid (pipes and wires) market. Following recent changes, Consumer Focus now deals with representing consumers' interests in complex regulated markets.⁶

The off-grid heating oil, LPG and solid fuel market is a matter for the Competition Commission (CC) and [Office of Fair Trading](#) while Trading Standards also has a part to play. In other words it relies on a mix of competition and consumer protection law to regulate it.

¹ [Off-Grid Energy An OFT Market Study](#) Office of Fair Trading OFT1380 October 2011

² HC Deb 19 October 2011 c930 onwards

³ OFT, op. cit.

⁴ *Energy consumption in the UK 2012*, DECC. Table 3.14

⁵ *Fuel poverty 2010 –detailed tables*, DECC

⁶ Consumer Focus [Regulated Industries Work Plan 2013/14](#) 8 April 2013

Under the *Competition Act 1998*, the OFT can refer anti-competitive behaviour to the Competition Commission.

Following allegations of heating oil companies “profiteering” during the cold weather of winter 2010/11,⁷ the OFT published a major report [Off Grid Energy An OFT Market Study](#) in October 2011.⁸ On possible greater regulation and price control, it said;

Regulation is a solution where markets cannot be expected to work well of their own accord, for example where natural monopolies arise. This is the case for gas and electricity, where the transmission [and] distribution networks are natural monopolies which it is not feasible or desirable for multiple firms to duplicate. It is worth noting that only these elements of the final price for electricity and gas are regulated – the commodity price (generation costs for electricity and exploration and production costs for gas) and retail costs are set in the market.

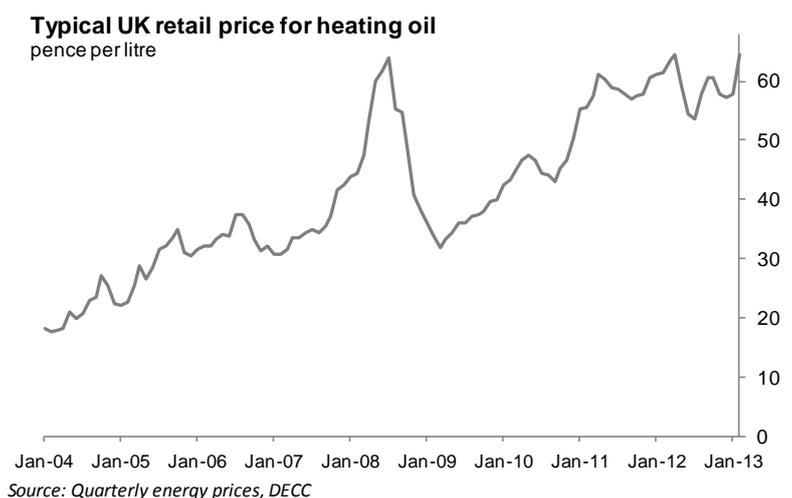
It is also worth noting that regulation would be unlikely to have a significant impact on overall prices – probably no more than is currently achievable by shopping around. This is because a price regulator would have to allow the pass-through of legitimate input costs, most notably the crude oil price.

3 The price of heating fuel

Over 90% of the variation in the average national retail prices of heating oil is explained by movements in the price of crude oil⁹ which in turn varies as a consequence of global events.

3.1 Price trends

The chart shows average monthly prices since 2004. This official series goes up to February 2013 when the typical price hit a new high of 65.6 pence per litre. Prices increased from below 20 pence per litre in early 2004 to around 35 pence per litre in autumn 2007. The following price spike took the average to more than 60 pence per litre in summer 2008. Prices fell rapidly in late 2008 almost back to 30 pence per litre before increasing steadily throughout 2009 and early 2010. The earlier peak in April 2011 was still just below the summer 2008 level.



