

# Competition in UK electricity markets, 2023

Hugo Neely 07745 736270 [electricitystatistics@energysecurity.gov.uk](mailto:electricitystatistics@energysecurity.gov.uk)

## Key headlines

Following privatisation in 1990, the number of UK major electricity suppliers has increased from 16 in 1989 to 32 in 2023. In 2023, 1 company DESNZ surveyed fell below the 0.1% market share threshold required for inclusion, while 1 new supplier was added to the survey.

In 2023, market concentrations remained relatively stable. This is against the trend seen from 2019 to 2021, when electricity market concentration increased across all sectors as more companies entered the market.

The market share of smaller suppliers (outside the top nine) has risen from 2.7 per cent in 2010 to 20.2 per cent in 2023, as new suppliers entered the market and others grew.

The number of major power producers has increased from 6 in 1989 to 56 in 2023.

The top nine MPPs' share of generation decreased to 75.1 per cent in 2023, down 0.4 percentage points on 2022 levels. Their share of capacity additionally decreased from 68.1 per cent to 67.9 per cent, primarily due to the decommissioning of nuclear power sites.

## Background

This article includes information relating to competition in the UK electricity markets, examining the two parts of the industry where there is competition for provision: generation and sales. For both markets, the article describes the number of companies operating, and the market concentrations. The electricity sales market is examined in more detail due to the distinct sectors suppliers sell electricity to – domestic consumers, industrial consumers, and commercial consumers. This article covers the major suppliers surveyed by DESNZ comprising approximately 96% of the market, and generating companies classed as Major Power Producers (MPPs). Major electricity suppliers are classed as those which sold over 0.1% of traded electricity in the reference year; MPPs are defined as companies whose primary purpose is the generation of electricity. Further information on the definition of major suppliers and MPPs is given in the methodology note at the end of this article.

The Herfindahl-Hirschman index is used to provide the market concentration of the electricity sales market as it provides extra emphasis on the contribution of participants with the largest shares; for more information on this measure see the methodology note at the end of this article.

## Competition in electricity sales

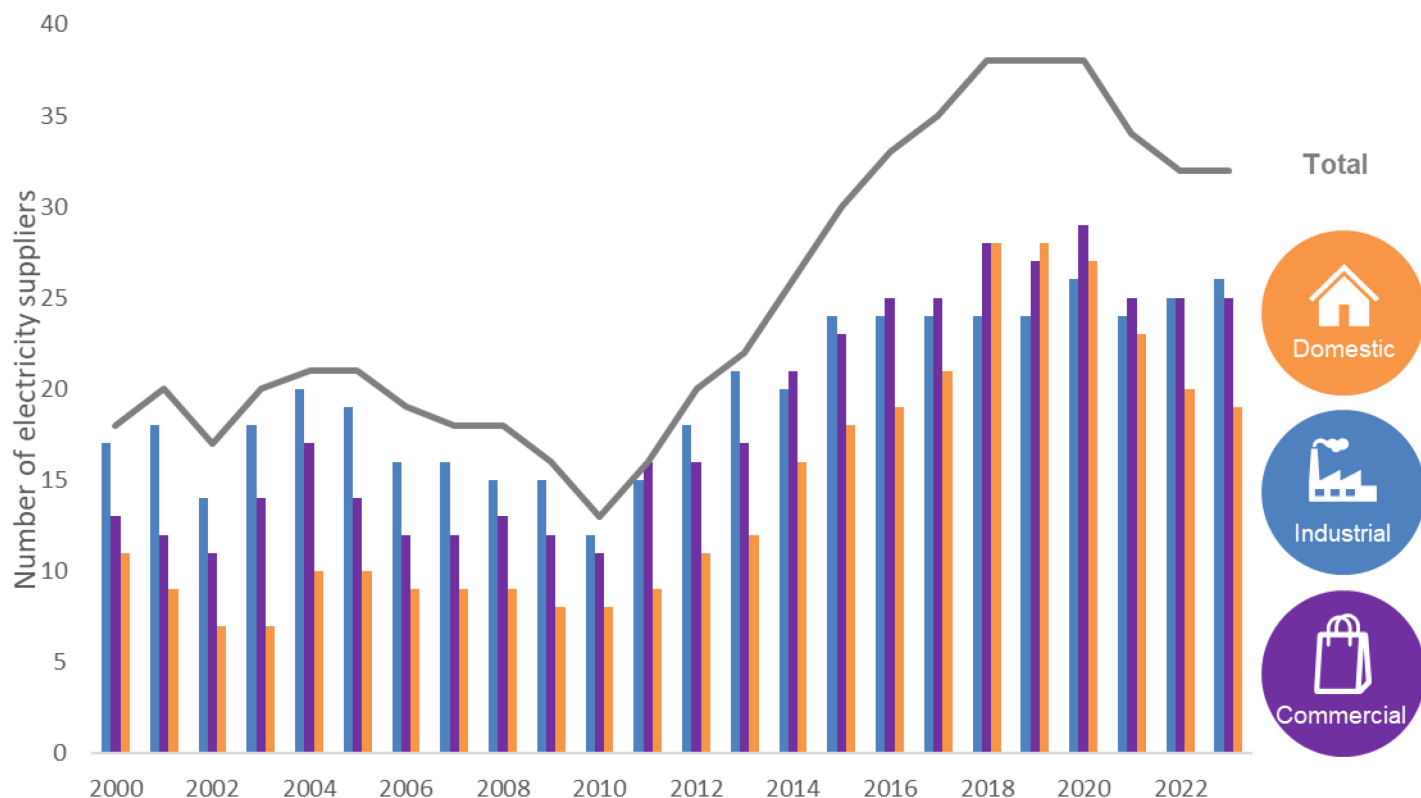
### Number of major UK electricity suppliers

