

## Competition in gas supply

### Introduction

This article includes information relating to competition in the gas market, formerly published as part of UK Energy Sector Indicators. The article describes the number of companies operating, the market concentrations of the domestic, commercial and industrial markets as well as data on the size of the companies operating.

### Background to changes in the gas market

Three-quarters of the non-domestic market (customers with demand above 25,000 therms per year) for gas was effectively opened up to competition at the end of 1986. Most of the remainder (between 2,500 and 25,000 therms a year) was opened up in August 1992. The domestic market was opened for competition in between April 1996 and May 1998, with large increases in the number of gas suppliers up to 2000.

After 2000, the number of companies supplying gas decreased by more than 50 per cent from its peak, driven by company mergers. There are effectively four competitive sectors - sales to the electricity generators, the industrial sector, the commercial sector and the domestic sector.

Competition for electricity generation cannot be calculated accurately due to complexities associated with this sector. BEIS collect data on final sales from gas companies; companies who generate electricity from gas are often the same companies who trade gas, therefore at the point of sale, sellers do not know the proportion of gas sold which will be used for generation and that which will be traded on. As such data for electricity generation competition are not presented here.

### Number of companies supplying gas at least 1,750 GWh of gas

The table below shows the number of companies supplying gas to final consumption in the domestic, commercial and industrial sectors. The table shows only those companies supplying at least 1,750 GWh of gas to the respective sectors.<sup>1</sup>

**Table 1, Number of companies supplying gas.**

	1997	1998	2000	2002	2004	2006	2008	2010	2012	2013	2014	2015
Domestic sector	1	9	14	12	7	6	6	7	7	8	9	12
Commercial sector	9	12	10	10	10	7	6	8	8	9	9	9
Industrial sector	12	15	15	15	10	9	8	8	7	10	11	12

(1) Companies can supply into more than one market and are counted in each market they supply. Companies who supply less than 1,750 GWh are excluded. In September 2016 Ofgem data indicate that 117 suppliers were licensed to supply gas to domestic customers but some suppliers have more than one supply licence and own or part own more than one supply company.

The data indicate that the number of companies supplying gas has increased in the domestic and industrial sectors in 2015, with the commercial sector remaining the same. Although data are restricted to companies supplying more than 1,750 GWh within each sector

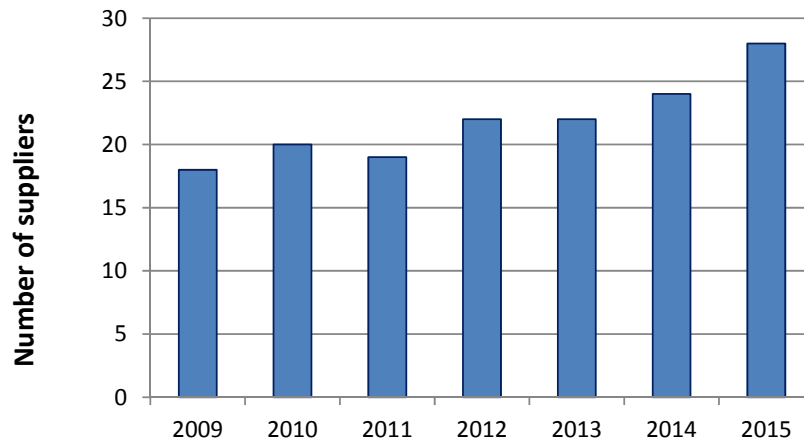
### Number of large and small suppliers in the market

New suppliers are continuing to enter the market at an increasing rate. Ofgem data indicates that fourteen new licensed suppliers became active in the domestic segment and nine in the non-domestic segment. These new entrants have business models such as not-for-profit, renewable and local supply schemes.

<sup>1</sup> This represents a methodological change from previous data shown in Energy Sector Indicators where the cut-off was previously 0.25 per cent of the market share for each market. The methodological change brings the table in line with the collection methodology used by BEIS.

The chart below shows the number of companies supplying more than 1,750GWh a year of gas, (excluding gas to electricity generation) and indicates a generally sustained pattern of increase from 17 in 2009 to 25 in 2015.

