Department for Business, Energy & Industrial Strategy

Subnational Electricity and Gas Consumption Statistics

Regional and Local Authority, Great Britain, 2019

22 December 2020 National Statistics

This publication provides national and subnational estimates of annual electricity and weather corrected gas consumption in Great Britain. Latest estimates[1] are for 2019 (electric) and 2019/20 (gas).

- Comparing electricity consumption to 2018, all regions showed a decrease in their electricity consumption, despite around 238,000 new meter installations across Great Britain.
- Average domestic electricity consumption continued to be lowest in the North East (3,026 kWh per meter) and highest in the East of England (3,939 kWh per meter).
- Since 2005, all regions have shown large reductions in meter point electricity consumption with the North East showing the highest reduction; 2,898 kWh (20.9 per cent) per meter.
- Total gas consumption increased in three regions (North East, South West and Outer London) in 2019/20 in comparison with 2018/19.
- Since 2005 all regions have shown large decreases in average domestic gas meter point consumption.
- The estimated proportion of homes not connected to the gas grid has remained consistent between 2015 and 2019 and currently sits at 14.1 per cent overall.

What you need to know about these statistics:

Estimates are based on meter point data provided by the electricity and gas industries from their administrative systems. The gas consumption year is from mid-May 2019 to mid-May 2020, whereas the electricity year more closely aligns to the calendar year. This means that the 2019/20 gas data includes the impact of the COVID-19 restrictions in place between March and May 2020.

An industry standard consumption threshold of 73,200 GWh per annum is used to categorise gas meters into domestic and non-domestic. This may result in some smaller commercial properties being classified as domestic and can affect the trends over time. Improvements to methodology and data coverage over time mean that the time series is revised. In general, data from 2017/18 onwards are more accurate and consistent.

Visit the Domestic Energy Map – an interactive map which displays average domestic electricity and gas consumption as well as the proportion of domestic properties not on the gas grid. The map can be accessed here: www.domesticenergymap.uk.

[1] The current gas year of 2019 covers the period of mid-May 2019 to mid-May 2020. See “Change in period covered in gas consumption statistics” on page 16 for more detail. The electric year is more closely aligned with the calendar year.

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Next publication: December 2021

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1. Introduction

1.1 Background

This document provides commentary on BEIS' subnational estimates of electricity and weather corrected gas consumption for Great Britain. Estimates are based on meter point data provided by the electricity and gas industries from their administrative systems. In this document the gas consumption year is referred to as '2019/20' as the gas year runs from mid-May 2019 to mid-May 2020, whereas the electric year is referred to as '2019' as the data more closely aligns to the calendar year; more detail on this is provided in the electricity and gas chapters.

Estimates are published from domestic and non-domestic users and broken down by countries and regions[2] (within England), and local authorities. For domestic gas consumption only, Middle layer super output area (Intermediate Geography Zone in Scotland) and Lower layer super output area (Data Zone in Scotland) estimates are available at: www.gov.uk/government/collections/subnational-electricity-consumption-data (for electricity) and www.gov.uk/government/collections/subnational-gas-consumption-data (for gas).

For full details on the methodology, assumptions and data interpretation relating to these statistics, please refer to the Methodology and Guidance document available here: www.gov.uk/government/publications/regional-energy-data-guidance-note. Users are highly advised to familiarise themselves with the material in the booklet before using the data.

For national estimates of domestic consumption Table 3.03 of ECUK[3] should be used. Breakdowns of consumption by property attributes and household[4]/business[5] characteristics are available through the National Energy Efficiency Data-Framework (NEED).

1.2 Users

The most significant use of the subnational consumption data is by Local Authorities and devolved administrations, and other external users such as academics and industry. These data have most commonly been used for targeting, to examine trends over time, or to assess the effectiveness of carbon reduction and energy efficiency policies and initiatives.

Internally, these data are used by BEIS policy colleagues and other analysts to inform policy development and help with the monitoring and evaluation of BEIS policies. The meter point gas and electricity data collected for subnational consumption outputs are also used in NEED.

Feedback from users of these data is welcomed. If you have any queries or suggestions, please contact us at energyefficiency.stats@beis.gov.uk. The team which produces this publication may hold user engagement events in the future to understand how they can better meet user needs: if you would like to be considered for an invitation to the next event, please email the above email address with information on what you use the data for and/or what changes you may wish to see made to this publication.

[2] A region refers to areas previously known as Government Office Regions (GORs), which were the primary statistical subdivision of England in which the Government Offices for the region fulfilled their role. They closed on 31 March 2011 and have remained a static geography used for statistical reporting since then. Further information is available in section 1.2 of the Subnational methodology and guidance booklet.
[3] www.gov.uk/government/statistics/energy-consumption-in-the-uk.
[4] www.gov.uk/government/collections/national-energy-efficiency-data-need-framework.
[5] www.gov.uk/government/collections/non-domestic-national-energy-efficiency-data-framework-nd-need

Updates to the data in this release:

All local authority tables from 2015 have been updated to align with the local authority administrative boundaries as of 1 April 2020. Alongside this all electricity and gas meter data has been linked to the latest postcode data for 2015 to 2019 to improve geographical coverage. This has reduced the number of 'unallocated' meters in this release compared to the previous publication.

As part of the electricity data collection process, it was identified that since 2017 a small sample (ranging between 17,000 and 60,000) of domestic MPANs had been settled via half-hourly meter settlement. This meant that in these cases the meter had previously been classified as non-domestic. These meters have been re-categorised as domestic meters.

In addition, gas data between 2015 and 2019 has been corrected to remove reads highlighted by the gas supplier as being faulty. Previously BEIS received an extract from the data supplier that did not correct for error reads, leading to some sites being under-estimated in their gas use. An exercise was undertaken to impute all error reads with their previous Annual Quantity (AQ) values.

To improve the presentation of the data for Scotland, tables from 2015 now include a distinct unallocated total for Scotland, England and Wales gas and electricity consumption. Unallocated meters are meters where the address information is insufficient to link a meter to a local authority.

2. Electricity

The data analysed in this document are based on the aggregation of Meter Point Administration Number (MPAN) readings throughout Great Britain, which are obtained from electricity suppliers through their data aggregators. In total there were 31.3 million MPANs[6] in 2019. The estimates presented for 2019 cover the industry defined years:

- Electricity non-half hourly[7] – 31 January 2019 to 30 January 2020
- Electric half hourly – 1 January 2019 to 31 December 2019

This section outlines electricity consumption by consuming sector (i.e., domestic, and non-domestic[8]), and geographic area (region and local authority).

Annual data for 2005 to 2019 can be found at:
www.gov.uk/government/collections/subnational-electricity-consumption-data

On-site generation of electricity statistics

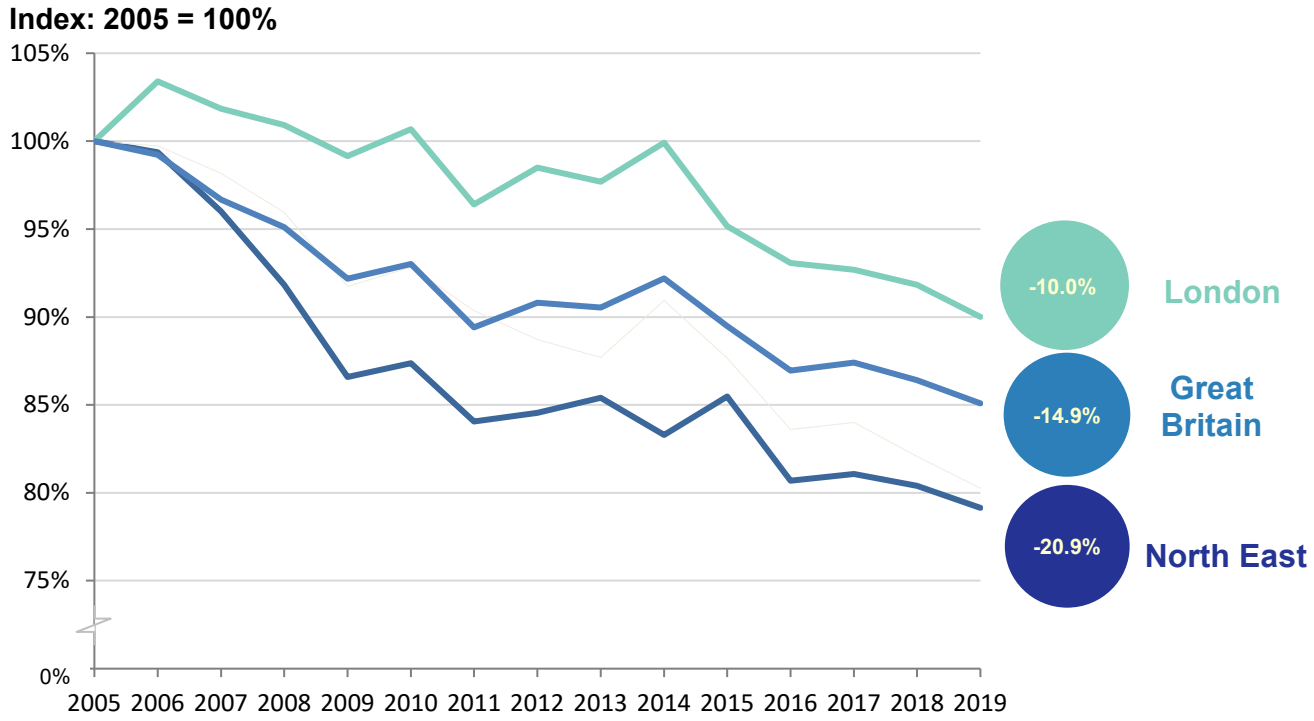
An increasing proportion of domestic and non-domestic properties in the UK have installed electricity generators on-site, including solar panels and wind turbines. Some of this electricity is fed back into the grid and some is used on site. As the data reported on in this collection is based on meter readings, electricity consumed directly from on-site generation is not captured in these statistics. More information on installations of electricity generators in the UK under the Feed-in Tariff can be found at: www.gov.uk/government/collections/feed-in-tariff-statistics

[6] In most cases an MPAN reflects a physical meter point. Some MPANs (around 1%) are classified as 'unmetered service' consumption. Unmetered service usually occurs where a physical meter in impractical to install (e.g., motorway lighting).
[7] A non-half hourly (NHH) meter is used for domestic or smaller non-domestic supplies.
[8] Meter profiles 1 and 2 are domestic meters. All other meter profiles (0 and 3 to 8) are non-domestic.

2.1 Total electricity consumption

Across all countries and regions in Great Britain a total of 272,541 GWh of electricity was consumed in 2019 (via 31.3 million meters). This was 1.5 per cent less than in 2018 (276,785 GWh via 31.0 million meters). Compared to 2018, total electricity consumption decreased in all countries and regions, with Scotland (2.2 per cent) and Inner London (2.7 per cent) showing the largest decreases. Chart 1 shows the trend in total electricity consumption between 2005 and 2019.

Chart 1: Total electricity consumption for all countries/regions in Great Britain, percentage change between 2005 - 2019



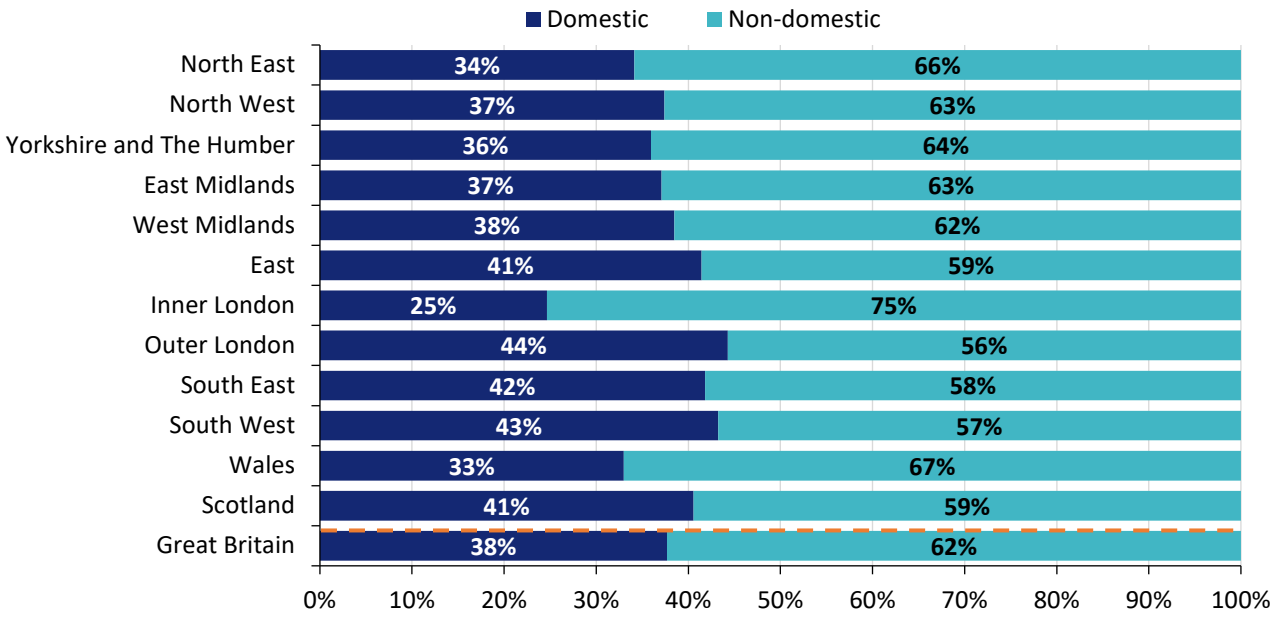
Out of all countries and regions, the South East consumed the largest proportion of all electricity in Great Britain (14 per cent, or 37,050 GWh), while the North East consumed the smallest proportion (4 per cent, or 10,999 GWh). 309 Local Authorities showed a decrease in total electricity consumption in 2019 compared with 2018, whereas 59 Local Authorities showed an increase. The largest increase was 18.4 per cent (Pembrokeshire) and the largest decrease was -9.4 per cent (Southwark). Often large changes in local authority electric consumption can be influenced by a small number of meters. Large changes often occur in local authorities that have large industrial sites.