Following privatisation in 1989, the number of major electricity suppliers initially rapidly increased from 16 to an early peak of 21 in 2004. From 2004 to 2010, the number of companies reduced to 13, as despite new market entrants, other companies were either taken over or bought additional power stations to add to their portfolios. After 2010, the number of companies increased again, reaching their highest level in 2018 at 38 companies, as the market fragmented further.

From 2021 to 2022, sharply rising wholesale gas prices significantly increased the cost of generation for electricity. This led to widespread disruption in the UK electricity market and contributed to the discontinuation of 3 energy suppliers with over 0.1 per cent of the market share, reducing the number of major companies to 32. In 2023, one supplier fell below the 0.1 per cent threshold while another began supply, resulting in the total number of major suppliers remaining unchanged.

The number of companies supplying electricity to each sector along with the total number of companies supplying electricity between 2000 and 2023 is shown below in Chart 1.

**Chart 1: Number of companies supplying electricity, 2000 to 2023 [note 1]**



[note 1] Companies can supply into more than one market and are counted in each market they supply to. Only includes companies that sold over 0.1% of total traded electricity in the reference year.

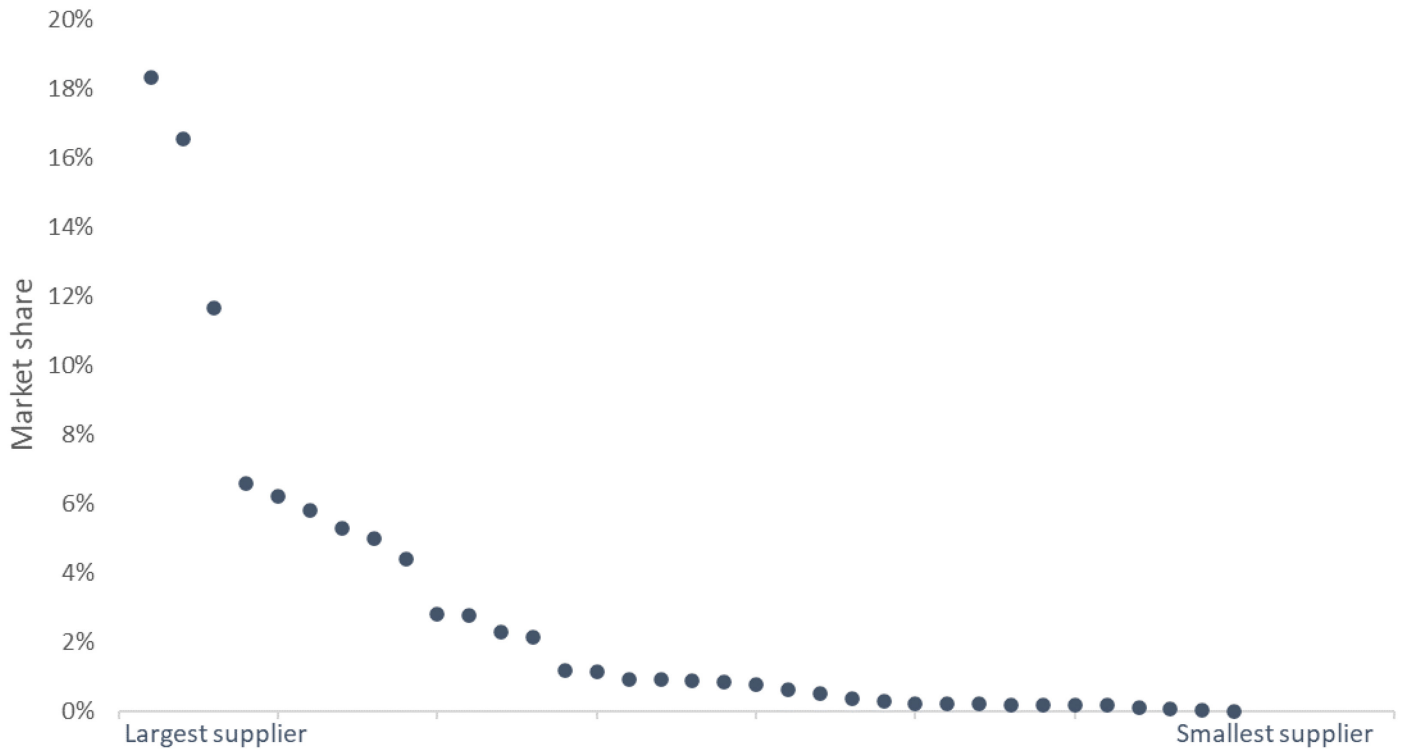
In 2023, one new electricity supplier was surveyed by DESNZ with a market share over 0.1 per cent of total supply. This company supplied to the industrial and commercial sectors. One supplier's market share fell below the 0.1 per cent threshold, this supplier supplying commercial and domestic consumers.

### Market share of UK electricity suppliers

Since privatisation, the electricity supply market has been characterised by the majority of supply being controlled by a handful of large suppliers. In 2010, the top 6 suppliers controlled a combined total of 91 per cent of total supply. Over time, this share has fallen as smaller suppliers have grown. In 2023, the top 6 suppliers now hold 65 per cent of the total market share, down 1 per cent on 2022 levels. The only time the share of the top 6 suppliers has grown since 2010 was from 2020 to 2021, when it rose by 4.4 percentage points as two companies within the top 6 merged and rising wholesale electricity prices contributed to some smaller suppliers ceasing trade.

Chart 2 below shows the percentage market share of electricity suppliers above the threshold in 2023. Here we can see the top 3 suppliers control a large portion of the market – 47 per cent of the total. Across the sectors, these suppliers hold 42 per cent of supply to industrial consumers, 46 per cent of supply to commercial consumers and 46 per cent of supply to the domestic market.