**Total number of companies supplying over 1,750GWh of gas, 2009 to 2015**



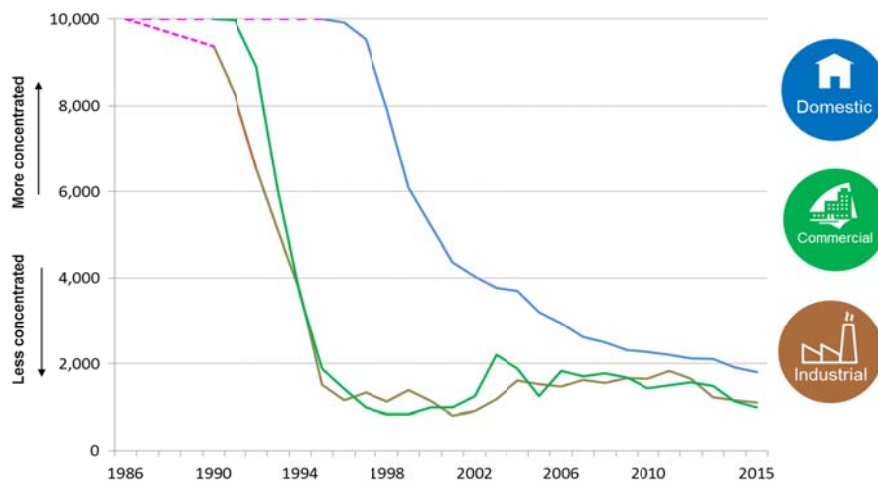
In addition, smaller suppliers continue to enter the market. BEIS collects information from companies licenced to supply gas through two surveys, one a mandatory return for companies supplying more than 1,750 GWh a year of gas (~ 0.5 per cent of final consumption), the other a voluntary return for companies supplying less than that threshold. Returns rates for the survey of companies over the 1,750 GWh threshold is 100 per cent, whilst the return for smaller companies under than threshold was 57 per cent in 2015. In 2015 there were 33 small gas suppliers who returned data compared with 8 returns in 2009. The increase has been broadly steady over that period but differences in survey completion rates will affect this.

**Competition in gas sales to the domestic, commercial and industrial sectors, 1986 to 2015**

Continuing the trend of recent years the domestic, industrial and commercial markets have all seen their market concentrations decrease in comparison to 2014. This is due to the increasing number of small suppliers joining the market, and taking a larger part of the market share.

The chart below shows the market concentration as expressed through the Herfindahl-Hirschman index, one of the standard metrics for analysing concentration. In the chart higher numbers show more concentration and lower numbers indicate a more diverse market.

**Herfindahl-Hirschman Index for market concentration, 1986 to 2015**



## Special feature – Competition in gas supply

Whilst each market has seen a decrease in their concentration, it is notable that the all three markets have done so consistently in recent years. Both the industrial and commercial sector became less concentrated through much of the first decade of the new century but both have shown an decrease in concentration in recent years.

The domestic market has become less concentrated due to increasing number of small suppliers taking an increasing percentage of the market share. In 2015 the total number of companies supplying gas to the market was 30, up from 21 in 2014. As Table 1 shows, the number of companies who supplied more than 1,750 GWh was up from 9 in 2014 to 12 in 2015, this figure has been increasing since 2008 as these new companies continue to take market share.

The industrial market has seen a small increase in the number of companies supplying more than 1,750 GWh since 2014, increasing from 11 in 2014 to 12 in 2015 (see Table 1). This coupled with the fact that smaller companies have joined the market (27 companies in total supplying the market in comparison to 20 in 2014) has led to the market becoming less concentrated.

The commercial market has seen a broadly steady picture with regards to the number of companies supplying over 1,750 GWh in recent years. However, the number of small suppliers has increased, up from 21 in 2014 to 31 in 2015, the market has become less concentrated.

### Gas supplied to all consumers by aggregated shares.

The table below shows how the market shares of the largest companies have changed over the last 5 years with the largest tending to lose market share to the medium sized and smaller companies. In 2011, the top 9 accounted for 82.2 per cent of the market, which is down to 77.2 per cent in 2015. Figures are based on total gas supplied excluding gas for electricity generation

**Table 2: Gas supplied to all consumers by aggregated shares.**

Gas suppliers	Market share (%)				
	2011	2012	2013	2014	2015
Aggregated share of top 3 suppliers	47.2	46.9	45.5	43.7	42.3
Aggregated share of next 3 suppliers	21.0	20.2	21.1	20.8	20.6
Aggregated share of next 3 suppliers	14.0	14.3	14.9	15.5	14.3
<b>Aggregated share of top 9 suppliers</b>	<b>82.2</b>	<b>81.4</b>	<b>81.5</b>	<b>80.0</b>	<b>77.2</b>
Other suppliers	17.8	18.6	18.5	20.0	22.8

### Herfindahl-Hirschman

The Herfindahl-Hirschman measure attempts to measure market concentration. It places extra emphasis on the contributions of participants with the largest shares. The measure is commonly used to assess whether mergers should go ahead and whether they will significantly affect the balance of the market in a particular sector.

It is expressed by the following equation:

Herfindahl-Hirschman measure = the square of each participant's market share added together across all participants in the market

Values vary between zero, which signifies a perfectly competitive industry, and ten thousand, for a pure monopoly.

### James Halliwell

Downstream gas

Oil and Gas Statistics Team

Tel: 0300 068 8121

E-mail: [James.Halliwell@beis.gov.uk](mailto:James.Halliwell@beis.gov.uk)