2.2 Domestic electricity consumption

Total domestic consumptionTotal domestic electricity consumption across all regions and countries in 2019 was 102,737 GWh, 0.3 per cent lower than in 2018 (103,050 GWh), and 14 per cent lower than in 2005 (119,425 GWh). Factors influencing total domestic electricity consumption include the population and number of households in a region, and the fuel mix used to meet domestic energy demands (for example, households without access to gas are likely to use more electricity for heating).

The non-domestic sector accounts for the majority of Great Britain's electricity consumption. In 2019, domestic electricity consumption accounted for 38 per cent of all electricity consumption in Great Britain, whilst non-domestic electricity consumption made up 62 per cent. A percentage breakdown of domestic and non-domestic electricity consumption by region can be seen in Chart 2 below. The percentage of total domestic electricity consumption varies from 75 per cent in Outer London, to 56 per cent in Inner London.

Chart 2: Domestic and non-domestic electricity consumption in Great Britain, percentage split by country and region, 2019



In 2019 there were 28.7 million domestic electricity meters, an increase of around 0.8 per cent since 2018 (28.5 million meters). However, there were an estimated 27.2 million households[9] in Great Britain. The difference between the number of meters and households is likely to be due to the following reasons:

- Some non-domestic meters being incorrectly classified as being domestic.

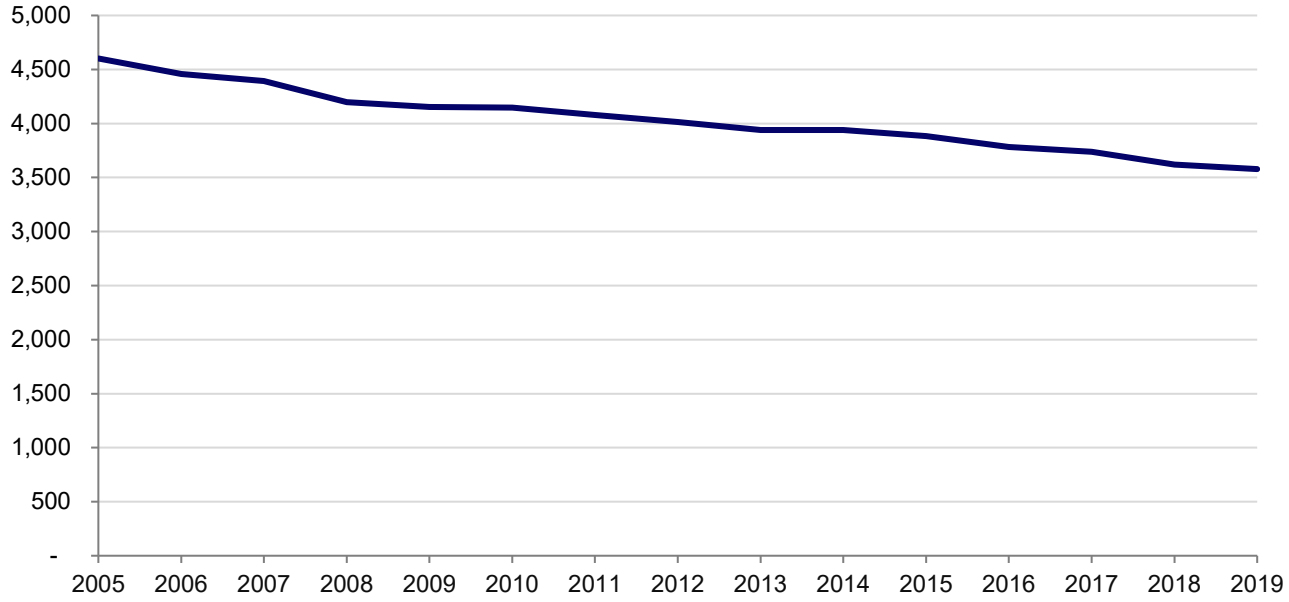
[9] This does not mean that there are 28.7 million domestic customers in Great Britain. Through the ONS, Welsh and Scottish Government statistics there are an estimated 27.2 million households in Great Britain
England - ONS household estimates based on 2018-variants.
www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/householdprojectionsforengland
Scotland - Scottish Government estimates 2019. www.nrscotland.gov.uk/files//statistics/household-estimates/2019/house-est-19-all-tabs.zip
Wales - Welsh Government estimates mid-2019. https://statswales.gov.wales/Catalogue/Housing/Households/Estimates

- Some properties having more than one electricity meter (or more than one MPAN) linked to the property.
- Some unmetered supplies (UMS) consumption is included in the domestic total[10].

Average domestic consumption

Chart 3 below shows mean annual domestic electricity consumption per meter in Great Britain. 3,578 kWh per meter was consumed in 2019, down around 1.1 per cent compared to 2018 (3,619 kWh) and 22.3 per cent lower than in 2005 (4,602 kWh). In 2019, median domestic electricity consumption was 2,817 kWh. This difference between the mean and median (761 kWh) is more pronounced for electricity than for gas because of the variety of ways electricity is used in homes (for example, some properties use electricity for heating, while most homes with a gas connection use gas for heating).

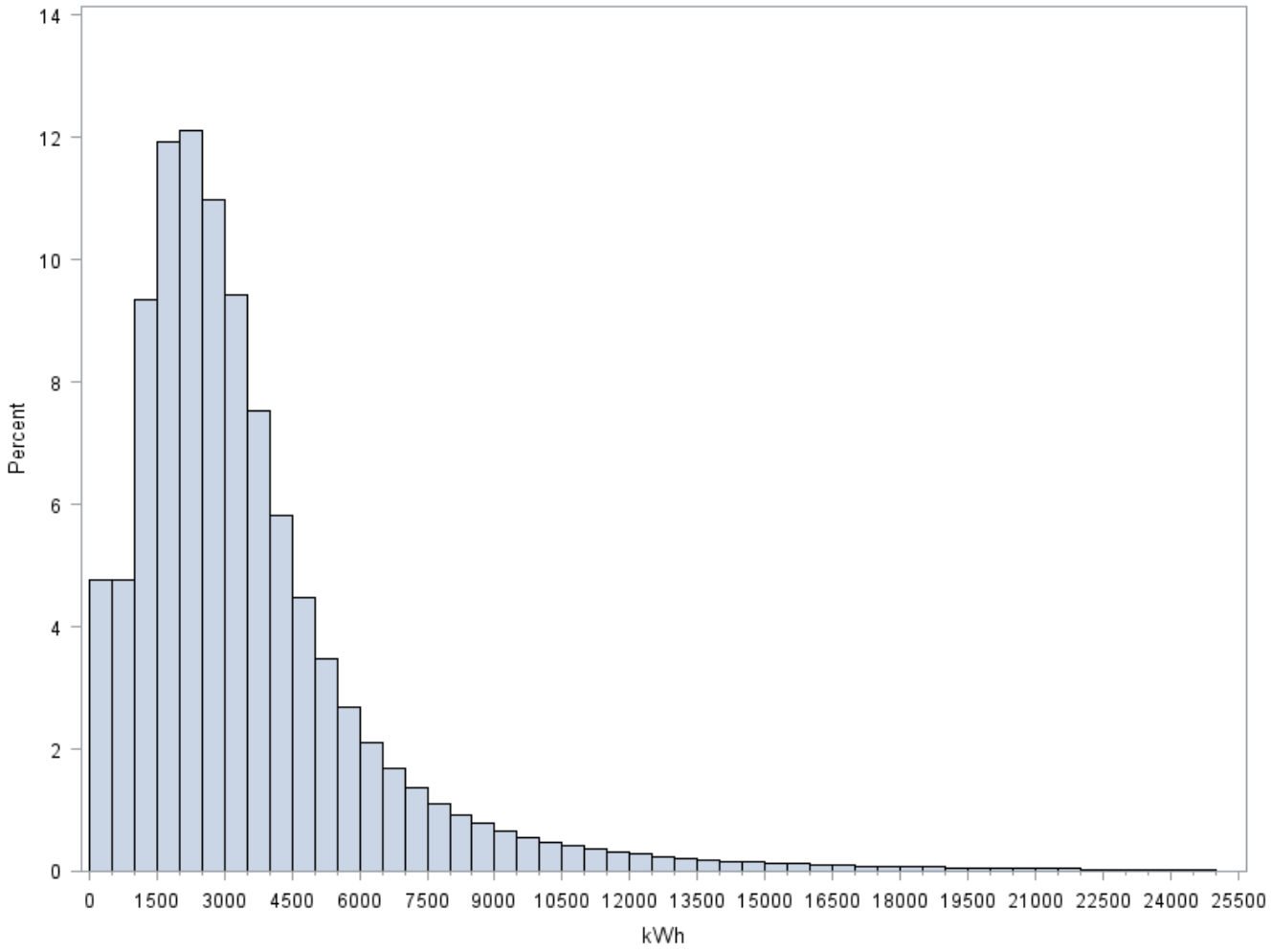
Chart 3: Mean annual domestic electricity consumption (kWh per meter) in Great Britain, 2005 to 2019



[10] UMS is estimated electricity consumption where a physical meter is not installed.

Chart 4 shows the distribution of domestic electricity consumption in 2019. It shows that 73 per cent of domestic meters consumed between 1,000 kWh and 5,000 kWh of electricity per annum with a mean of 3,578 kWh and a median of 2,817 kWh.

Chart 4: The distribution of domestic electricity consumption per meter in Great Britain, 2019



Map 1 on the next page shows average domestic electricity consumption per meter by Local Authority in 2019. Average household consumption is included in the accompanying Excel spreadsheet[11]. Average consumption per meter by Local Authority ranged from 2,756 kWh to 6,704 kWh.

[11] www.gov.uk/government/collections/subnational-electricity-consumption-data

Map 1: Mean domestic electricity consumption per meter by local authority, 2019

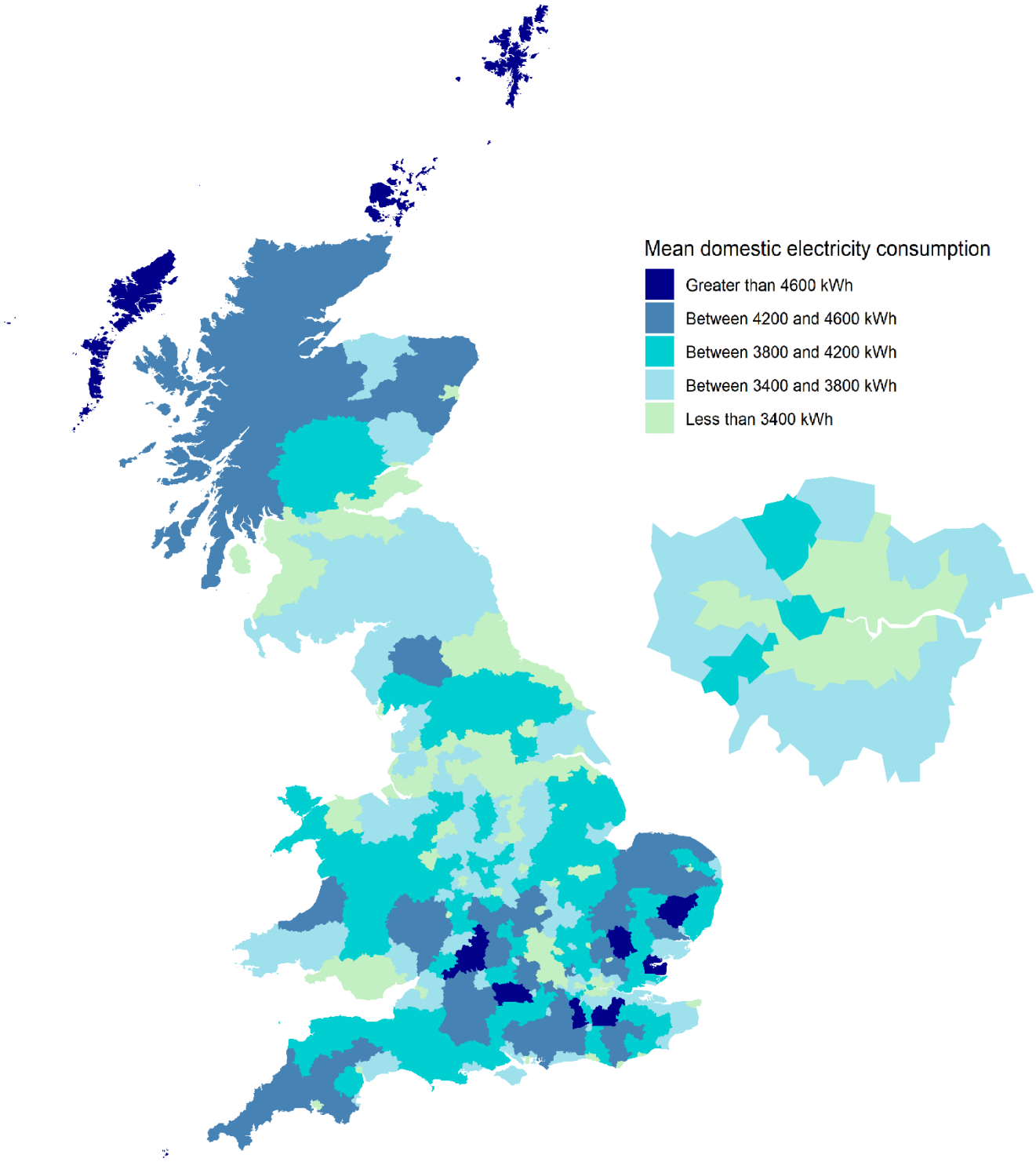


Table 1: Changes in mean domestic electricity consumption (kWh per meter) by country/region in Great Britain, 2005 to 2019 and 2018 to 2019