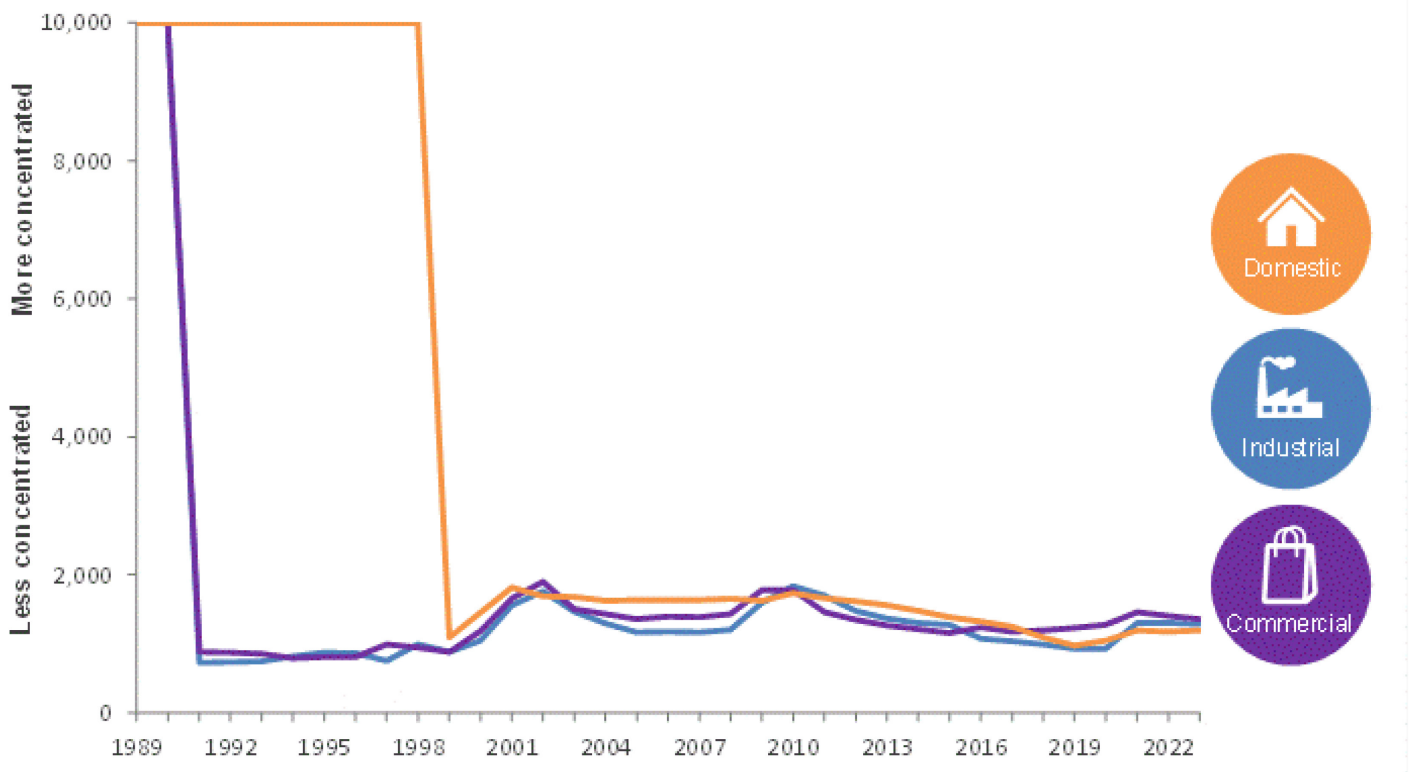
**Chart 2: Market share of electricity suppliers, all sectors, 2023**



**Market concentration of UK electricity suppliers**

Chart 3 below shows the market concentration as expressed through the Herfindahl-Hirschman Index. In the chart, higher numbers show more concentration while lower numbers indicate a more diverse market. Further information on the Herfindahl-Hirschman index can be found at the end of this article.