This series does not take into account short term or local variations in prices. For instance, the large reported price rises associated with the cold snap in late November and December 2010 are only partly reflected in this series. Daily averages reported by the website www.boilerjuice.com show prices increasing rapidly to more than 70 pence per litre for much of early December. The severe cold weather pushed up demand and led to general difficulties in supply and severe problems locally. Both factors pushed up average UK prices

⁷ “Central heating oil price shoots up by 70pc” *The Telegraph*, 10 December 2010

⁸ Off-Grid Energy An OFT Market Study Office of Fair Trading OFT1380 October 2011 http://oft.gov.uk/shared_oft/market-studies/off-grid/OFT1380.pdf

⁹ OFT, op. cit.

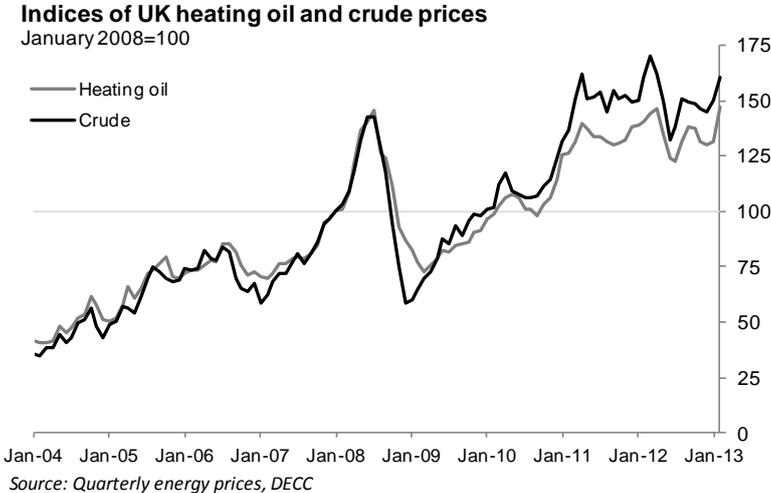
at the time and led to larger than normal local variations in the short term. The typical mid-month price on the official series was 50.2 pence per litre.

The estimated cost of heating a typical three bed-house with oil has been second only to LPG for most of the past seven years. In January 2013 the estimated national average cost of using oil for heating and hot water in a typical three bedroom house was just under £1,700 per year, compared to around £1,250 for gas.^{10 11} While the average cost of heating oil is almost 50% higher than mains gas, the cost of using LPG is almost double that of gas. UK average heating oil and LPG heating costs have risen over the last four years, during which time LPG has been consistently the most expensive and heating oil has been the most volatile.

3.2 Why have prices increased by so much?

VAT is charged on heating oil at the reduced rate of 5% since 1997. There is no duty on heating oil, so price changes are solely driven by changes in the pre-tax price. The main elements of the price of heating oil are the price of crude, the exchange rate, the difference between the cost charged by refineries for heating oil and the cost of crude¹² and the costs and margins of suppliers in the UK. The price of crude is the main element; however it needs to be converted into Sterling to reflect the cost of the raw material in the UK. There will also be a lag between headline market prices (normally for delivery the following month), prices paid in the UK by refineries and delivery to oil suppliers.

The chart opposite compares prices paid for crude by UK refineries (in Sterling) with the earlier price series for heating oil. They are presented as indices to help comparison. It shows that crude prices tend to be more volatile and 'lead' heating oil prices. There is some evidence of a relative seasonal increase in heating oil prices and an increase in the relative gap from early 2009. The two series have followed each other fairly closely for much of the period. Directions of change have been very similar, although the magnitudes have varied. The spring 2011 increase in crude prices was noticeably steeper than the heating oil increase.



The price charged by refineries for petroleum products is not often the same as the price of crude. Most are more expensive but some, such as fuel oil, are cheaper. The differential reflects the different levels of demand for these fuels. There is limited flexibility in the short to medium term in the amount of each type of product that can be refined from a barrel of crude. This means their supply is effectively linked so an increase in demand for one product is normally linked to an increase in supply of all. This will, other factors remaining equal, increase the relative price of the in-demand products and reduces the price of others. This

¹⁰ Assumes the use of conventional boilers for all fuels mentioned here.
¹¹ Comparative domestic heating cost tables, Sutherland Tables January 2013
¹² 'Crack spread'. This applies to all petroleum products not just heating oil.

explains much of the seasonal variation in heating oil prices and why diesel is more expensive than petrol.

