



Department for
Business, Energy
& Industrial Strategy



SUBNATIONAL GAS AND ELECTRICITY CONSUMPTION

Analytical Tool User Guide

February 2020

This is a National Statistics publication

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the UK Statistics Authority: Code of Practice for Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs
- are well explained and readily accessible
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.



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Summary

The sub-national electricity and gas analytical tool has been produced to help local authorities (LA's) and other users of BEIS sub-national data to better understand changes in consumption over time.

The data presented in the tool comes from BEIS sub-national gas and electricity consumption estimates¹ for Great Britain. These datasets present total consumption, number of meters and average consumption estimates at an LA level.

The tool enables comparisons to be made with other LA's and can be split into two distinct sections of analysis:

- Time series data to identify trends and changes to a LA.
- Comparison of a selected LA with up to eight other LA's for a given year.

The following variables are available for analysis and/or for comparisons with other LA's:

Fuel	Sector	Comparator
Gas	Domestic	Total consumption
Electricity	Non-domestic	Total number of meters
		Average consumption per meter

The remainder of this guide describes and illustrates the use of the tool.

¹ The complete sub-national electricity and gas consumption datasets can be accessed from the following locations
Gas: <https://www.gov.uk/government/collections/sub-national-gas-consumption-data>
Electric: <https://www.gov.uk/government/collections/sub-national-electricity-consumption-data>

How to use the tool

Instructions for using the tool have been provided within the workbook. However, further information has been provided in this document.

The workbook contains 6 worksheets, discussed in greater detail below.

Cover page

On opening the workbook users are presented with the front page (see diagram 1 below) displaying a brief overview of the tool, an explanation of what data is included and links to related publications.

Diagram 1 Cover Page

Department for Business, Energy & Industrial Strategy

NATIONAL STATISTICS

Local authority electricity and gas meter point data Analytical Tool: 2018

This analytical tool has been created to aid the user in comparing meter point gas and electricity data for a local authority, against several others. The spreadsheet contains data in the domestic and non-domestic sectors using the variables of total consumption (GWh), average consumption per meter (kWh).

This spreadsheet contains:
Data for domestic, non-domestic and electricity and gas sales, total consumption, number of meters and average consumption for local authorities and regions across the country.

This spreadsheet excludes:
Unallocated meters (meters that were unable to be allocated to a local authority).

In addition to these data tables, the following accompanying documents are also available:

1. Accompanying **factsheets** providing a background to the local authority level electricity and gas datasets:
<https://www.gov.uk/government/statistics/sub-national-electricity-and-gas-consumption-summary-report-2018>
2. A **methodology and guidance** chapter containing further information about the datasets:
<https://www.gov.uk/government/publications/regional-energy-data-guidance-note>

An Annex is included in this workbook which provides details of all BEIS sub-national consumption statistics datasets available: [\(Click Here to View\)](#)

Click here to enter the analytical tool

Enter the Analytical Tool

To begin using the tool, navigate to the second tab by clicking the 'Enter the Analytical tool' button or the 'LA selection sheet' tab at the bottom of the workbook.

Step 1 Selecting local authorities

The tool uses drop down menus to select the LA's that the user wishes to analyse. The process is the same as in selecting variables and is illustrated in diagram 2 below.

Diagram 2: Selecting local authorities

Step 1: Select up to 9 Local authorities to compare

1 Choose LA	2 Choose LA	3 Choose LA
4 Choose LA	5 Choose LA	6 Choose LA
7 Choose LA	8 Choose LA	9 Choose LA

You are still able to select up to 9 more LA(s) for analysis.

Clear all Selections

Up to nine LA's can be selected here and those selected will be displayed in charts and tables. Completed entries are shown by a green cell and incomplete entries by a red cell.

Click on one of the cells that contain, "Choose LA". This will reveal a drop-down arrow, where users can select a local authority. When a local authority has been selected, the cell to the right will turn from red to green. There are nine cells, where users select an LA. When users click the clear all sections button, this will return these nine cells back to their "Choose LA" setting.

When Local authorities have been selected users can then use the navigation buttons to move through the analytical tool:

Diagram 3: Navigation Buttons

Tabular Analysis

Back to Cover Page

Go to ANNEX

These buttons are available on each of the tabs, to support a decision about the data users wish to analyse. They are hyperlinked making it easier to navigate between menus. Equally, users can navigate using the tab bar at the bottom of the worksheet.