**Chart 3: Herfindahl-Hirschman Index for electricity sales market concentration, 1989 to 2023**



Following privatisation, the industrial and commercial market concentrations saw initial sharp decreases followed by rises between 1998 and 2002, caused primarily by a spate of mergers. The domestic market's concentration remained at 10,000 before 1999, being dominated by the Regional Electricity Companies (RECs) which each had regional monopolies on the market. Market concentration fell in 1999 as domestic sales became more competitive, then rose until 2001 due to mergers between former RECs. Between 2002 and 2008 there was little variation in the domestic market's index, however the industrial and commercial indexes fell in this period. The market concentration of all sectors then rose in 2008 spurred by the closure of several market participants. From 2010 to 2019, market concentration declined in the domestic and industrial sectors as many new smaller suppliers entered the market.

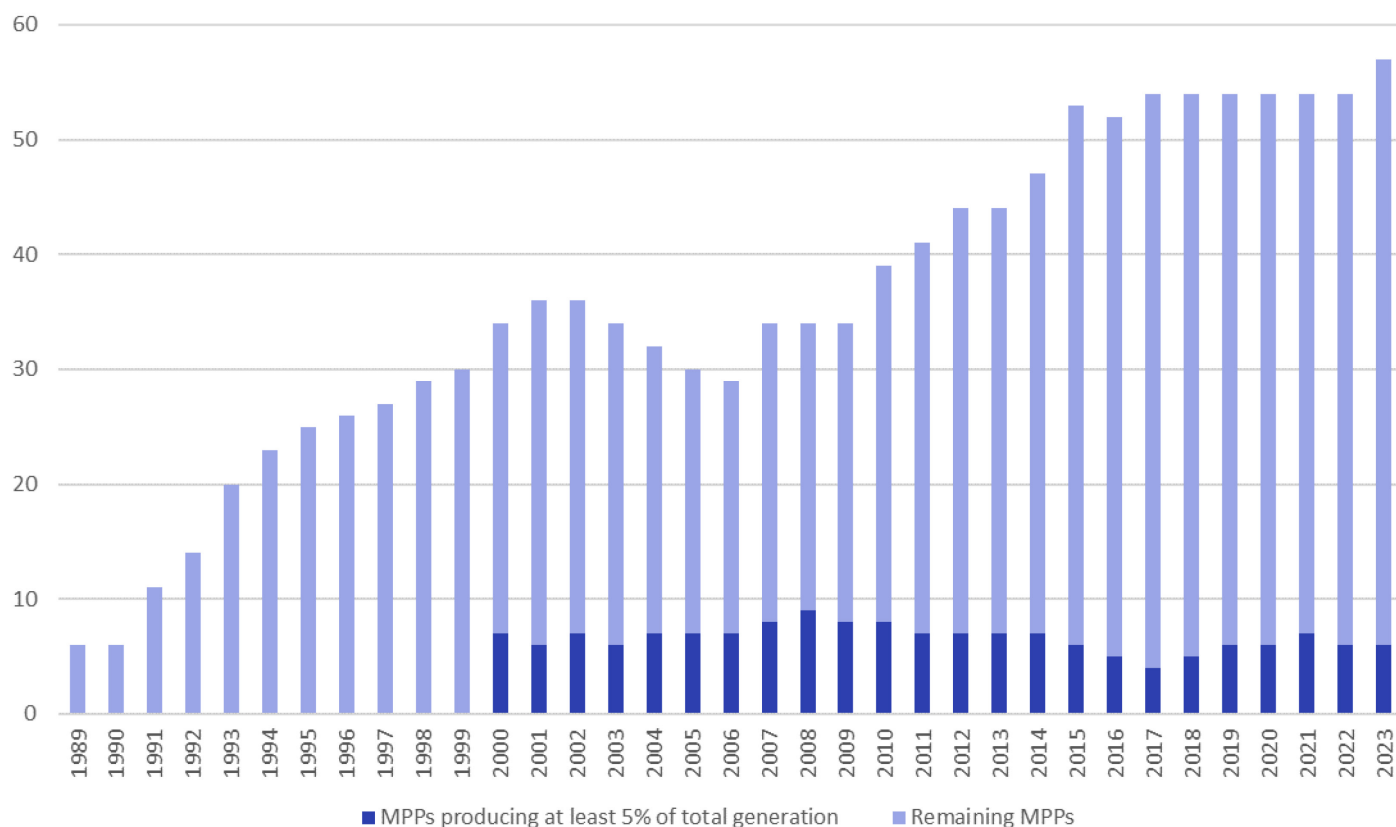
From 2019 to 2021 both the domestic and commercial market concentration increased due to mergers between large suppliers and suppliers exiting the market. The industrial market concentration remained stable between 2019 and 2020, however sharply increased in 2021 due to mergers between large suppliers and another exiting the market. From 2021 to 2023, all market concentrations remained relatively stable. The commercial market saw the most notable change, reducing by 104 points as the market share of the largest suppliers fell and the share of their smaller competitors grew.