The OFT found that for heating oil, there is a strong seasonal variation in demand, and after controlling for crude oil prices, retail prices do rise as temperature falls¹³;

Retail margins are strongly seasonal – firms make enough money delivering high volumes in the winter months to support their operations through the quieter summer – but do not appear excessive overall. There is no evidence in the data we have to support the hypothesis that suppliers are quicker to pass on increases in the underlying oil price than decreases.

Severe weather in December 2010 triggered a sharp spike in demand (40 per cent up on the previous year) at the same time as hampering deliveries. Prices also spiked – while average prices for December were in the region of 50-60 pence per litre, in some places prices of up to 80 pence per litre were reported on single days. Some of the price increase reflected higher costs of supply in these conditions, for example longer driving times per drop.

Nonetheless it is likely there was also a profit element. However in competitive markets it is not illegal to raise prices in response to increased demand. Our analysis of the market suggests that, while firms are able to make profits at times of peak demand, competition will constrain the extent to which they do so over time

... On this basis, we find no grounds to recommend regulating prices.

4 Overall situation

On the whole then, no major policy changes have yet arisen through the OFT's report. In February 2012 Consumer Focus (CF) published further work on [Off-Grid Fuels](#). This outlined research done and considered how additional price support might be made available.¹⁴

CF considered (figure 2 on page 17) a range of policy options available for price support. CF made a number of recommendations for oil suppliers, and for the Government in the short- to long-term (pp 23-25). While extending Ofgem's remit from the mains pipes and wires to the off-grid market was listed as a possible option, this was not specifically recommended.

Because gas remains the cheapest form of heating, the extension of the gas network was seen as a more important and longer-term priority and CF has also suggested that gas connections should be considered as eligible measures under Green Deal and that the Government should consider gas network extension projects in any economic stimulus package.

Mike Weir MP introduced a Private Member's Bill on one of the measures CF considered, which was paying winter fuel payments early; please see the Library [Winter Fuel Payments for "off-gas grid" households standard note](#) on this.

The Energy and Climate Change Select Committee also held a short session on off-grid heating and fuel poverty in 2012. Some of the evidence is on line¹⁵, and the Committee wrote to the Minister Greg Barker about the issues in July 2012.¹⁶

¹³ OFT op. cit.

¹⁴ Baker and Faulk, 2012

¹⁵ [Energy and Climate Change Committee oral and written evidence](#)

¹⁶ [Letter from Tim Yeo to Greg Barker, 4 July 2012](#)

The issue also came up during the current Energy Bill's committee stage. The Minister offered the Committee Members a meeting on the issue, as outlined in page 40 onwards of the Library [research paper on the 2012 Energy Bill Committee stage](#).

In summary, the issue is on-going.

5 OFT findings specifically on the heating oil and LPG markets

5.1 Heating oil

The overall conclusion in the heating oil (kerosene) sector was that the evidence 'strongly' suggested that competition was generally working well. The OFT found no evidence of collusion between suppliers, but rather found evidence that rival suppliers competed on price. It found no need for Competition Act enforcement or intervention to regulate prices.

The study found that 97% of off-grid households live in a location served by four or more heating oil suppliers. Less than 0.3% had access to only one or two but the OFT felt that lack of services in very remote rural areas was not an issue unique to heating oil. The 10 largest companies supply less than half the market.

Heating oil suppliers make a gross margin of perhaps six pence per litre on an underlying price of around 50 pence per litre, and out of this must cover their own costs including staff and transport. The retail margin is therefore only 10 or 15% of the final price of heating oil.

The OFT also considered transparency, when large brands own smaller ones, giving only an impression of competition. In particular, GB Oils Ltd, a company owned by DCC Group plc operates 42 brands. The OFT received assurances from DCC Group that ownership would be identified clearly on marketing, invoices, and on the telephone.