Step 2 Local Authority Tables

This tool uses drop-down menus for variable selection. These drop-down menus will allow users to observe certain energy sectors from the local authorities selected. It will display this data as a table below. A demonstration on how to use this is set out in diagram 4 below.

Diagram 4: Selecting variables

Users are presented with a list of options in order to generate a table. When an option box has been completed it will turn green, incomplete option boxes will remain red. In addition to this, the criteria table will update to show the specification of a table. The options that are available to users are as follows:

Decision	Options available
Step 1: Which form of energy?	Electricity Gas
Step 2: Which energy sector?	Domestic Non-domestic
Step 3: Which estimator?	Total consumption Total number of Meters (Thousands) Average consumption per meter
Step 4: Which statistic to measure?	Value Annual Change Annual percentage Change

Note: Until all four compulsory variables are selected, the boxes to the right of the drop-down list boxes will remain red. This reminder will disappear once all four selections have been made. If users wish to reset their selections, click the 'Clear All Selections' button at the right side of the sheet.

Step 4 will allow users to choose a statistic that they wish to observe. "Value" will give the figure observed for each year, "Annual Change" provides the difference in value between two consecutive years and "Annual percentage Change" will give the percentage difference between two consecutive years.

Diagram 5: Criteria Box

Criteria
Electricity
Domestic
Total Consumption
Value

When these criteria have been filled, a table of data will be computed (diagram 5). Below in diagram 6, is a screenshot for the Local authorities: Westminster, Tower Hamlets and Richmond upon Thames.

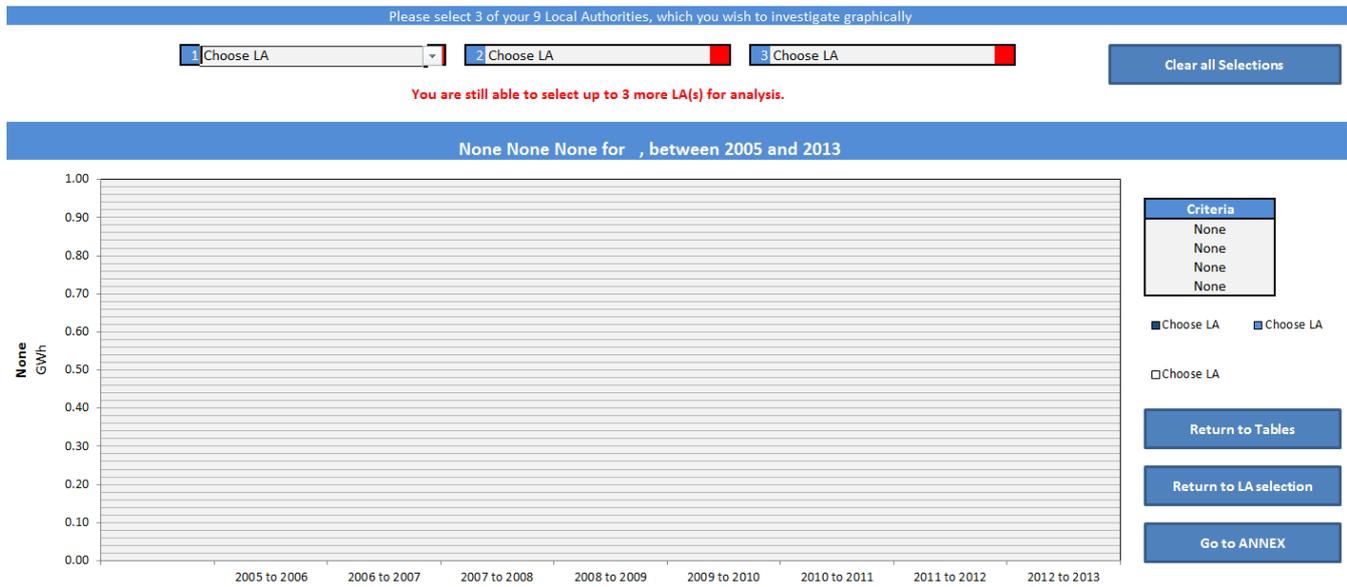
Diagram 6: Data table for Westminster, Tower Hamlets and Richmond upon Thames