Region	Mean electricity consumption per meter (kWh)			Percentage change	
	2005	2018	2019	2005 to 2019	2018 to 2019
North East	3,887	3,052	3,026	-22.1%	-0.9%
North West	4,527	3,437	3,395	-25.0%	-1.2%
Yorkshire and The Humber	4,321	3,368	3,343	-22.6%	-0.7%
East Midlands	4,522	3,640	3,593	-20.5%	-1.3%
West Midlands	4,842	3,666	3,615	-25.3%	-1.4%
East	4,951	3,983	3,939	-20.4%	-1.1%
London	4,274	3,498	3,447	-19.4%	-1.5%
South East	4,887	3,950	3,917	-19.8%	-0.8%
South West	4,985	3,883	3,850	-22.8%	-0.8%
England	4,618	3,651	3,611	-21.8%	-1.1%
Wales	4,295	3,422	3,389	-21.1%	-1.0%
Scotland	4,631	3,442	3,393	-26.7%	-1.4%
Unallocated	4,164	3,528	3,189	-23.4%	-9.6%
Great Britain	4,602	3,619	3,578	-22.2%	-1.1%

A small number of meters in Great Britain cannot be described as being in a specific area, and are therefore described as 'Unallocated'

At the regional level, the North East continued to have the lowest mean domestic consumption at 3,026 kWh per meter (median was 2,517 kWh). The East continued to have the highest mean and median domestic consumption per meter; 3,939 kWh and 3,042 kWh respectively.

Table 1 above shows the changes in mean electricity consumption over time. Between 2005 and 2019, reductions in mean domestic electricity consumption per meter have been consistent between regions and countries, with reductions ranging from 26.7 per cent in Scotland to 19.4 per cent in London. There are several factors which may have contributed to these reductions in consumption, including: weather conditions; energy efficiency improvements[12] such as increased levels of insulation, new boilers and more energy efficient appliances; increased prices[13]; a recession; changes in the building stock; increases in solar photovoltaic self-generation by households, and household composition. It should also be noted that 2005, the earliest point for this analysis, is where the Digest of UK Energy Statistics (DUKES) also recorded a peak in domestic electricity consumption to date[14].

Standard domestic and Economy 7 consumption

Table 2 below shows the mean and median domestic consumption per meter in each country and region in 2019 and is further broken down by Standard and Economy 7 meters. Economy 7 meters record electricity consumption at two tariff rates, one for daytime and a cheaper rate during the night.

[12] The energy efficiency of the housing stock improved between 2005 and 2017, the average SAP rating of a dwelling increased by 12.6 points from 49.4 to 62. The SAP rating is a measure of the overall energy efficiency of the dwelling. Annex Table 2.6: Mean SAP rating, by tenure, 1996 to 2017: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/834603/2017-18_EHS_Headline_Report.pdf

[13] Between 2005 and 2019, domestic electricity prices contained in Quarterly Energy Prices show an increase of 124.1 per cent (70.7 per cent in real terms) which is likely to have influenced demand. 'Quarterly Energy Prices' can be accessed here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/812264/table_221.xlsx

[14] See Table 5.1 of DUKES: www.gov.uk/government/statistics/electricity-chapter-5-digest-of-united-kingdom-energy-statistics-dukes

Table 2: Average domestic electricity consumption by meter type and country/region in Great Britain, 2019

Region	All domestic meters (kWh per meter)			Standard domestic meters (kWh per meter)			Economy-7 meters (kWh per meter)		
	Mean	Median	Number of meters (1000s)	Mean	Median	Percentage of all meters	Mean	Median	Percentage of all meters
North East	3,026	2,517	1,241	2,934	2,493	94%	4,807	3,594	5%
North West	3,395	2,779	3,286	3,245	2,725	92%	5,514	4,351	7%
Yorkshire and The Humber	3,343	2,692	2,425	3,210	2,647	93%	5,286	4,025	6%
East Midlands	3,593	2,847	2,093	3,288	2,710	69%	4,355	3,271	29%
West Midlands	3,615	2,903	2,492	3,396	2,813	84%	4,931	3,733	14%
East	3,939	3,042	2,702	3,563	2,874	73%	5,048	3,769	25%
Inner London	3,232	2,344	1,552	3,064	2,266	90%	5,005	3,931	9%
Outer London	3,607	2,857	2,079	3,432	2,765	85%	4,690	3,682	14%
South East	3,917	3,040	3,955	3,674	2,922	83%	5,234	4,014	16%
South West	3,850	2,960	2,589	3,501	2,814	86%	6,127	5,015	13%
England	**3,611**	**2,839**	**24,414**	**3,372**	**2,736**	**85%**	**5,060**	**3,828**	**14%**
Wales	**3,389**	**2,757**	**1,433**	**3,211**	**2,702**	**93%**	**5,987**	**4,608**	**6%**
Scotland	**3,393**	**2,666**	**2,832**	**3,184**	**2,613**	**85%**	**4,694**	**3,432**	**14%**
Unallocated	3,189	2,286	34	3,086	2,229	68%	5,602	4,489	4%
Great Britain	**3,578**	**2,817**	**28,712**	**3,345**	**2,721**	**85%**	**5,046**	**3,814**	**14%**

A small number of meters in Great Britain cannot be described as being in a specific area, and are therefore described as 'Unallocated'

In 2019, across all countries and regions, mean consumption for customers with standard domestic meters was 3,345 kWh (the median consumption was 2,721 kWh). In contrast, households with Economy 7 meters used a larger amount of electricity (5,046 kWh mean consumption and 3,814 median consumption). The differences may occur due to households with Economy 7 meters being more likely to use electricity to heat their homes and/or hot water.

The range of consumption differs across different meter types. The consumption per standard meter ranged from 2,934 kWh in the North East to 3,674 kWh in the South East of England. Mean consumption per Economy 7 meter varied from 4,355 kWh in the East Midlands to 6,127 kWh in the South West, showing a greater range of consumption than for standard meters. It should be noted that not all customers who have an Economy 7 meter will be on an Economy 7 tariff. However, customers with an ordinary domestic meter cannot be on an Economy 7 tariff.

Classifying Economy 7 meters statistics

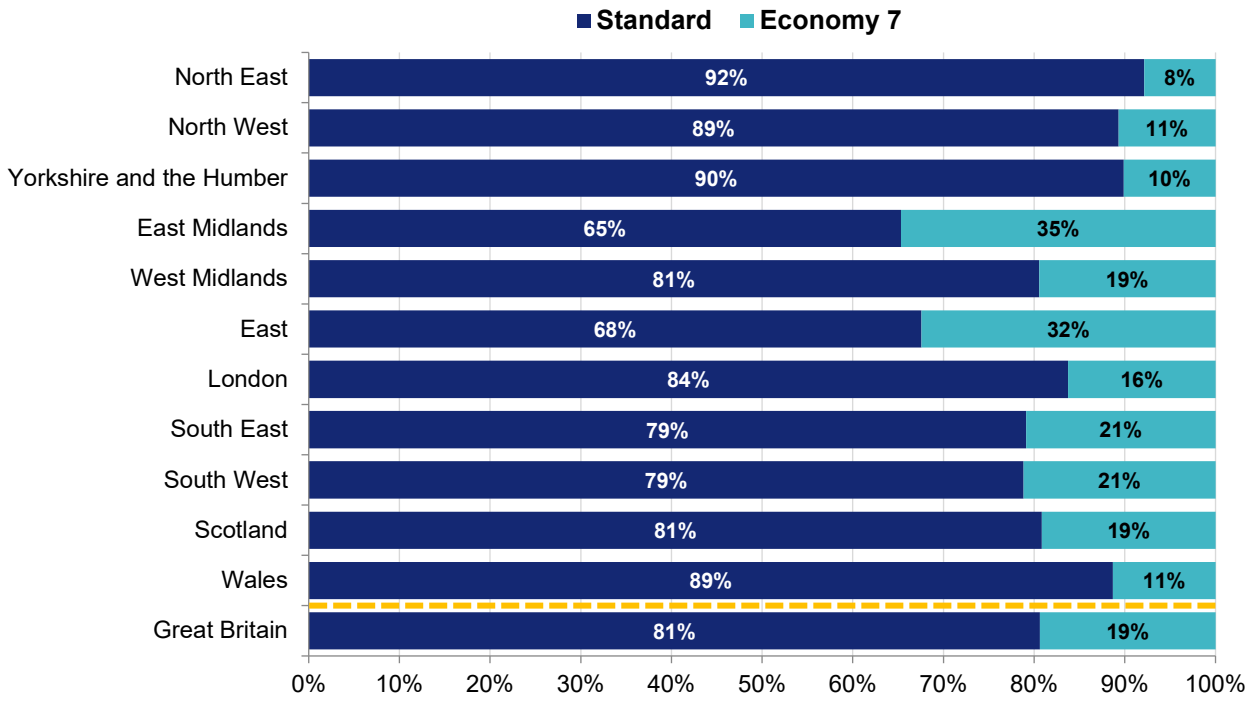
Meter point administration data is collected from electricity suppliers and includes electricity consumption and profile type. In instances where there are multiple consumption reads for a Meter Point Administration Number (MPAN), consumption is aggregated per MPAN.

The profile type is used to classify a meter as domestic or non-domestic, with profile 1 and profile 2 used to classify meters as domestic and all other profiles used to classify a meter as non-domestic. Only profile 2 is used to classify domestic Economy 7 meters, whilst profile 1 types are classified as standard meters. For the definitions of the different profile types, please page 33 below.

It should be noted that the Economy 7 classification also includes other off-peak tariffs, for example Economy 11, and may also include some properties not using electric as the main heating source.

Chart 5 below shows the percentage split of domestic meters between standard meters and Economy 7 meters, by country and region. For Great Britain as a whole, 81 per cent of total domestic consumption was attributed to ordinary domestic meters and 19 per cent to Economy 7 meters. However, across regions the percentage of standard domestic meters varied from 92 per cent in the North East, to 65 per cent in the East Midlands.

Chart 5: Percentage split of total domestic electricity consumption by standard and Economy 7 meters and by country/region in Great Britain, 2019



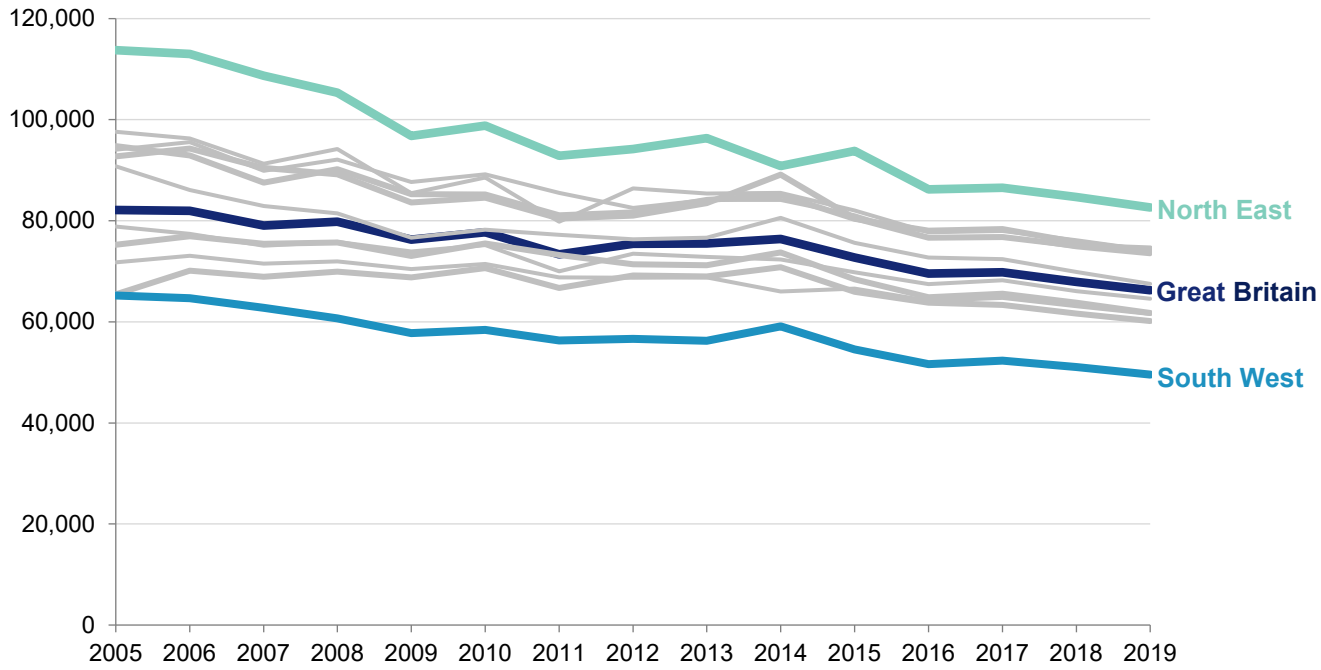
Non-domestic electricity consumption

In 2019, total non-domestic electricity consumption was 169,804 GWh, a decrease of 2.3 per cent since 2018. Compared with non-domestic consumption in 2005 (200,889 GWh) there was around a 15.5 per cent decrease in total electricity consumption. This is despite the number of non-domestic meters increasing by 116,826 (4.8 per cent) over the same period.