The OFT had similar concerns about some websites, which claimed to be 'price comparison' sites but did not operate as such; several have now renamed themselves or made changes to reflect this. The OFT's findings and action on these is summarised on line¹⁷.

The OFT continues to consider some aspects of pricing practices, such as prices supplied in advance changing by the day of delivery, or prices for people who pay by a budgeting plan. For example Carmarthenshire Country Council trading standards officers have taken action against a supplier for charging more than it quoted or not giving a quote.¹⁸

5.2 LPG

LPG is used in the domestic market either in bulk form or in cylinders. Around 150,000 households use bulk LPG and 25,000-50,000 households use cylinder LPG for heating purposes in the UK. Bulk is cheaper, while cylinder is mainly used where bulk cannot be supplied, for example due to space constraints, or in park homes.

In June 2006, the CC published a report on the domestic bulk LPG market which said that difficulties in switching supplier had inhibited competition. Two subsequent Orders on the industry were intended to address this by easing switching and improving information.¹⁹

¹⁷ OFT Press notice September 2011 www.of.gov.uk/news-and-updates/press/2011/96-11

¹⁸ [HC Deb 31 October 2011 c368W](#) onwards

¹⁹ [HC Deb 30 June 2010 c 3P](#)

Compared to a fragmented heating oil market, the bulk LPG market is highly concentrated with four major national companies supplying around 90% of the market. The OFT found some evidence of increased switching and of new entrants following the Orders.

Although LPG price increases “credibly appear to be driven in part by external input cost pressures”, the OFT still felt that managing this was an issue, particularly where consumers are contracted to purchase exclusively from a given supplier. The CC Orders reduced exclusivity periods to no more than two years. Even so the OFT considered that consumers should either have some form of contractual protection (for example price limits) or should be able to cancel the contract on reasonable terms if the price varies significantly. It is working with suppliers to seek improvement in the clarity of contract terms and protection of consumers' cancellation and switching rights.

On cylinder LPG, the high costs of this suggested to the OFT that cylinder LPG consumers are ‘more likely than average to struggle with their heating costs’ and are in practice unable to readily switch to alternative methods of heating;

While a small segment of the off-grid energy market, cylinder LPG users therefore appear to be a potentially vulnerable segment, including a number of park home residents (who may be further constrained by relying on the supply procured through their site owner). Cylinder LPG users may have only a limited number of local suppliers, may pay higher heating costs on average than any other off-grid consumers, may be less able to readily switch to a different fuel type and are susceptible to road delivery disruptions. Consumers may benefit from shopping around. Consumers should extract any benefit that is possible from shopping around and seek to minimise costs through improvements to insulation where possible and efficient energy use, maximising available grants where qualifying criteria are met.

5.104 However, in light of the potential challenges faced by cylinder LPG consumers, this group could be a candidate for targeted assistance or support, for example from policy-makers or consumer organisations.

UKLPG is the LPG trade association and can provide a list of suppliers, and [Trading Standards](#) may also be able to advise LPG customers.

5.3 Park Homes

There is a particular issue regarding bottled LPG for people on park home sites, and a further complication of park home owners sometimes ‘selling on’ fuel. There is little that can be done presently about LPG costs for park home owners. The OFT report acknowledged that bottled LPG was one of the most expensive ways to heat homes but did not offer any firm remedies.²⁰

An October 2012 Consumer Focus report [Living the Dream? – new Consumer Focus report looks at lives of people living in park homes in England](#) outlined the range of challenges faced by park home owners.²¹

The Library’s standard [note on park homes](#) notes that the Labour government responded to a Park Home Working Group saying it would consider the implications of introducing a statutory resale price for gas supplied by cylinder and bulk tank. However, no price limits have been set.