Local Authorities	2005	2006	2007	2008	2009	2010	2011	2012	2013
1 Westminster	507.44	500.56	504.97	496.14	504.06	510.81	500.83	503.71	493.09
2 Tower Hamlets	371.31	365.58	377.55	382.84	393.98	402.68	401.72	409.35	399.39
3 Richmond upon Thames	368.38	365.76	363.87	354.04	353.03	355.84	353.69	352.10	347.84
4 Choose LA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Choose LA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 Choose LA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7 Choose LA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 Choose LA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 Choose LA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Step 3 Individual Local Authority Graphs

The worksheet 'Local Authority Graphs' gives a detailed analysis of up to three Local Authorities of interest (please see diagram 7 below). Users will need to indicate at the top of the sheet which three (or less) of the nine Local authorities they wish to analyse on this sheet. This can be done by using the drop-down list boxes. These will turn green when a local authority has been selected. Users can select 1, 2 or 3 Local authorities for analysis. Again, there is a "Clear all selection" button which will return the drop-down list to their original settings.

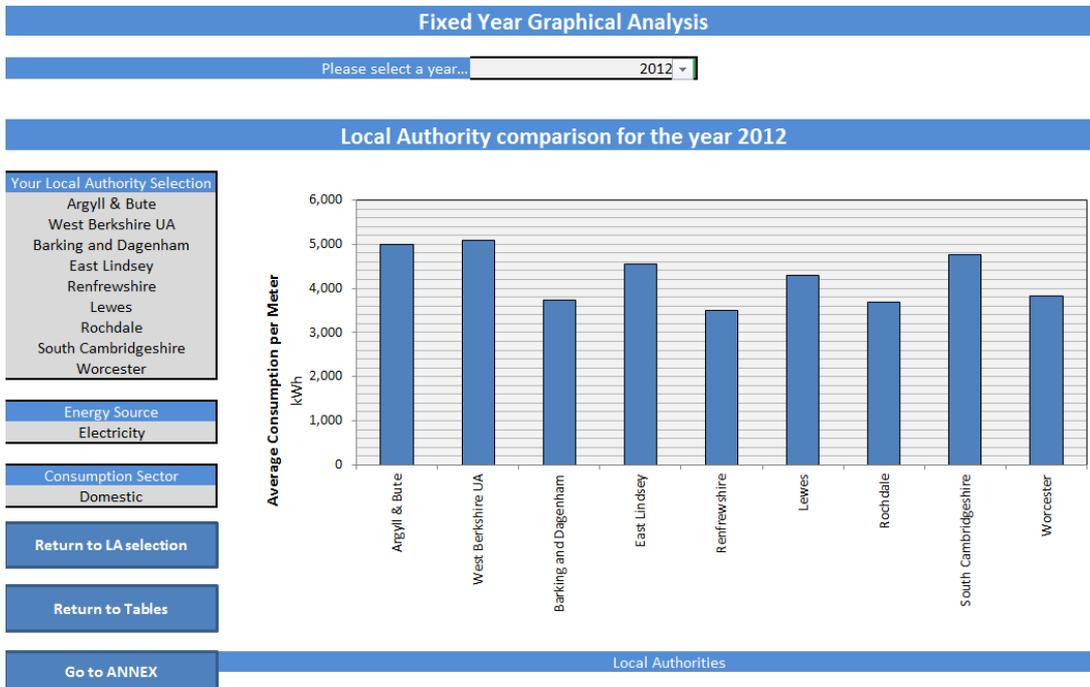
Diagram 7: The individual local authority analysis page



The “Criteria” box will match the criteria selected in the tables; if users wish to change the criteria then use the navigation buttons or equivalently the worksheet tabs to go back the “Local Authority Tables” section, where users can change the criteria.

Step 4 Fixed Year Graphs

Diagram 8 Fixed Year Graphical Analysis



This page allows users to make comparisons with the nine local authorities selected for a given year. Change the year by using the drop-down box at the top of the page. In order to change the selected LA's users will need to return to the 'LA selection' and if users wish to change the criteria of the graph then return to the 'Tabular analysis' tab. The energy source and consumption sector are displayed on the left with a list of selected local authorities.

