

Mapping the UK's oil stocks

Introduction

To meet its international obligations, the UK holds oil stocks to lessen the impact of global disruptions to oil supply. These are over and above those volumes held for commercial purposes. This article outlines where stocks are located in the UK, and elsewhere in Europe.

Background to oil stocking

The UK is required to hold oil stocks to meet obligations imposed by both the International Energy Agency (IEA) and the European Union (EU). For the IEA obligation, (www.iea.org/topics/oil/oilstocks/methodology/), the UK must hold 90 days of net oil imports. The EU obligation requires countries to hold the higher of 90 days of net oil imports or 61 days of oil consumption. As the UK is still a significant producer of crude oil, it is currently bound by the requirement to hold 61 days of consumption, as this currently represents the greater volume. The EU methodology is outlined at:

<http://eur-lex.europa.eu/legal-content/EN/ALL/?qid=1414672111051&uri=CELEX:32009L0119>

The purpose of these stocks is to help buttress the global oil market by ensuring that stock can be released to minimise volumes lost to the global market from any disruption. To date, there have been three releases co-ordinated by the IEA, responding to the disruption of the 1991 Gulf War, the damage from Hurricanes Katrina and Rita in 2005, and the contraction of oil supply from Libya in 2011. In the event of a disruption, stock is made available to the global market.

The UK manages its oil stocking obligations by issuing legally-binding directions to substantial suppliers¹ of oil based on their UK market share. The obligations currently bear on refiners and the larger importers and stipulate what products and volumes are required, and the reporting arrangements for those oils. While BEIS reports monthly figures on oil stocks in table ET 3.11 (www.gov.uk/government/statistics/oil-and-oil-products-section-3-energy-trends) information on stock locations has not previously been published.

How companies hold oil stocks

Companies hold stock to meet their obligation in one of three ways:

- Firstly, they hold stock at their own refineries or terminals, or in storage locations owned by third parties. Map 1 charts where these stocks are held in the UK. These volumes will also include the operator's commercial stock (stock holding in excess of the obligated amount). These volumes vary but typically are in the region of 2 million tonnes.
- Secondly, companies can reserve volumes of stock owned by other companies. These are commercial arrangements between companies (monitored by BEIS) that help facilitate the efficient functioning of the oil stocking obligation. These volumes are included within Map 1.
- Thirdly, companies can hold stock elsewhere in the EU, under bilateral agreements between the companies involved and the respective member states. These agreements must be authorised by both BEIS and the other member state in advance. The application must include the company or organisation holding the stock and the product, quantity and the location of the stock. All stocks held in this way are counted towards a company's obligation and must be available to be released in case of an emergency.

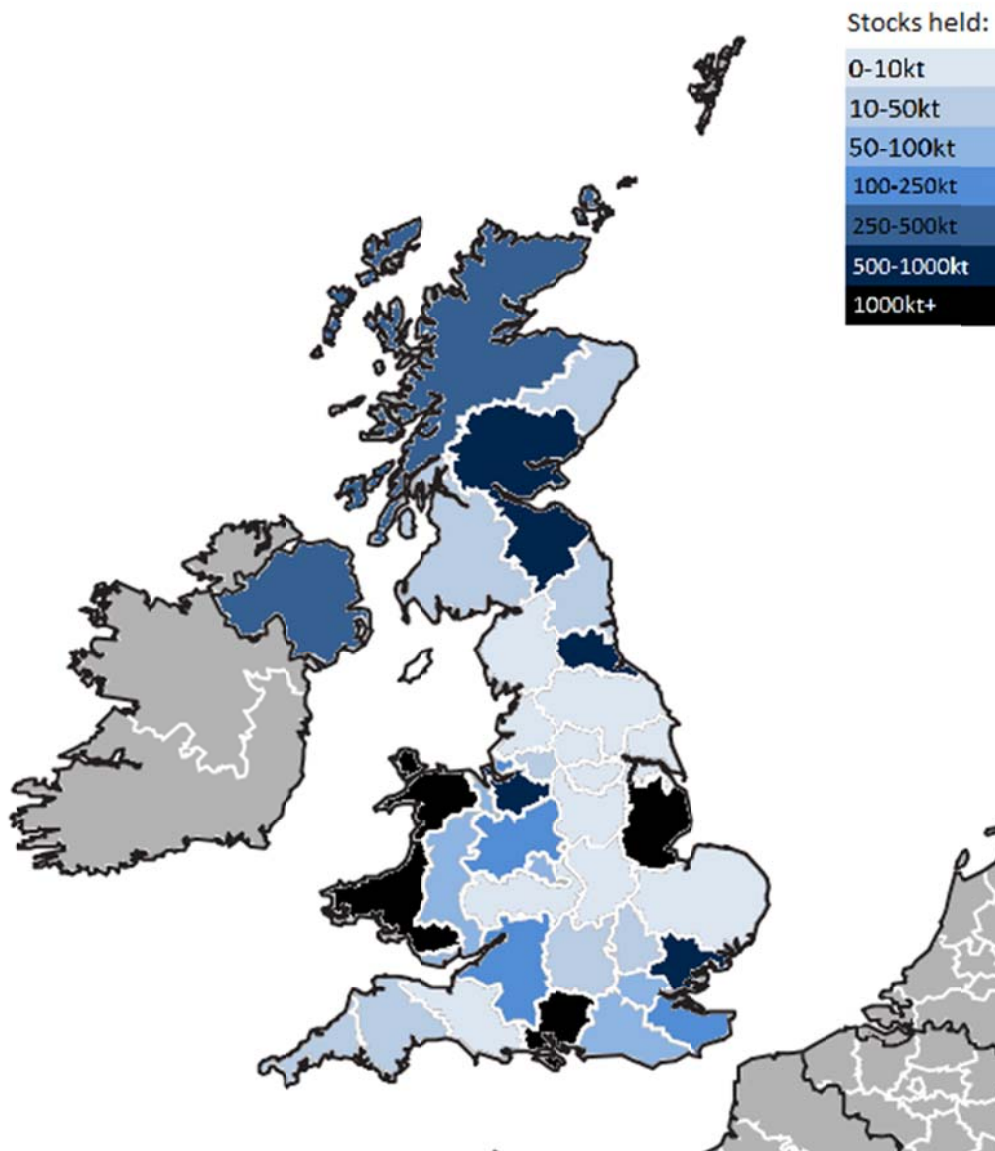
¹ A "substantial supplier" is defined as a company whose supply of oil to the UK market exceeded 50,000 tonnes of crude liquid petroleum or petroleum products during a 12 month period.