In Scotland, non-domestic electricity consumption decreased in 2019 by 3.1 per cent to 14,072 GWh, compared to 14,515 GWh in 2018. Inner London's non-domestic electricity use decreased by 3.2 per cent to 15,341 GWh from 15,847 GWh during the same period. In comparison Wales's non-domestic electricity use decreased by around 0.3 per cent to 9,860 GWh from 9,893 GWh in 2018. Overall, the region with the largest non-domestic electricity use was the South East of England at 21,557 GWh.

Average non-domestic electricity consumption decreased by 2.4 per cent in 2019 (66,256 kWh) compared to 67,905 kWh in 2018. As can be seen in Chart 6 below, this follows the long-term downward trend in non-domestic electricity consumption per meter, which is 19.3 per cent lower in 2019 than in 2005, where it was 82,129 kWh. Mean electricity consumption ranged from 49,558 kWh in the South West to 82,631 kWh in the North East, whilst median electricity consumption ranged from 5,150 kWh in Outer London to 8,378 kWh in the East Midlands. The differences in the mean and median seen for each region when compared to domestic electricity consumption reflect the variety of businesses in these areas.

Chart 6: Mean non-domestic electricity consumption (kWh per meter) by country/region in Great Britain, 2005 to 2019



3. Gas

The data analysed in this document are aggregations of Meter Point Reference Number (MPRN) readings throughout Great Britain obtained as part of BEIS's annual meter point gas data exercise. The estimates for 2019/20 cover the gas period between mid-May 2019 and mid-May 2020. Due to the gas period covering parts of both 2019 and 2020 this document will refer to this period as "2019/20". The same notation will be used for 2018/19 where the average gas period covers mid-May 2018 to mid-May 2019. These data are weather corrected.

In the domestic sector, gas consumption is predominantly used for heating purposes, and as a result usage is driven by external temperatures and weather conditions. The weather correction factor enables more like-for-like comparisons of gas use over time, by controlling for weather changes. It should be noted that the weather correction process may not adequately compensate for extreme weather conditions where consumers may adjust their gas use radically in short spaces of time.

An overview of the weather correction process is available at:
www.gov.uk/government/publications/overview-of-weather-correction-of-gas-industry-consumption-data.

BEIS publish weather uncorrected gas consumption data to compliment these data and can be found at:
www.gov.uk/government/statistical-data-sets/gas-sales-and-numbers-of-customers-by-region-and-local-authority.

This section looks at gas consumption by domestic / non-domestic classification and geographic area (country, region and local authority). The published gas data tables can be found at:
www.gov.uk/government/collections/subnational-gas-consumption-data.

3.1 Total gas consumption

During 2019/20, the total annual gas consumption in Great Britain was 505,499 GWh (via around 24.4 million meters), 0.7 per cent lower than consumption in 2018/19, where it was 508,981 GWh. This total does not include “unique site” meters, as described on the following page.

Notes on Gas Consumption

Break in trends

Gas meter readings are received by BEIS from Xoserve, who compile these data from gas shippers, who in turn receive the data from gas suppliers. If any meter reading does not progress through one of these stages, then BEIS’ record of the Annual Quantity (AQ) isn’t updated and the previous AQ is used in the subnational figures.

With the 2017/18 consumption figures, Xoserve introduced a new data collection system. Due to this, a large proportion of meters which had not reported for some time have had their AQs updated in the 2017/18 gas consumption figures. This large update led to an increase in the total AQ reported in 2017/18 gas consumption data. With most gas meters now providing timely meter readings, the figures from 2017/18 onwards are a more accurate reflection of gas consumption.

Because some meters did not submit readings for multiple years prior to 2017/18, the figures for these years are likely to underestimate total gas consumed. The figures from 2017/18 represent a break in trends, with gas consumption not being comparable to previous years.

Sector classification and the impact of COVID-19

To distinguish if a meter is classified as domestic or non-domestic, the gas industry cut-off point of 73,200 kWh is used – that is, if a meter consumes less than 73,200 kWh within the gas year it is defined as a domestic meter, and non-domestic if it consumes 73,200 kWh or more.

In March 2020, the government placed restrictions to limit the spread of COVID-19 and the country entered a phase of ‘national lockdown’. The gas year for the latest data from mid-May 2019 to mid-May 2020 includes the period when these lockdown measures were in place. Where these measures affected the gas consumption of non-domestic properties, it could result in some non-domestic sites that would normally consume more than the 73,200 kWh threshold falling below this threshold. Around 5% of non-domestic meters were reclassified as domestic in 2019/20. We are doing further work to assess alternative methods of sector classification.

Change in period covered in gas consumption statistics

The summer of 2017 saw the implementation of new gas meter point management and settlement processes, which caused a change in the period covered by gas data from 2016 onwards. For the previous year (2015’s gas year) the average meter read period was October 2014 – September 2015. For 2016 it was July 2016 – July 2017, a forward movement of almost 22 months, rather than the usual 12 months. For 2017, it was June 2017 – June 2018, for 2018 it was May 2018 to May 2019 and for 2019 it is May 2019 to May 2020. In summary, the gas consumption periods each year refers to are:

- Prior to 2014: same October – September period as 2014 and 2015
- 2014: October 2013 – September 2014
- 2015: October 2014 – September 2015
- 2016/17: Mid-July 2016 – Mid-July 2017
- 2017/18: Mid-June 2017 – Mid-June 2018
- 2018/19: Mid-May 2018 – Mid-May 2019
- 2019/20: Mid-May 2019 – Mid-May 2020

All references to gas consumption years in this report signify the gas period for that year (e.g.: “gas consumption 2015” refers to consumption of gas between October 2014 and September 2015).

Note that this change brings the mean read date of gas meters ahead of the mean read date of electricity meters by roughly 5 months.

Unique Sites in gas consumption statistics

In addition to domestic and non-domestic meters, BEIS is now supplied with data on "Unique Sites" (also known as "Non-Standard Sites"). These are high consuming sites which have previously been unreported due to the complexities in their billing arrangements. Up until 2015 Unique Sites had higher total consumption than the rest of the meters in the UK combined.

The data on unique sites show extreme changes in reported annual consumption. Because of this and to ensure consistency in the time series, gas consumption from unique sites and other large consumers are not included in the published tables; for example, data between 27,000 and 50,000 GWh has been removed in the years since 2016. However, this is being kept under review and estimates for Unique Sites may be published in the future.

Total consumption decreased in 215[15] of the 365 local authorities connected to the gas network between 2018/19 and 2019/20. The number of meters in an area can change as new properties are built, more homes become connected to the gas grid, or old properties are demolished. Boundary changes can also affect the number of meters in an area. In addition, assigning a meter to an area within the subnational gas consumption statistics is dependent upon the postcode information for each meter. Improvements in address information may allow more meters to be matched to the correct geographic area rather than remaining 'Unallocated'[16]. This means that an increase in the number of meters in an area may reflect better postcode allocation, rather than an actual increase in the number of meters within the year.

Table 3 below shows the changes in gas consumption and number of meters in Great Britain between 2018/19 and 2019/20, broken down by region and countries. Overall, it shows that there has been an increase in the number of meters for all regions.

Total gas consumption fell in 10 of the 13 countries and regions between 2018/19 and 2019/20, with the largest decline (2.0 per cent) in the East of England. The South West, North East and Outer London observed modest increases of less than 1 per cent. Gas use remained relatively consistent between 2018/19 and 2019/20 ranging between a decline of 2.0 per cent and an increase of 0.7 per cent across the regions.

[15] The local authorities of Orkney Islands, Shetland Islands and Isles of Scilly are not connected to the gas network and therefore not included in the gas consumption data.
[16] Unallocated' meters are meters with insufficient address information to assign their consumption to a geographical area

Table 3: Total gas consumption in Great Britain by country/region in Great Britain, 2018/19 and 2019/20

	2018/19 (revised)[2]		2019/20		Percentage Change	
	Total gas consumption (GWh)	Meters (1000s)	Total gas consumption (GWh)	Meters (1000s)	Total gas consumption	Meters
North East	24,274	1,142	24,427	1,149	0.6%	0.6%
North West	65,038	2,989	64,978	3,005	-0.1%	0.5%
Yorkshire & The Humber	52,355	2,188	51,392	2,201	-1.8%	0.6%
East Midlands	39,969	1,857	39,668	1,869	-0.8%	0.7%
West Midlands	47,298	2,189	46,909	2,203	-0.8%	0.6%
East	45,537	2,168	44,634	2,183	-2.0%	0.7%
Inner London	26,645	1,213	26,294	1,215	-1.3%	0.1%
Outer London	35,065	1,830	35,114	1,835	0.1%	0.3%
South East	64,069	3,365	63,694	3,389	-0.6%	0.7%
South West	34,611	1,951	34,868	1,967	0.7%	0.8%
England	**434,861**	**20,892**	**431,978**	**21,017**	**-0.7%**	**0.6%**
Wales	**24,159**	**1,156**	**23,957**	**1,165**	**-0.8%**	**0.7%**
Scotland	**47,652**	**2,102**	**47,502**	**2,120**	**-0.3%**	**0.9%**
Unallocated[1]	2,308	58	2,063	61	-10.6%	4.5%
Great Britain	**508,981**	**24,208**	**505,499**	**24,363**	**-0.7%**	**0.6%**

1. A small number of meters in Great Britain, cannot be allocated to a specific area (0.3 per cent). These meters are therefore categorised as 'Unallocated'.

2. Revisions to the 2018/19 gas data were applied to individual meter consumption identified as errors by the data provider.

In 2019/20, the City of London had the highest local authority mean gas consumption (per meter) at 251,894 kWh, while Torridge (England) had the lowest at 12,884 kWh. The difference in mean gas consumption between the two reflects the different compositions of these areas, with the City of London having a far higher concentration of large business consumers.

3.2 Domestic gas consumption

Average domestic gas consumption

The mean and median annual gas consumption per domestic meter in 2019/20 were 13,495 kWh and 11,937 kWh respectively, with total domestic gas consumption coming in at 325,183 GWh. This is slightly higher than the 2018/19 figure of 320,183 GWh. Overall, in 2019/20, mean domestic consumption was 0.9 per cent higher than in 2018/19. This is consistent with trends seen in national datasets[17] and although around 2 months of the annual data reflect a period of COVID-19 lockdown measures, this is unlikely to have been the significant factor in the overall change in domestic consumption.

Table 4 shows both mean and median domestic gas consumption per meter, the total number of domestic meters and the total domestic consumption (including percentage breakdowns) for each country and region in Great Britain for 2019/20.

Table 4: Mean and total domestic gas consumption per meter by country/region in Great Britain, 2019/20

	Meters (1000s)	Total consumption (GWh)	Percentage of total domestic gas consumption	Mean domestic consumption (kWh)	Median domestic consumption (kWh)
North East	1,138	15,428	4.7%	13,557	12,358
North West	2,974	39,779	12.2%	13,374	11,962
Yorkshire and The Humber	2,178	30,395	9.3%	13,957	12,499
East Midlands	1,850	25,227	7.8%	13,633	12,299
West Midlands	2,179	29,931	9.2%	13,737	12,359
East	2,161	29,234	9.0%	13,529	11,982
Inner London	1,192	14,313	4.4%	12,003	9,791
Outer London	1,815	27,167	8.4%	14,966	13,193
South East	3,350	45,958	14.1%	13,718	11,924
South West	1,948	23,520	7.2%	12,075	10,562
England	**20,786**	**280,953**	**86.4%**	**13,516**	**11,956**
Wales	**1,154**	**14,716**	**4.5%**	**12,750**	**11,563**
Scotland	**2,096**	**28,823**	**8.9%**	**13,749**	**12,025**
Unallocated[1]	60	692	0.2%	11,569	10,250
Great Britain	**24,096**	**325,183**	**100.0%**	**13,495**	**11,937**

1. A small number of meters in Great Britain, cannot be allocated to a specific area (0.3 per cent). These meters are categorised as 'Unallocated'.

Outer London had the highest mean domestic consumption with 14,966 kWh per meter (median consumption of 13,193 kWh). The mean for Outer London was just over 1,000 kWh more than the second highest region, Yorkshire and the Humber (mean 13,957 kWh and median 12,499). Inner London has the lowest mean consumption per meter at 12,003 kWh. In general, domestic gas consumption is influenced by property characteristics. For example, larger properties tend to consume more gas[18].

[17] The subnational data is weather corrected, and unadjusted domestic gas consumption estimates (from different sources to those used in this publication) are available in Table C9, Energy Consumption in the UK (https://www.gov.uk/government/statistics/energy-consumption-in-the-uk). Estimates in Table C9 show an increase in overall domestic consumption between 2018 and 2019 (from 105,065 GWh to 103,825 GWh) and average consumption (from 3,810 kWh to 3,731 kWh).

