MARKET ANALYSIS

Changing landscape

The Energy Institute's Knowledge Service (EIKS) team has gathered a wealth of UK forecourt data and other information relevant to the fuel retailing sector, which is now available online.

Petroleum Review first published the Energy Institute's annual *Retail Marketing Survey (RMS)* supplement in April 1971, and has been providing UK fuel retailing statistics and complementary editorial features ever since. The data has now been combined with a wealth of related information, and is available as part of the EI Road Fuels collection at **https://knowledge.energyinst.org/collections/road-fuels**

Travelling through time

Looking back just prior to the start of the *RMS*, in 1967 the total number of UK fuel retail sites reached an all-time high of 39,958. This high total figure was partly caused by the abolition of the wartime 'pool' petrol in 1953 which, with the reintroduction of petrol brands and competition between them, led to distributors buying sites wherever they could to ensure a slice of the new, post-war prosperity. However, by the late-1960s the value of many of these outlets and the difficulty in supplying them led to a slow process of closures.

In 1971 there were around 14mn vehicles registered and petrol – of which there were four grades – costing 33 and 35.5 pence per gallon (7–9 p/l). Some 56 brands supplied this fuel to just over 37,500 sites, 8,000 of which were company-owned. Twenty years later, the *RMS* still listed 63 brands supplying 19,465 sites, just over half the number in 1971. Unleaded petrol cost around 42 p/l.

Today, as the industry has consolidated, site numbers have fallen to 8,396 (as of 31 December 2018). BP leads the field with 1,231 outlets, closely followed by Esso (1,184) and Shell (1,053). Texaco has 713 forecourts and Gulf 455. The percentage of company-owned sites has remained at a fairly constant level in recent decades, down from 35% in 1991 to 33% today.

The rapid number of site closures seen in the 1990s and 2000s roughly coincided with the expansion of supermarket forecourts throughout the UK (up from 294 in 1991 to 1,111 in 2005) and the increasing value of land which made the running of city sites unappealing to many fuel retailers.

Supermarkets continue to dominate both sales and numbers of sites, with 1,603 forecourts today – accounting for 19% of the outlets nationwide, but capturing 47% of petrol sales. Tesco leads the field, with 507 sites, followed by Morrisons (335), Asda (322) and Sainsbury's (314). As noted, supermarkets have captured 47% of fuel sales, a figure that is still edging upwards. They have successfully capitalised on prime locations, large outlets with often several dozen pumps and a strong consumer base founded on grocery shopping.

That said, a significant number of unbranded and minor retailer sites (640) remained in business at the close of 2018.

Fuel pricing

Prices in 2018 for unleaded averaged 126.14 p/l, with a low of 119.95 p/l in March and a high of 129.76 p/l in August. This is up from 2017, when the average was 118.39 p/l. Diesel was also up, at 130.07p/l, compared to the previous year when it averaged 120.13 p/l.

The total amount of petrol sold has declined steadily over the past 10 years, from 15,888,000 tonnes in 2009 to 12,404,000 tonnes in 2018 – a fall of 26%. Diesel, on the other hand, has increased year-on-year, from 20,117,000 tonnes to 25,776,00 tonnes in 2018, up 24%. Both these figures include retail and commercial sales.

Historically, retail sales of road fuels have increased year-on-year in line with the increase in the number of vehicles on the roads. In addition, petrol sales had traditionally far exceeded sales of diesel – for example, 21mn tonnes versus 7mn tonnes in 1998. However, with new diesel cars offering better fuel economy and motorists being encouraged to buy them due to their perceived 'greener' credentials at the time, sales of diesel-engined vehicles increased. With this, the sale of diesel began to catch up, slightly exceeding petrol sales for the first time in 2011 (13.9mn tonnes of diesel versus 13.8mn tonnes of petrol). Diesel sales have declined more recently in line with a marked fall in new diesel car sales due to concerns about emissions and the 'Dieselgate' scandal. However, total retail sales of road fuels remained fairly stable between 1998 (28mn tonnes) and 2015 (28.4mn tonnes). Due to different collection methods from 2016 onwards, commercial fuel sales and retail fuel sales data were combined, rising from 37.3mn tonnes in 1998 to reach 38.1mn tonnes in 2018.

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Electric revolution

While electric vehicles (EVs) have existed in various forms since the beginning of the 20th century, their mass adoption has been hindered by battery technology, which until recently made them suitable only for short-range travel and if ample time was available between use for recharging cycles. However, interest in EVs has increased in recent years as the world looks to a lower carbon future, with improvements in battery technology, gradual cost reduction, and the environmental drive to switch from internal combustion engine (ICE) vehicles to reduce air pollution, noise and maintenance (as EVs have less parts than ICE vehicles).

There are three types of EV – battery-only vehicles (BEVs) that rely solely on batteries to run electric motors; range-extended EVs, which have a small combustion engine to top up the

battery's charge, with the electric motors driving the wheels; and plug-in hybrid EVs (PHEVs) with an electric powertrain together with an onboard combustion engine, both of which can provide power to the wheels as needed. 'Full' hybrids are similar to plug-in hybrids, but their batteries cannot be charged by plugging in, thus they are not usually considered 'true' EVs.

Until recently, BEVs have only been practical for short- to medium-range journeys or, for longer journeys, on routes where there is secure access to a public charging network. But as battery technology improves, there are now battery EVs in production with a promised range of around 250 miles from a single charge. As ranges and charging times improve, BEVs are becoming more practical and attractive cost-wise.

However, the future success of EVs depends very much on the development of a national public charging point infrastructure. There are currently 19,909 public EV charging points at 7,012 locations throughout the UK. This is rapidly increasing, with some 712 new connectors added in January/February 2019, and 18,372 since 2011 – a rise of 1,295%. Of these, 16,337 are located in England, 2,841 in Scotland, 629 in Wales, 61 in the Isle of Man and 41 in the Channel Islands.

Rapid charging is enabling more widespread adoption of EVs. In the UK, there are currently 4,613 rapid charge connectors. Their number has jumped in recent years, reflecting a growing demand for higher charging rates as battery capacities increase and EVs are driven on longer journeys. There are also plans for battery swap stations, particularly for taxis and possibly light electric vans.

Road fuels collection

To explore the data above and much more, visit the EI's Road Fuels collection at **https://knowledge.energyinst.org/collections/road-fuels**

All the data previously published as part of the *RMS* can be downloaded, including:

- Numbers of retail outlets by brand
- Supermarkets
- Numbers of retail outlets
- Numbers of vehicles licenced in the UK by year
- Regional breakdown of retail outlets
- Market share by ownership
- Fuel sales through supermarkets
- Average fuel prices
- Deliveries to retail and commercial customers

In addition, this year we have included EV charging points by total numbers by area, and numbers of connectors by type. These figures have been supplied by ZapMap – see **www.zap-map.com** for a map showing the location of EV charging points across the UK.

The fuel retail statistics have been supplied by Experian Catalist – **https://www.experian.co.uk/catalist/index.html**

Technical guidance

The Energy Institute publishes a number of documents covering the fuel retailing sector, including:

- *Design, construction, modification, maintenance and decommissioning of filling stations* – known as the 'Blue Book'
- *Guidance on environmental management at filling stations*
- *Guidance for the storage and handling of biofuels at filling stations*

These publications are available to download from **https://publishing.energyinst.org/**