## Competition in electricity generation

### Number of Major Power Producers

Chart 4 shows the number of companies that are counted as MPPs since 1989. The number of companies increased rapidly, from six before privatisation up to an early peak of 36 in 2001, before mergers caused numbers to fall back to 29 in 2006. Starting in 2007, several renewable generators were reclassified as MPPs, leading to an increase in the number of MPPs to 34; this remained stable through to 2009. Since 2010, the number of MPPs has steadily increased as new generators came online, reaching a peak in 2017 of 54. This remained stable up to 2023, when 2 additional MPPs came online.

**Chart 4: Number of Major Power Producers, 1989 to 2023 [note 2]**

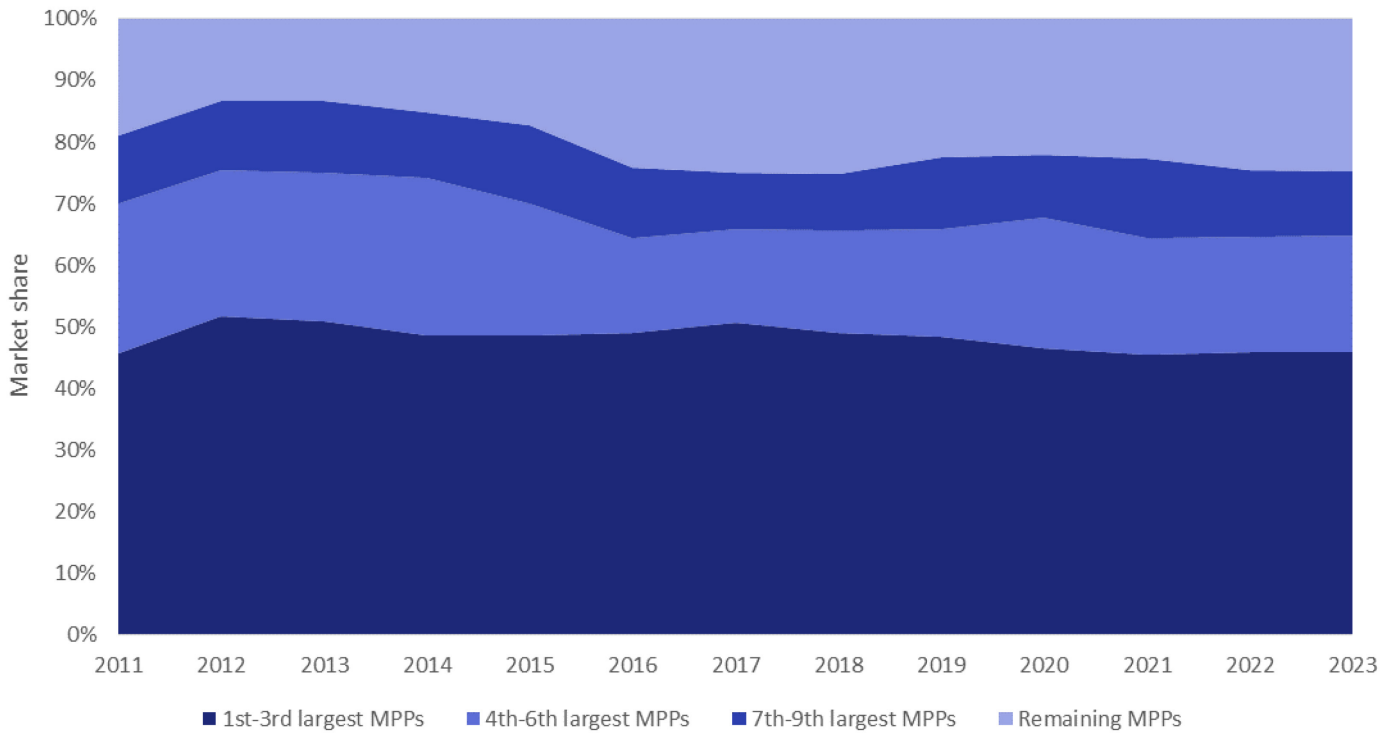


*[note 2] Data on the number of MPPs producing at least 5% of total generation is not available from 1989-1999. During this period, all MPPs are shown under 'Remaining MPPs'.*

### Market share of Major Power Producers

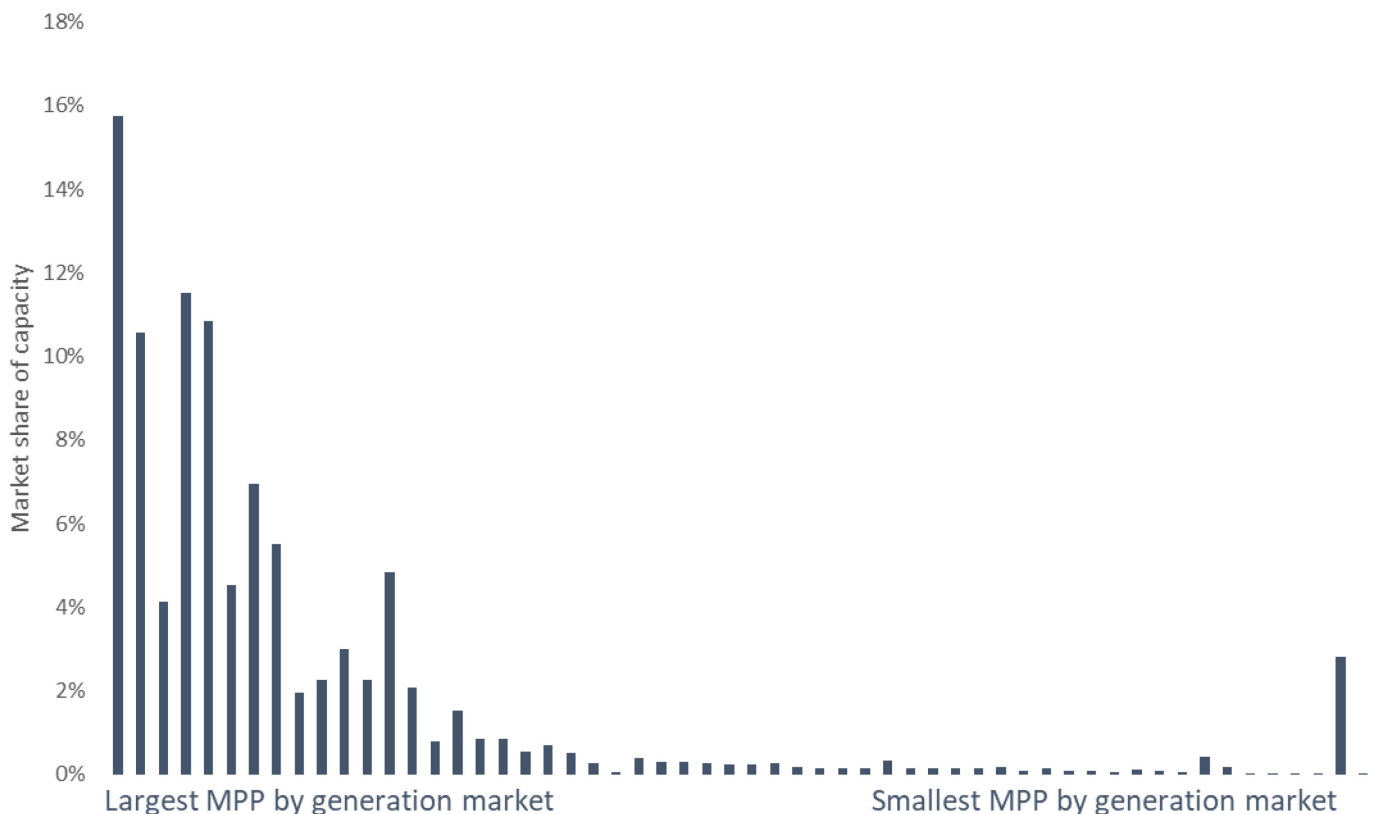
Chart 5 shows the MPPs aggregated share of generation from 2011 to 2023. The market share of the top 9 generators in this period peaked in 2013 at 86.7 per cent declining to 74.8 per cent in 2018, as new smaller companies entered the market. This share increased in 2019 and 2020, before decreasing again for the past three years, reaching 75.1 per cent in 2023.