[18] For detailed analysis on the determinants of household gas use, see https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/812418/Annex_D_Determinants_of_household_gas_use.pdf

Map 2 shows mean domestic gas consumption per meter by local authority in 2019/20. Elmbridge (South East) had the highest mean gas consumption in 2019/20 at 18,722 kWh, while Tower Hamlets (Inner London) has the lowest at 9,537 kWh.

Map 2: Average domestic gas consumption per meter by local authority, 2019/20

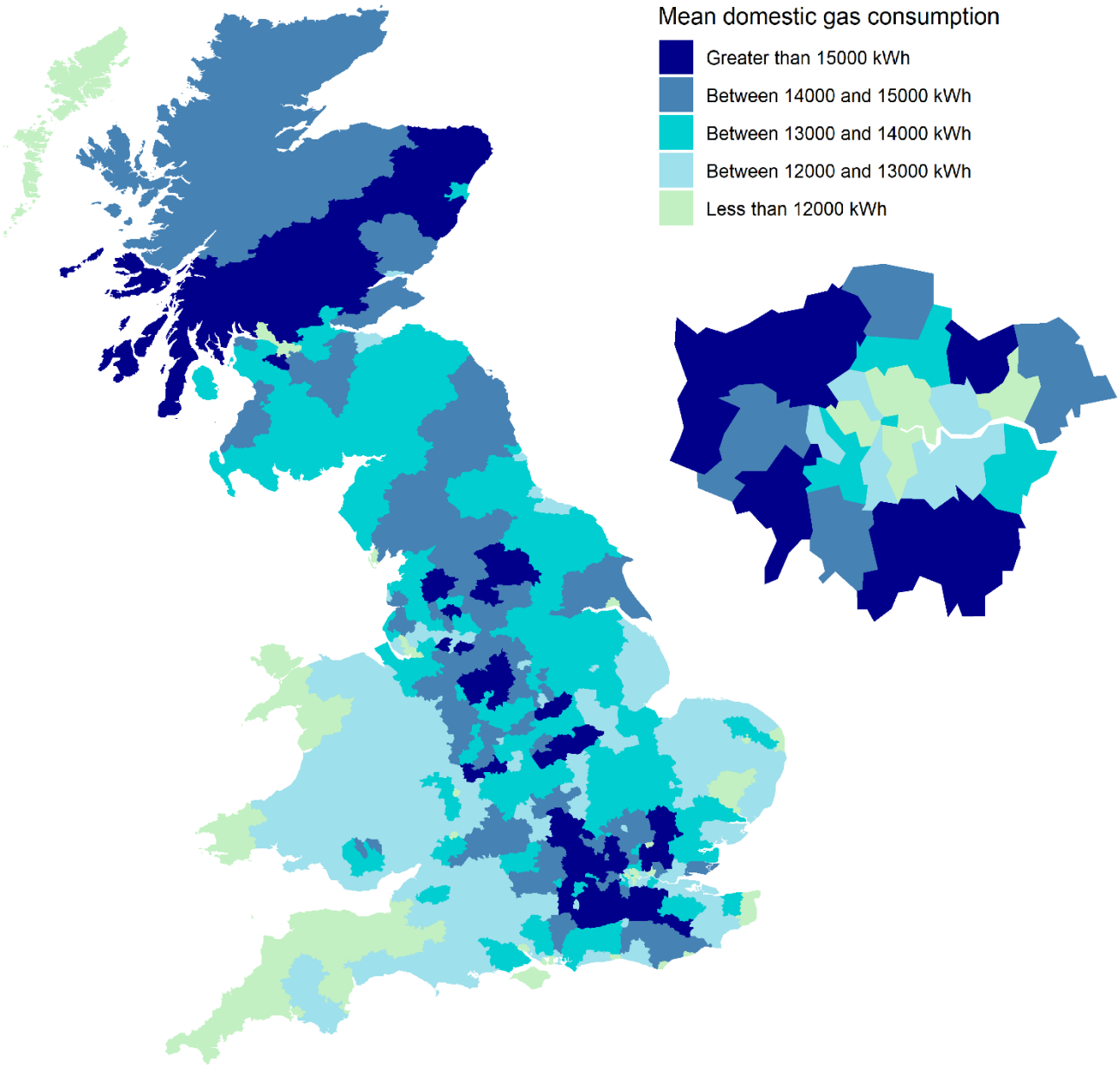


Chart 7 below shows the change in average domestic gas consumption per meter point between 2005-2019 and between 2018/19 - 2019/20 at a country and regional level.

Mean domestic gas consumption per meter across all countries and regions has decreased by 29.0 per cent between 2005 and 2019/20. The South West has seen the biggest reduction by 5,326 kWh (30.2 per cent), while London has seen the smallest reduction by 4,350 kWh (24.0 per cent). There are many factors which may have contributed to the reductions in consumption

including energy efficiency improvements[19], such as increased levels of insulation, new boilers and more energy efficient appliances; increased prices[20]; changes in the building stock and changes in household composition.

A small increase in total domestic consumption and mean domestic (0.9 per cent) consumption was observed between 2018/19 and 2019/20. As shown in Chart 9 there has been a flattening off in the longer-term downward trend in domestic gas consumption. There may be a small impact of the COVID-19 lockdown measures in the latter part of the year as more people stayed at home, but temperatures were generally milder than normal at this time. The largest increase was observed in the South West (1.6 per cent).

Chart 7: Change in average domestic gas consumption (kWh per meter) by region and country in Great Britain, from 2005 to 2019/20, and from 2018/19 to 2019/20

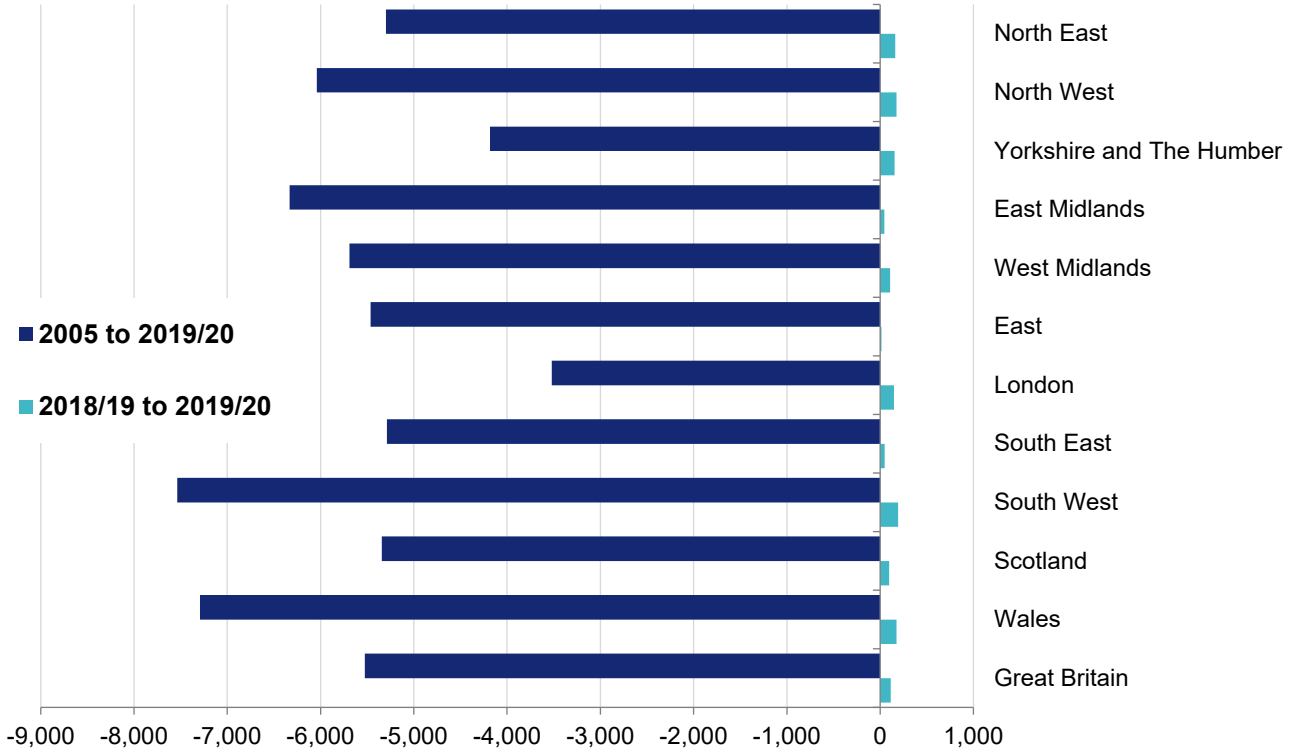


Chart 8 below shows the mean domestic gas consumption per meter for the South West, Yorkshire and the Humber and Great Britain from 2005 to 2019/20. These regions have been selected as they had the highest and lowest average domestic gas consumption for 2019/20. The average consumption for all other regions in Great Britain was between the lines shown for Yorkshire and the Humber and the South West. Note that all regions follow a similar trend. Also note that Outer London is the region with the highest mean gas consumption per meter in

[19] The energy efficiency of the housing stock improved between 2005 and 2017, the average SAP rating of a dwelling increased by 12.6 points from 49.4 to 62. The SAP rating is a measure of the overall energy efficiency of the dwelling. Annex Table 2.6: Mean SAP rating, by tenure, 1996 to 2017: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/834603/2017-18_EHS_Headline_Report.pdf

[20] Between 2005 and 2019, domestic gas prices for direct debit customers contained in BEIS: Average annual domestic gas bills, show an increase of more than 100 per cent (62.4 per cent in real terms) which is likely to have influenced demand. Average annual domestic gas bills' can be accessed here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/875743/table_232.xlsx

2019/20 (14,966 kWh) but this is not shown on Chart 8 because BEIS did not historically separate Inner and Outer London regions prior to 2015.

Chart 8: Mean domestic gas consumption (kWh per meter) for selected regions in Great Britain, 2005 to 2019/20

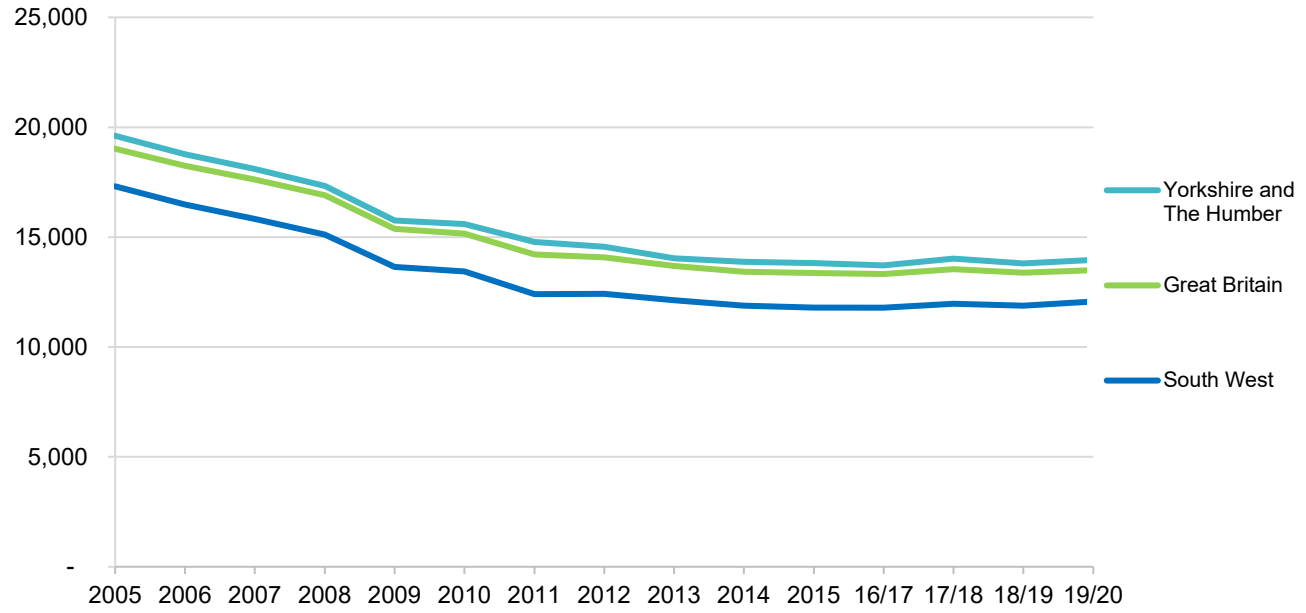
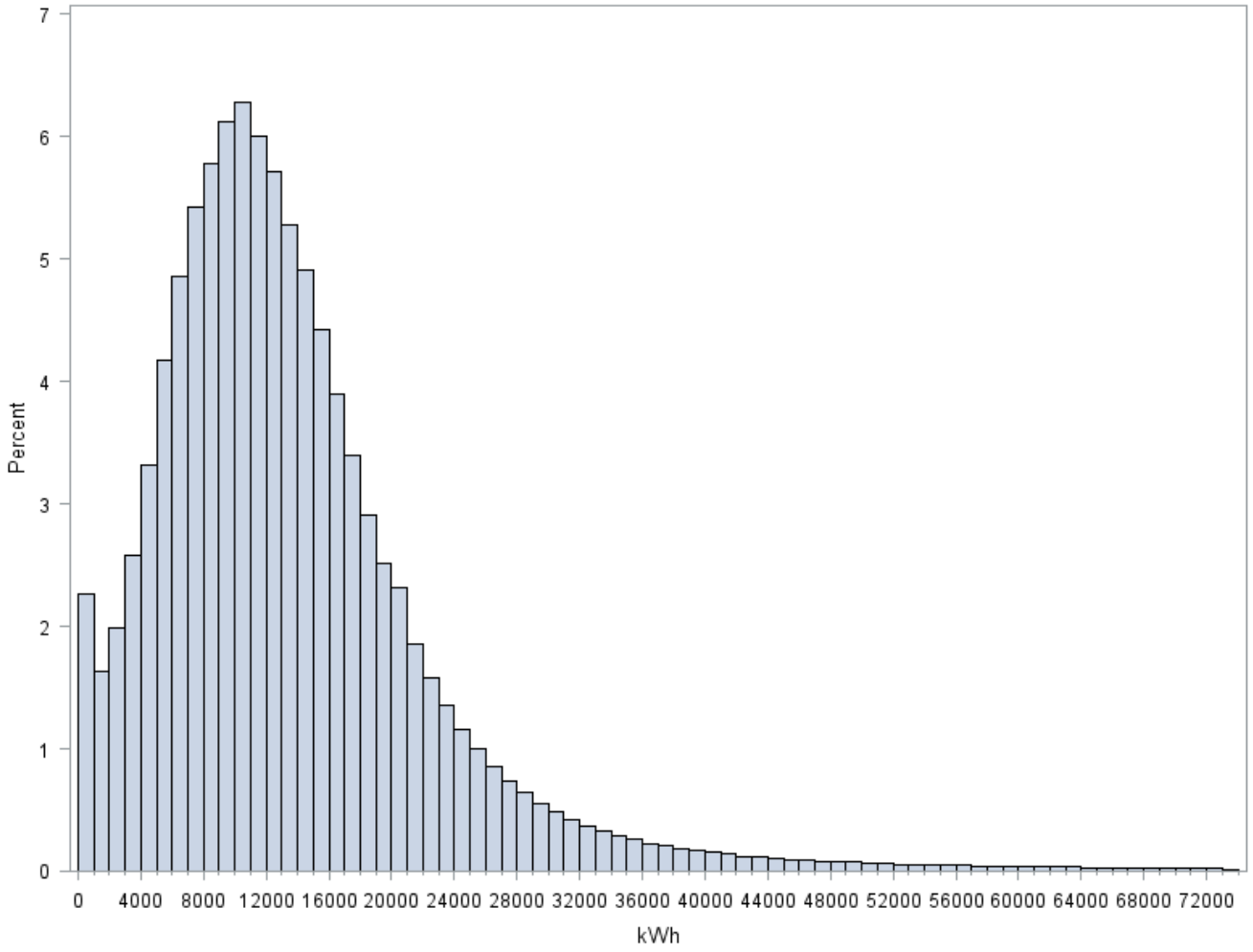