²⁰ [Off Grid Energy An OFT Market Study](#) OFT October 2011

²¹ 15 October 2012

There are however 'reselling rules' set by Ofgem and Ofwat for water and energy (on the regulated market/mains electricity). Also, park home residents do now have the right to a free breakdown of all bills and supporting documentation relating to any charges claimed by the site owner if requested by the occupier. These will normally include energy, sewerage and water charges.²²

6 Help for off-grid consumers

6.1 Regulators

As mentioned above, Ofgem and Consumer Focus do not have a remit to help off-grid consumers. The market is regulated instead by the [Office of Fair Trading](#) although [Trading Standards](#) may also be able to provide advice and support.

6.2 Oil clubs

Citizens' Advice has advice on forming [oil clubs](#), syndicates or cooperatives, where people combine orders, to reduce costs and increase bargaining power, with savings reported of 10% or more.

Citizens' Advice, the Federation of Petroleum Suppliers (FPS) and ACRE (Action with Communities in Rural England) have produced a guide to [Best Practice for Oil Buying Groups](#).

Collective purchasing or bargaining is an idea that has gathered some momentum for general (electricity and mains gas) energy bills and indeed has been actively encouraged by Consumer Focus and the Government.²³

6.3 Federation of Petroleum Suppliers database

The main industry trade body is the Federation of Petroleum Suppliers FPS. They provide some [consumer advice](#) such as encouragement to order early and prepare for winter.

The FPS also has a database of which oil suppliers are available in each area, and into which constituents can enter their postcodes; see <http://fps.findmydistributor.co.uk/>

6.4 Support with paying bills

The Library standard note on [Help with Energy Bills](#) outlines what is available generally. In response to a petition in June 2010 the Secretary of State for Energy ruled out 'social tariffs' and by implication their successor, the [Warm Home Discount Scheme](#), for fuel other than electricity for off-grid consumers²⁴;

There are currently various other ways in which support has been provided to vulnerable consumers and those not connected to the gas grid. The current voluntary agreement with the big six energy suppliers, under which they provide discounted tariffs, known as social tariffs, means that vulnerable customers who are eligible for these tariffs and who may also be off the gas grid, can receive help with their bills from their electricity supplier. Extending the voluntary agreement to the LPG, heating oil and solid fuel markets could be potentially damaging in the light of current market conditions. It would require distributors to price their fuel at well below cost for eligible

²² <http://www.consumerfocus.org.uk/files/2012/05/park-homes-leaflet-UK.pdf>

²³ <https://www.gov.uk/government/news/davey-next-steps-on-collective-purchasing-for-a-better-energy-deal>

²⁴ HC Deb 30 June 2010 c 3P

customers, and the cost of the tariff may need to be subsidised by other consumers paying already high prices. There could also be unintended consequences, for example companies withdrawing from the market to concentrate on other areas such as jet fuel supply. This risks reducing competition and could lead to higher prices for consumers.

However, if an eligible off-gas grid household's heating is obtained primarily through electricity, then social tariffs or the Warm Home Discount may well help significantly with this.

6.5 The Renewable Heat Incentive (RHI)

The Government has also pointed out that its various energy efficiency schemes may well help off-grid consumers, and these include the RHI, an 'off-grid equivalent' to the feed-in-tariff scheme FITs.

The current energy efficiency schemes are outlined briefly in the note on [Help with Energy Bills](#), and notably, a 'key focus' of the RHI is intended to be people living off the gas grid. Please see the Library [standard note on the RHI](#).

6.6 Microgeneration

The OFT report examined barriers to microgeneration uptake for off-grid homes, such as cost and payback period, installer capacity and skills, planning permission, and uncertainty about the future market scenarios.

It noted that the RHI could have a multiplier effect on the installation of heat generating technologies, but that the delays in defining eligibility for the RHI had hampered the demand and supply of heat generating technologies, with focus being switched to electricity generating technologies supported by FITs.²⁵

Now, the Government's main vehicle for delivering both energy efficiency and micro-generation technology for both on- and off-grid homes is [the Green Deal](#) (the link is to the Library's standard note).

²⁵ OFT op cit., p181