**Chart 5: Percentage shares of total MPP generation, 2011 to 2023**



Over all periods, the top 9 generators have held a lower share of capacity (67.9 per cent in 2023) compared to generation. This indicates a greater proportion of their generation came from non-renewable sources, which operate at a higher load factor than renewable generation (or more information on load factors, please see [DUKES Table 5.10](#) and [DUKES Table 6.3](#)). This, alongside factors such as outages, is a primary reason for the low correlation between capacity market share and generation market share shown in Chart 6 below.

**Chart 6: MPP capacity market share vs generation market share, 2023**



## Data for this article

The data used to produce this article can be found in [Tables 1 to 6 of the associated Competition in UK Electricity Markets workbook](#). Revisions to data in this article are noted here.

## Further Sources of Information on competition in UK electricity markets

Ofgem release their own statistics on competition in [GB generation and the domestic suppliers' market](#).

Ofgem list [all companies that hold licenses in generation and supply](#).

The Competition and Markets Authority [published a report on competition in energy](#).

## Methodology notes

In this article, '**electricity supplier**' refers to the major electricity suppliers surveyed by DESNZ, covering approximately 96% of all UK electricity sales in 2018. '**Major electricity suppliers**' include suppliers that sold over 0.1% of traded electricity in the reference year, this was 237 GWh in 2023. This differs from previous editions of this article where all suppliers surveyed by DESNZ were included. The change allows DESNZ to increase its survey coverage whilst still presenting comparable trends in this article. Please see the [DESNZ Electricity statistics data sources and methodologies](#) for more details.

**Major Power Producers (MPPs)** are companies whose primary purpose is the generation of electricity. They represent around 80 per cent of generation. For the current list of MPPs and the sites they own, please see [DUKES Table 5.11](#). For thermal generation, there is no minimum size but solar and wind farms are only included where a company owns more than 50 MW of capacity, which can be across multiple sites. Note some smaller thermal generators are also counted as 'other generators' even though their main activity is electricity generation.

**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.



© Crown copyright 2024

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit [nationalarchives.gov.uk/doc/open-government-licence/version/3](https://nationalarchives.gov.uk/doc/open-government-licence/version/3) or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk).

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available from: <https://www.gov.uk/government/collections/energy-trends>

If you need a version of this document in a more accessible format, please email [energy.stats@energysecurity.gov.uk](mailto:energy.stats@energysecurity.gov.uk)

Please tell us what format you need. It will help us if you say what assistive technology you use.