Chart 9 below shows the distribution of annual domestic gas consumption by all domestic meters in Great Britain. The mean consumption is 13,495 kWh and the median consumption is 11,937 kWh. Most domestic meters (18.1 million or around 75% of all domestic meters) consumed between 4,000 kWh and 20,000 kWh of gas per year.

Chart 9: The distribution of domestic gas consumption per meter in Great Britain, 2019/20



3.3 Non-domestic consumption

Total non-domestic consumption

In 2019/20, total non-domestic annual gas consumption in Great Britain was 180,316 GWh (via 266,781 meters), 4.5% per cent lower than in 2018/19 (188,798 GWh). This reduction in consumption is partly due to some meters moving from the non-domestic to domestic classification as their usage fell below the 73,200 kWh threshold. This reclassification may be partly linked to the COVID-19 lockdown measures in Great Britain when non-essential businesses closed from 23rd March (also see box on p16). Non-domestic consumption decreased in 274 local authorities[21] between 2018/19 and 2019/20.

Some local authorities showed significant proportional increases in consumption compared to 2018/19. These changes are often caused by the introduction of new businesses/meters or by single meters consuming significantly more gas over the period. BEIS work with data suppliers to ensure that the consumption data is accurate and seek specific feedback on these high consuming meters to ensure the quality of the data.

Average non-domestic consumption

Average annual non-domestic gas consumption per meter was 675,896 kWh in 2019/20, virtually unchanged from 2018/19 (676,142 kWh). Table 5 shows total non-domestic gas consumption in each of the regions. The North West accounted for 14.0 per cent of all non-domestic gas consumption, compared to Outer London and the North East which accounted for 4.4 and 5.0 per cent respectively. The North West, Yorkshire and The Humber and Scotland had the highest average non-domestic gas consumption per meter, reflecting the mix of industry in the regions, and the greater use of gas for industrial purposes.

Table 5: Mean non-domestic gas consumption per meter and total non-domestic gas consumption by country/region in Great Britain, 2019/20

	Number of non-domestic meters	Total non-domestic consumption (GWh)	Percentage of total non-domestic gas consumption in Great Britain	Average non-domestic consumption (kWh per meter)
North East	11,250	8,999	5.0%	799,951
North West	30,927	25,199	14.0%	814,789
Yorkshire and The Humber	23,427	20,997	11.6%	896,260
East Midlands	18,805	14,440	8.0%	767,887
West Midlands	24,094	16,978	9.4%	704,658
East	22,104	15,400	8.5%	696,687
Inner London	22,149	11,981	6.6%	540,934
Outer London	19,896	7,947	4.4%	399,419
South East	38,985	17,736	9.8%	454,938
South West	19,589	11,348	6.3%	579,319
England	231,226	151,025	83.8%	653,148
Wales	10,416	9,241	5.1%	887,238
Scotland	23,863	18,679	10.4%	782,763
Unallocated[1]	1,276	1,371	0.8%	1,074,229
Great Britain	266,781	180,316	100%	675,896

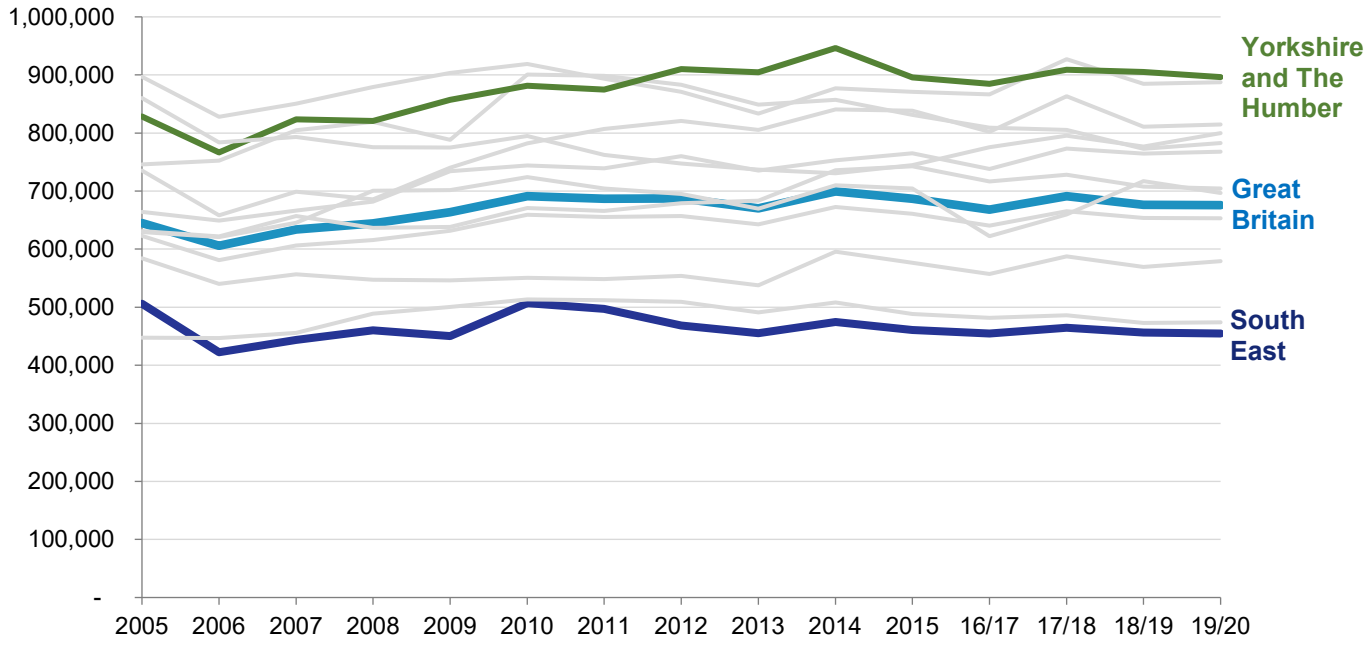
[1] A small number of meters in Great Britain, cannot be described as being in a specific area (0.5 per cent). These meters are therefore categorised as 'Unallocated'.

21 The local authorities of Orkney Islands, Shetland Islands and Isles of Scilly are not included in the subnational gas consumption datasets due to limitations in access to gas data.

Chart 10 shows the trends in mean non-domestic gas consumption per meter between 2005 and 2019/20 for all countries and regions in Great Britain. Yorkshire and the Humber and the South East have also been highlighted as they represent the highest and lowest means respectively in 2019/20. In comparison to domestic gas consumption, different trends are evident for average annual non-domestic gas consumption between 2005 and 2019/20.

At a local authority level, King's Lynn and West Norfolk (East of England) had the highest non-domestic mean gas consumption in 2019/20 at 5,257,481 kWh, while Elmbridge (South West) had the lowest mean at 186,426 kWh. It is noteworthy that the median gas consumption in King's Lynn and West Norfolk was only 151,687 kWh.

Chart 10: Mean non-domestic gas consumption (kWh per meter) for all countries/regions in Great Britain, 2005 to 2019/20



3.4 Number of properties not connected to the gas grid

Background

There is no definitive source of information on properties that are off the gas grid. However, BEIS produces estimates of the number of domestic properties without gas based on the difference between the number of gas meters in each area, as set out earlier in this document, and the number of properties in each area.

The published data does not allow the identification of specific properties within an area which are off the gas grid but does allow small geographic areas which have few or no gas meters to be identified. However, there are limitations which should be considered when using these estimates:

- Each gas meter is assigned as domestic or non-domestic based on the gas industry threshold of 73,200 kWh, with all meters consuming below 73,200 kWh per gas year assumed to be domestic. This means that smaller consuming commercial/industrial consumers are allocated as domestic. Therefore, estimates of the number of properties without gas are an underestimate of the true number. The impact of this assumption on estimates will vary by area.

- Some meters cannot be allocated to a local authority due to insufficient or incomplete address information[22]. Approximately 0.2 per cent of domestic meters could not be allocated to a local authority in 2019/20.

- In some cases, incorrect address information may mean meters are allocated to the wrong area. The number of meters which are incorrectly allocated will vary by area.

In this dataset, there is no differentiation between properties which do not have a gas meter because they are in an area which is off the gas grid and those which are in an area on the gas grid but have a property which is not connected to it (such as inner-city blocks of flats).

Estimates of properties not connected to the gas grid

Table 6 below shows the estimated proportion and number of properties that are not connected to the gas network in each region of Great Britain. For Great Britain as a whole, this is 14.1 per cent in 2019/20. This is a 0.1 percentage point increase from the 2018/19 estimate. Overall estimates for Great Britain have remained stable between 2015 and 2018/19, with the number of non-gas properties increasing by just under 74,000 properties between 2018/19 and 2019/20.

The South West of England has the highest proportion of properties without a gas meter at 23.5 per cent, and the North East had the lowest proportion at 7.4 per cent.

[22] These meters are included in the overall estimates for Great Britain but are aggregated in the ‘Unallocated’ row in the subnational statistics outputs.