As a result, substantial volumes of stock are held outside of the UK's border. In total on the 31st December 2016, around 9.5 million tonnes of stock (7.1 MT obligated and 2.4 MT commercial) are held in the UK, and around 5 million tonnes held elsewhere in Europe. In total, these stocks are able to broadly meet our obligations. For reference, the amount of stock released during the Libyan disruption was equivalent under 3 days of the 61 days available.

Oil stock locations in the UK

The map below illustrates the location of all oil stocks held in the UK at the 31st December 2016. Annex 1 shows the underlying data.

Map 1: Location of stocks within the United Kingdom



The map indicates that the majority of oil stored in the UK is stored in coastal areas that have the requisite infrastructure – the ports, terminals and refineries – to facilitate both trade and storage. Just under half of all the oil stored in the UK was located in Hampshire, Lincolnshire and West

Special feature – UK oil stocks

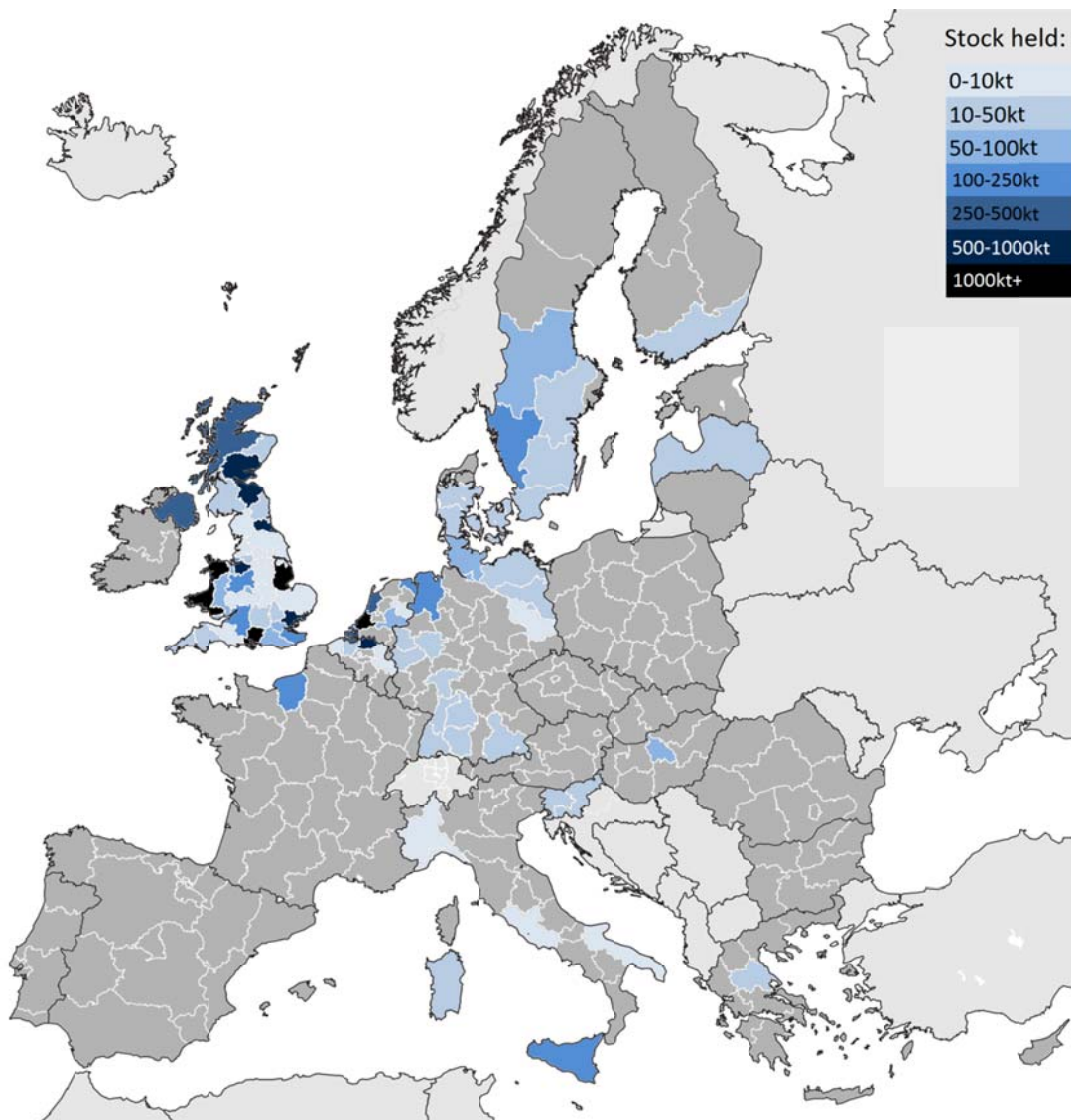
Wales. There are a further four areas that also held significant volumes. These top seven areas for oil storage account for around 80% of all the UK stocks.