Table 6: Estimates of properties not connected to the gas grid, 2019/20

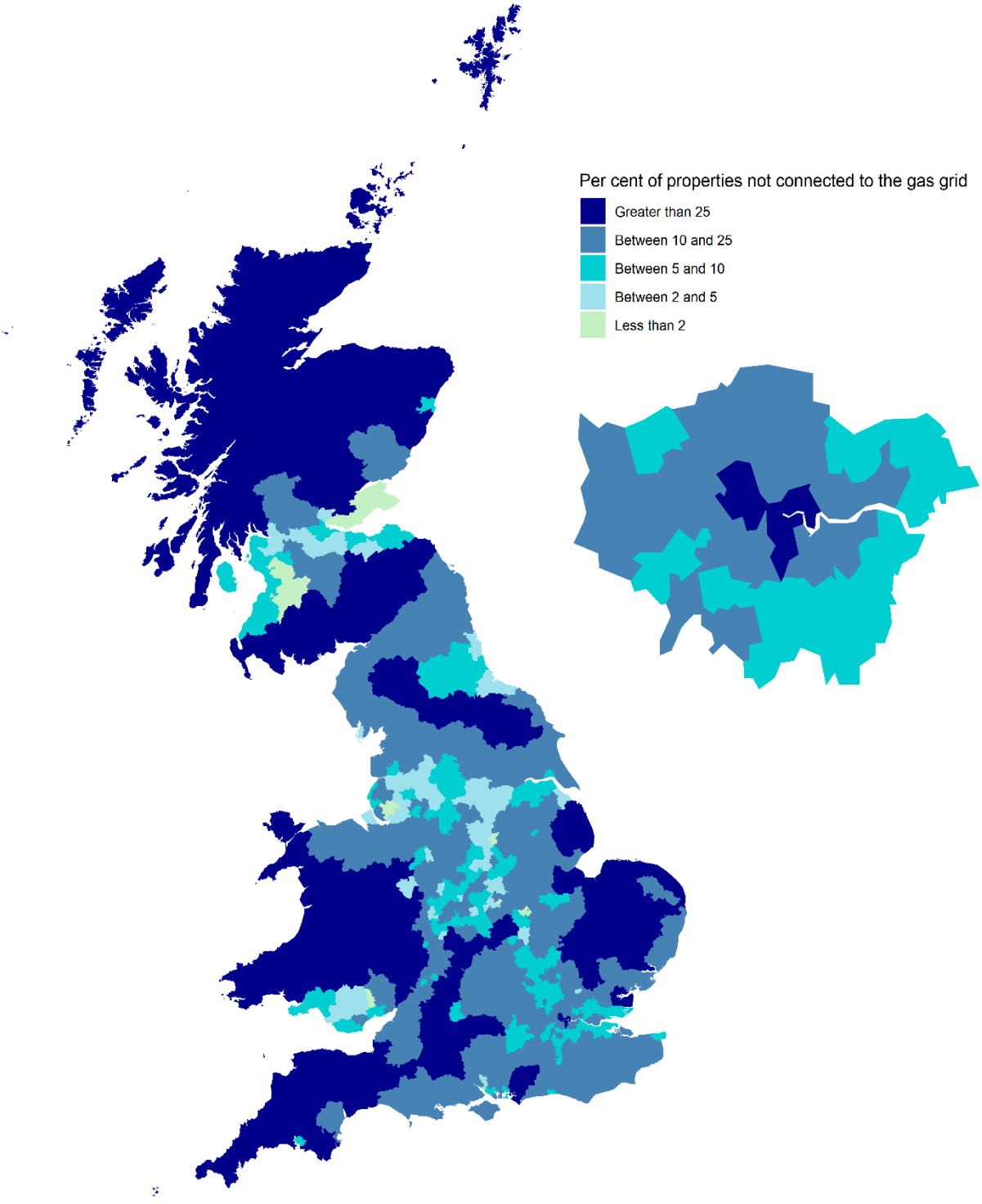
	Number of domestic gas meters (1000s)	Number of council tax registered properties in 2019/20 (1000s)	Estimated number of "off gas" properties (1000s)	Estimated proportion of "off gas" properties (percentage)
North East	1,148,252	1,239,800	91,548	7.4%
North West	3,009,792	3,300,940	291,148	8.8%
Yorkshire and The Humber	2,199,859	2,437,910	238,051	9.8%
East Midlands	1,868,816	2,105,090	236,274	11.2%
West Midlands	2,202,815	2,505,560	302,745	12.1%
East	2,180,856	2,701,650	520,794	19.3%
Inner London	1,216,723	1,568,820	352,097	22.4%
Outer London	1,835,706	2,073,790	238,084	11.5%
South East	3,379,786	3,934,940	555,154	14.1%
South West	1,964,909	2,567,450	602,541	23.5%
England	**21,007,514**	**24,435,950**	**3,428,436**	**14.0%**
Wales	**1,166,182**	**1,440,960**	**274,778**	**19.1%**
Scotland	**2,117,573**	**2,490,635**	**373,062**	**15.0%**
Great Britain	**24,361,402**	**28,367,545**	**4,006,143**	**14.1%**

A small number of meters, in Great Britain, cannot be described as being in a specific area (0.2 per cent). These meters are therefore categorised as 'Unallocated' and cannot be used to estimate off gas properties in an area, but are used to calculate the Great Britain off-gas estimate.

Map 3 shows how the proportion of properties without a gas meter varies across local authorities in Great Britain.

Estimates for properties off the gas grid at local authority, MSOA and LSOA levels (2019/20) are published at: www.gov.uk/government/collections/subnational-gas-consumption-data

Map 3: Percentage of meters that are off the gas grid by local authority, 2019/20



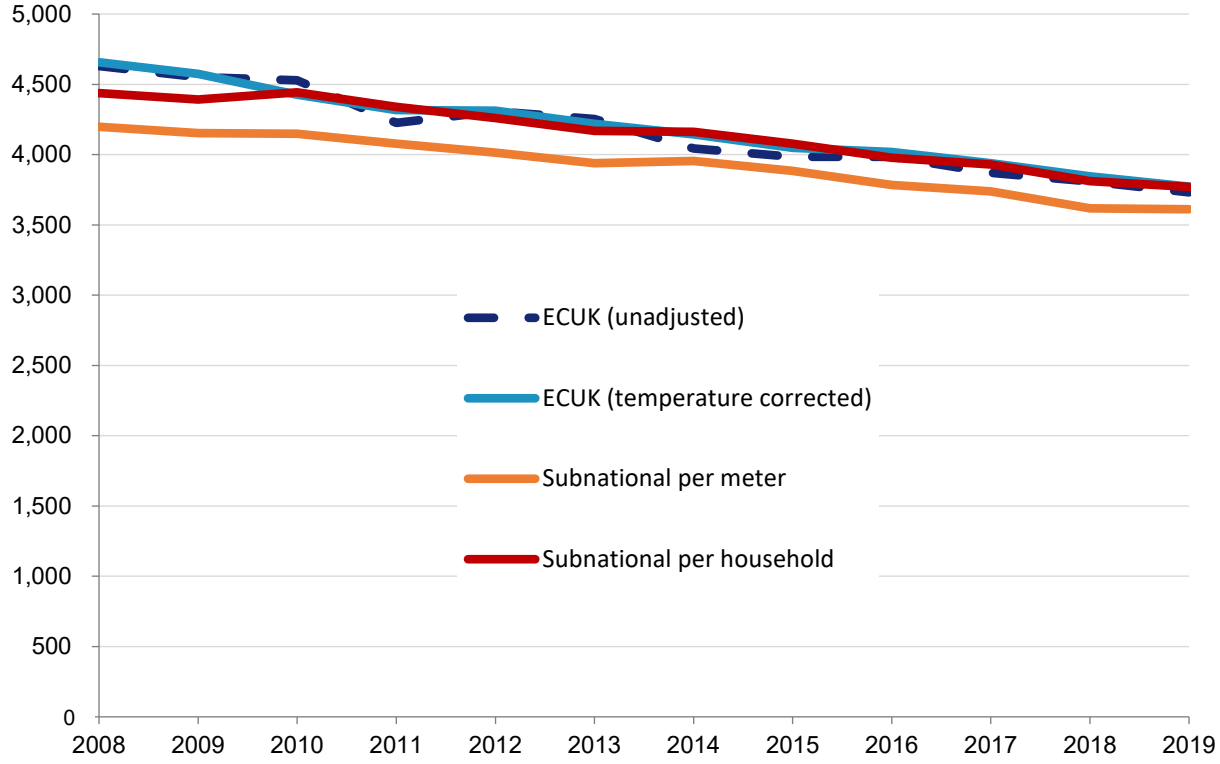
4. Comparison with other sources

4.1 Electricity

Domestic Electricity

See Chart 11 below for a comparison of the subnational data with the average annual consumption per household published in Energy Consumption in the UK (ECUK) Table 3.07 (and based on data from DUKES Table 1.1.5). This shows that the trend over time is consistent between the two sources.

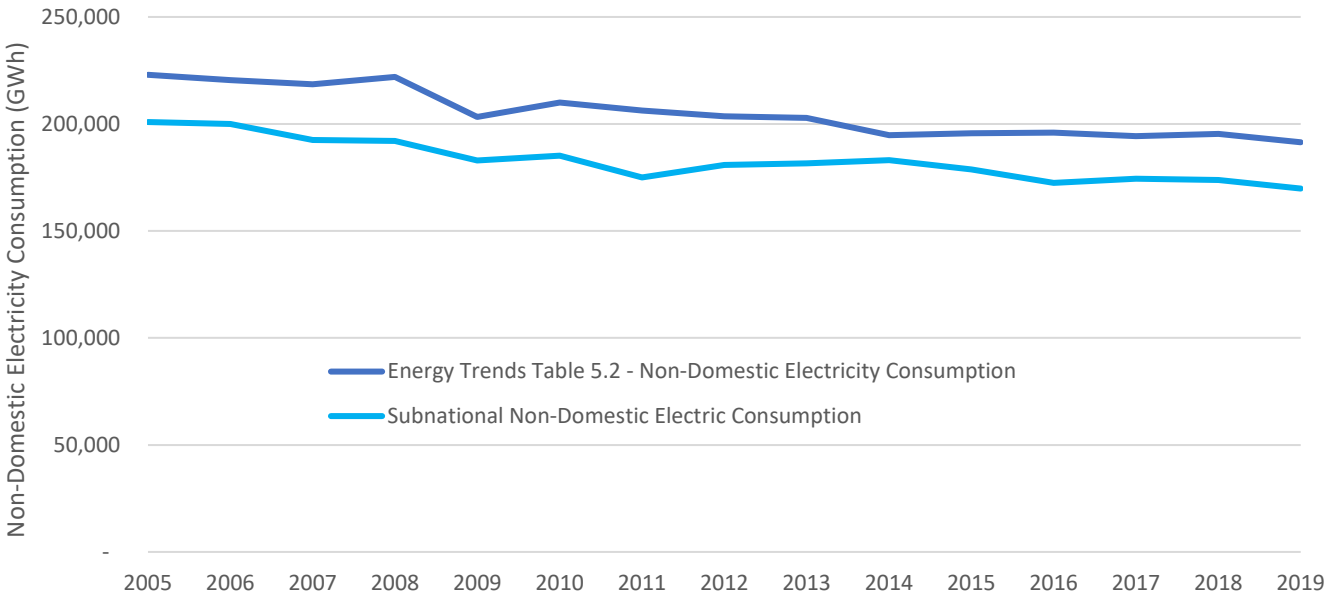
Chart 11: Comparison of sources, mean annual electricity consumption per household, 2008 to 2019



Non-domestic Electricity

See Chart 12 below for a comparison of the subnational data with the total annual non-domestic consumption for the UK as published in Energy Trends Table 5.2. This shows that whilst the methodology for counting non-domestic consumption between the two sources is different, the trend over time is broadly consistent.

Chart 12: Comparison of sources, annual non-domestic electricity consumption, 2005 to 2019



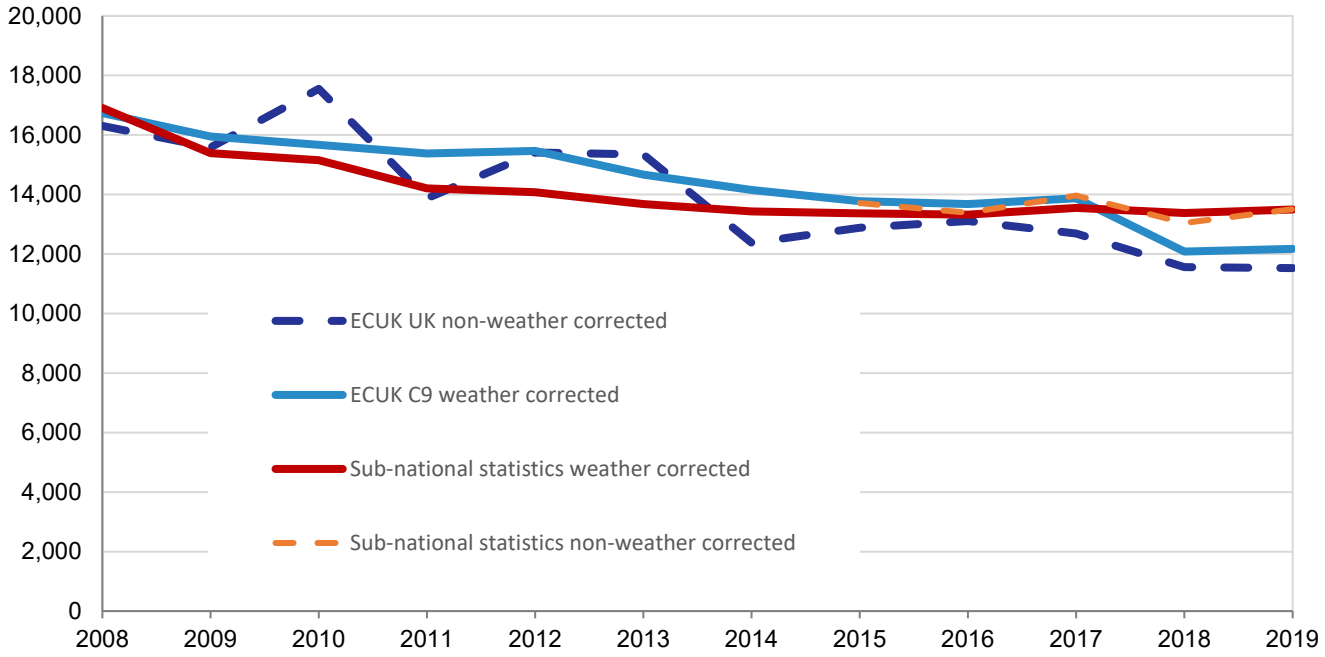
4.2 Gas

Domestic gas consumption

BEIS publish estimates of gas consumption from other sources, which can be used to derive estimates of average domestic gas consumption as published in ECUK Table C9 (derived from DUKES Table 1.1.5). Chart 13 below contains estimates between 2008 and 2019. Note that weather correction can cause variability between the estimates.

The table shows that in broad terms the data series are consistent, which provides reassurance to users of the subnational data provided here. The difference between the ECUK and subnational average domestic gas consumption figures will in part be driven by the different denominators used to calculate the two figures. ECUK data uses the number of billed customers collected by BEIS as part of its survey of gas suppliers, whereas subnational data uses the number of domestic meters as the denominator. There will be some non-domestic meters incorrectly included in the subnational data which may underestimate the average.

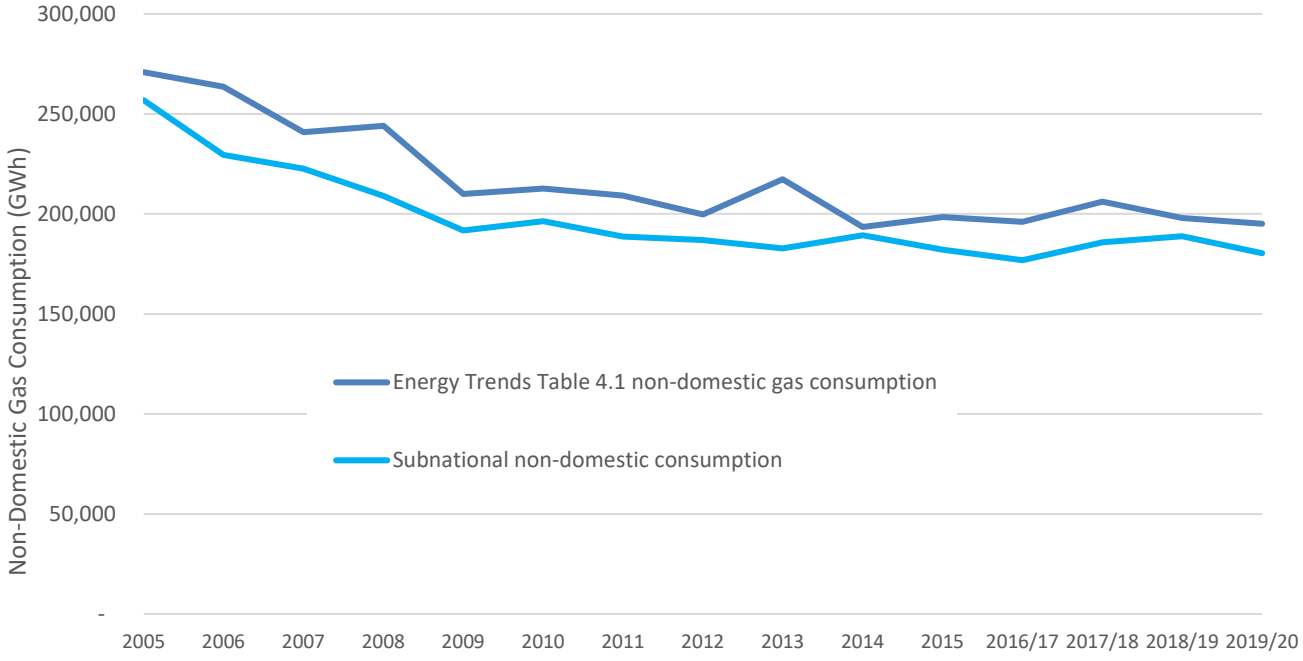
Chart 13: Comparison of sources, mean domestic gas consumption (kWh), 2008 to 2019[23]



Non-domestic gas consumption

See Chart 14 below for a comparison with the total annual UK non-domestic gas consumption published in Energy Trends Table 4.1 This shows that the methodology for counting non-domestic consumption between the two sources is different, although trend over time is consistent.

Chart 14: Comparison of sources, annual non-domestic gas consumption, 2005 to 2019



[23] Note that due to a methodological change, subnational gas consumption from 2017/18 is not directly comparable to previous years.

Accompanying tables

The following electricity consumption tables accompany this report and are available in Excel and csv format at www.gov.uk/government/collections/subnational-electricity-consumption-data:

- Regional and local authority electricity consumption statistics
- Middle Super Output Areas electricity consumption
- Lower Super Output Areas electricity consumption
- Postcode level electricity statistics: 2019 (experimental)
- Stacked electricity consumption statistics data (csv)

The following gas consumption tables accompany this report and are available in Excel format at www.gov.uk/government/collections/subnational-gas-consumption-data

- Regional and local authority gas consumption statistics
- Middle Super Output Areas gas consumption
- Lower Super Output Areas gas consumption
- Postcode level gas statistics: 2019 (experimental)
- Stacked gas consumption statistics data (csv)

Technical information

For full details on the methodology, assumptions and data interpretation relating to these statistics, please refer to the Methodology and Guidance document available here: www.gov.uk/government/publications/regional-energy-data-guidance-note.Users are highly advised to familiarise themselves with the material in the booklet before using the data.

Definitions

Electricity Meter Profile	Profile 1 – Standard domestic meter. Profile 2 – Economy 7 domestic meter. Profile 3 – Standard non-domestic meter. Profile 4 – Economy 7 non-domestic meter. Profile 5 to 8 – higher consuming non-domestic meters (Note that Profile 5 to 8 are being phased out of use and replaced with Profile 0 meters). Profile 0 – non-domestic half-hourly meter.
MPAN	Meter Point Administration Number – A unique number to identify individual electric meters.
kWh	Kilowatt hour – the quantity of kilowatts consumed in one hour.
GWh	Gigawatt hour – the quantity of gigawatts consumed in one hour.
MPRN	Meter Point Reference Number – A unique number to identify individual gas meters.
Gas Meter Profile	Domestic meter – a meter that consumes less than 73,200 kWh. Non-domestic meter – a meter that consumes more than or equal to 73,200 kWh.

Related statistics

Gas Statistics

Comparison to DUKES

It is important to take care when comparing subnational gas data to data published in the Digest of United Kingdom Energy Statistics (DUKES)[24]. DUKES is an annual BEIS publication which provides a detailed and comprehensive picture of energy production and use over the last five years, with extensive tables, charts and commentary covering all the major aspects of energy.

There are differences in reported gas figures in the subnational and DUKES publications as DUKES data:

- Are based on a calendar year, whereas subnational data covers various periods (see section 2.2).
- Are not weather corrected whereas subnational data are weather corrected.
- Covers consumption for the United Kingdom, whereas the subnational statistics cover Great Britain only.
- Are compiled using a top-down approach, where statistics are gathered by energy companies on a national level, whereas subnational datasets are compiled using a bottom-up approach, from an initial set of individual MPRN data.
- Include consumption from large power stations in its totals, which are not included in subnational data

Comparison to ECUK

There are also points the user needs to be aware of when comparing subnational data to Energy Consumption in the UK (ECUK)[25]. ECUK is an annual BEIS publication which includes a detailed overview of energy consumption at a UK-wide level.

Differences occur between ECUK and subnational figures as data in ECUK:

- Are, in many cases, modelled and obtained from secondary analysis performed by BEIS on data from several sources, including DUKES.
- Contain a more comprehensive sectoral split than the subnational statistics and give information on the end use of most fuels.

[26] DUKES can be accessed on the BEIS website:
[26] DUKES can be accessed on the BEIS website:

Electricity Statistics

Comparison to subnational electricity data

Subnational electricity and gas consumption statistics use varying methodologies to compile the datasets and cover different time periods. A key difference to bear in mind is that electricity consumption data are not weather corrected while gas consumption data have a weather correction factor applied to them. Despite these differences, the combined electricity and gas figures provide a good indication of overall annual household energy consumption in Great Britain at local authority, MSOA/IGZ and LSOA level.

For more information on how gas consumption statistics are produced, please see Chapter 3.

Comparison to DUKES

It is important to take care when comparing subnational electricity data to the Digest of United Kingdom energy statistics (DUKES)[26]. DUKES is an annual BEIS publication which provides a detailed and comprehensive picture of energy production and use over the last five years, with extensive tables, charts and commentary covering all the major aspects of energy.

There are differences in reported electricity figures in the subnational and DUKES publications as DUKES data:

- Are based on a calendar year, whereas 2019 subnational electricity data cover 31st January 2019 to 30th January 2020.
- Covers consumption for the United Kingdom, whereas the subnational consumption statistics cover Great Britain.
- Are compiled using a top-down approach, where statistics are gathered by energy companies on a national level, whereas subnational datasets are created from an initial set of individual MPAN data.
- Include consumption from Central Volume Allocation (CVA) users in its totals, which are not included in the subnational data (see section 3.1).

Comparison to ECUK

There are also issues when comparing subnational data to Energy Consumption in the UK (ECUK)[27]. ECUK is an annual BEIS publication which includes a detailed overview of energy consumption at a UK-wide level.

Differences occur between ECUK and subnational figures as data in ECUK:

- Are, in many cases, modelled and obtained from secondary analysis performed by BEIS on data from several sources, including DUKES.
- Contain a more comprehensive sector split than subnational statistics and give information on end use for majority of fuels.

[26] DUKES can be accessed on the BEIS website: https://www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes.
[27] ECUK can be accessed on the DECC website: https://www.gov.uk/government/collections/energy-consumption-in-the-uk.

Gas Statistics

Comparison to DUKES

It is important to take care when comparing subnational gas data to data published in the Digest of United Kingdom Energy Statistics (DUKES)[28]. DUKES is an annual BEIS publication which provides a detailed and comprehensive picture of energy production and use over the last five years, with extensive tables, charts and commentary covering all the major aspects of energy.

There are differences in reported gas figures in the subnational and DUKES publications as DUKES data:

- Are based on a calendar year, whereas subnational data covers various periods (see section 2.2).
- Are not weather corrected whereas subnational data are weather corrected.
- Covers consumption for the United Kingdom, whereas the subnational statistics cover Great Britain only.
- Are compiled using a top-down approach, where statistics are gathered by energy companies on a national level, whereas subnational datasets are compiled using a bottom-up approach, from an initial set of individual MPRN data.
- Include consumption from large power stations in its totals, which are not included in subnational data

Comparison to ECUK

There are also points the user needs to be aware of when comparing subnational data to Energy Consumption in the UK (ECUK)[29]. ECUK is an annual BEIS publication which includes a detailed overview of energy consumption at a UK-wide level.

Differences occur between ECUK and subnational figures as data in ECUK:

- Are, in many cases, modelled and obtained from secondary analysis performed by BEIS on data from several sources, including DUKES.
- Contain a more comprehensive sectoral split than the subnational statistics and give information on the end use of most fuels.

Further information

Future updates to these statistics

Great Britain:

[28] DUKES can be accessed at the following page: https://www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes.
[29] ECUK can be accessed at the following page: https://www.gov.uk/government/collections/energy-consumption-in-the-uk.

The next publication of subnational gas and electric data will be in December 2021 when 2020 data will be available.

Northern Ireland:

The next publication of Northern Ireland electric and gas data will be in December 2021 when 2019 electric and 2019/20 gas data will be available.

Revisions policy

The BEIS statistical revisions policy sets out the revisions policy for these statistics, which has been developed in accordance with the UK Statistics Authority Code of Practice for Statistics.

Uses of these statistics

The most significant use of the subnational consumption data is by local authorities and devolved administrations for targeting and monitoring a range of carbon reduction and energy efficiency policies. For example, they have told us they use it to:

- identify areas with high consumption to identify reasons and target measures.
- enable more effective deployment of renewable energy schemes by knowing where energy is consumed.
- estimate the proportion of energy reduced or replaced through local sustainable energy projects.
- help identify areas off the gas grid.
- establish a baseline consumption figure to set targets for reduction.
- enable more efficient targeting of investments and interventions.
- help in planning to improve the energy efficiency of homes.

Other external users include academics and members of industry who use the data for a variety of purposes. Most commonly, data has been used to examine trends over time or assess the effectiveness of energy efficiency initiatives.

Internally, data are used by BEIS policy colleagues and other analysts within the department to inform policy development and help with monitoring and evaluation of BEIS policies. The meter point gas and electricity data collected for subnational consumption outputs are also the most important input for BEIS's National Energy Efficiency Data-Framework (NEED).

They also form the basis of responses to parliamentary questions and general enquiries.

Users are also invited to complete this one-minute survey to improve future publications: https://www.surveymonkey.co.uk/r/92JMDHT

User engagement

Users are encouraged to provide comments and feedback on how these statistics are used and how well they meet user needs. Comments on any issues relating to this statistical release are welcomed and should be sent to: energyefficiency.stats@beis.gov.uk

The BEIS statement on statistical public engagement and data standards sets out the department's commitments on public engagement and data standards as outlined by the Code of Practice for Statistics.

National Statistics designation

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The continued designation of these statistics as National Statistics was confirmed in June 2014 following a compliance check by the Office for Statistics Regulation[30].

Pre-release access to statistics

Some ministers and officials receive access to these statistics up to 24 hours before release. Details of the arrangements for doing this and a list of the ministers and officials that receive pre-release access to these statistics can be found in the BEIS statement of compliance with the Pre-Release Access to Official Statistics Order 2008.

Contact

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- Media enquiries: 020 7215 1000
- Public enquiries: 020 7215 0222

[30] Full assessment available here: www.statisticsauthority.gov.uk/publication/statistics-on-energy-and-climate-change/

If you need a version of this document in a more accessible format, please email energy.stats@beis.gov.uk Please tell us what format you need. It will help us if you say what assistive technology you use.