Whilst inland areas tend to hold less stock, there is an extensive pipeline network for the distribution of oil throughout the UK, along with deliveries by truck where necessary.

Stocks held in other EU member states on behalf of the UK

The map below shows the location of stocks held in other EU member states on behalf of the UK on the 31st December 2016. Annex 2 shows the underlying data.

Map 2: Location of stocks in the United Kingdom and in the EU



The bulk of oil held in other European member states is held in the Netherlands and Belgium. Stock in the Netherlands accounts for around half of all stock held abroad, with a further 17 per cent held in Belgium. The bulk of this oil is held in the Amsterdam-Rotterdam-Antwerp (ARA) oil hub.

The remaining stock is distributed throughout Europe, with significant volumes in Germany, Sweden and Italy.

The principal requirement for the UK's emergency oil stocks are that they are accessible to the market in the event of a global disruption, rather than that they are held within the UK. Much of the oil held in other member states is easily accessible to the UK with stocks in the ARA area (over two thirds of the stock held abroad) being held only short sailing distances away, with the possibility of resupply to the UK (loading, sailing and unloading) of only a few days.

Summary

Since 1995, the net amount of stock held outside of the UK has increased from around 10 per cent of the total to just over a quarter of the total, see Energy Trends table 3.11 at:

www.gov.uk/government/statistics/oil-and-oil-products-section-3-energy-trends, due in part to companies taking advantage of a widening group of international partners willing to hold stocks, and increased flexibility offered to member states as part of the EU's oil stocking directive.

BEIS continue to monitor oil stocking locations on a monthly basis to ensure the commercial efficiencies offered by international stocking are balanced against the volumes domestically that could help us to respond to short-term domestic emergencies, which fall short of needing a European or worldwide co-ordinated response.

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Annex 1: UK Oil Stocks 31st December 2016

Location of stocks by NUTS 2 regions. The data have been categorised to avoid any commercially sensitive information being disclosed.

Area	Kilotonnes
Bedfordshire and Hertfordshire	10-50
Berkshire, Buckinghamshire, and Oxfordshire	10-50
Cheshire	500-1000
Cornwall and Isles of Scilly	10-50
Cumbria	0-10
Derbyshire and Nottinghamshire	0-10
Devon	10-50
Dorset and Somerset	0-10
East Anglia	0-10
East Riding and North Lincolnshire	0-10
East Wales	50-100
Eastern Scotland	500-1000
Essex	500-1000
Gloucestershire, Wiltshire and the Bristol/Bath area	100-250
Greater Manchester	10-50
Hampshire and Isle of Wight	1000+
Herefordshire, Worcestershire and Warwickshire	0-10
Highlands and Islands	250-500
Kent	100-250
Lancashire	0-10
Leicestershire, Rutland and Northamptonshire	0-10
Lincolnshire	1000+
London	50-100
Merseyside	100-250
North Eastern Scotland	10-50
North Yorkshire	0-10
Northern Ireland	250-500
Northumberland and Tyne and Wear	10-50
Shropshire and Staffordshire	100-250
South Western Scotland	10-50
South Yorkshire	0-10
Surrey, East and West Sussex	50-100
Tees Valley and Durham	500-1000
West Midlands	10-50
West Wales and The Valleys	1000+
West Yorkshire	0-10
In transit	250-500
Total Stock¹	9500
-of which commercial¹	2400

¹ Figures rounded to the nearest 100

Annex 2: Location of stocks held in other EU member states on behalf of the UK 31st December 2016.

Figures have been rounded to the nearest 10.

Country	Kilotonnes
Belgium	820
Denmark	100
Estonia	20
Finland	30
France	100
Germany	580
Greece	20
Hungary	60
Italy	210
Malta	60
Netherlands	2390
Slovenia	30
Sweden	360
Grand Total	4770