Annex (Sub-national publications)

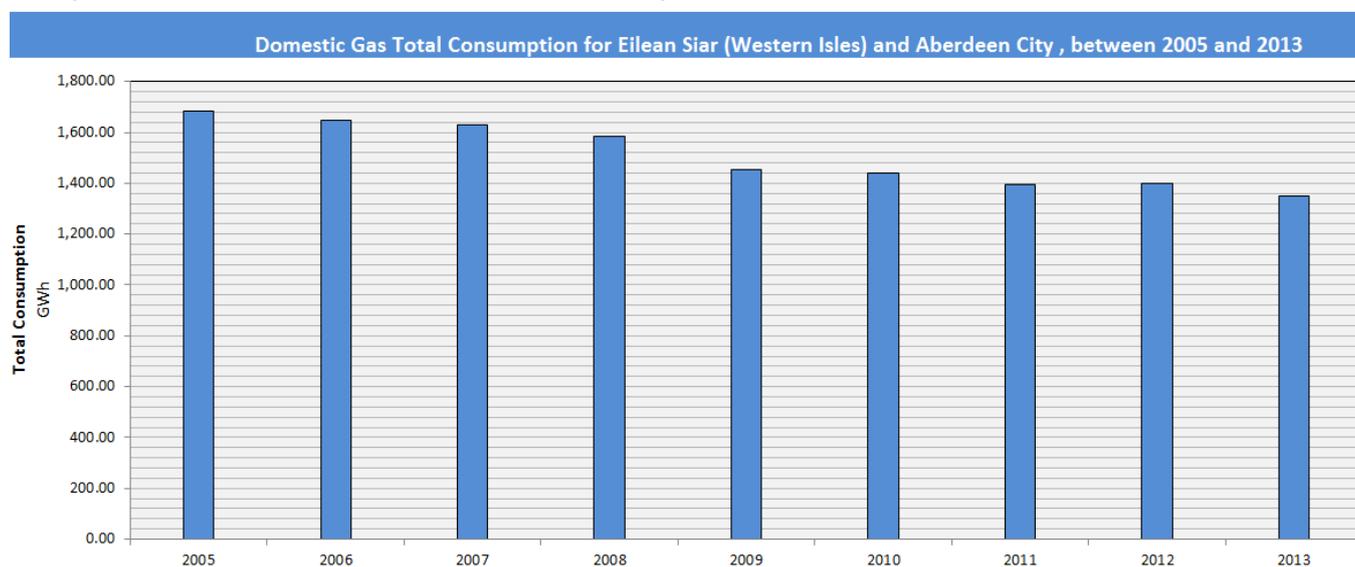
This spreadsheet within the tool contains links to sub-national consumption datasets that BEIS currently has available, along with a link to the sub-national methodology and guidance booklet.

Missing gas consumption data for some local authorities

The LA's of Na h-Eileanan Siar (Western Isles), Orkney Islands, Shetland Islands and Isles of Scilly are not included in the sub-national gas consumption datasets for some or all years due to limitations in access to gas for these regions. As a result of this there is no gas consumption data for these local authorities included in the tool, and charts will be reflected to show this. Some examples of how this can affect the outputs of the tool are shown in diagram 10 below.

Note: Electricity consumption data are published for these local authorities, so the analytical tool can be used to analyse electricity consumption in these local authorities.

Diagram 10: Examples of LA's with no gas consumption data



Here there is gas information for Aberdeen City, however, there is bar for Eilean Siar (Western Isles).

Further information about the compilation of the gas and electricity datasets (including the caveats and limitations) are detailed in the Sub-national methodology and guidance booklet, which can be accessed here:

<https://www.gov.uk/government/publications/regional-energy-data-guidance-note>.

ANNEX A Sub-national Publications

Here are a list of links, which users might find beneficial regarding sub-national statistics. The areas which are available for further reading are:

Electricity consumption statistics for Great Britain

<https://www.gov.uk/government/collections/sub-national-electricity-consumption-data>

Gas consumption statistics for Great Britain

<https://www.gov.uk/government/collections/sub-national-gas-consumption-data>

Road transport consumption statistics for the United Kingdom

<https://www.gov.uk/government/collections/road-transport-consumption-at-regional-and-local-level>

Residual fuel for the United Kingdom

<https://www.gov.uk/government/collections/sub-national-consumption-of-other-fuels>

Total final energy consumption for Great Britain

<https://www.gov.uk/government/collections/total-final-energy-consumption-at-sub-national-level>

There is also a link to the detailed Sub-national methodology and guidance notes, which can be found on this link: <https://www.gov.uk/government/publications/regional-energy-data-guidance-note>

These notes offer a summary of what each of the above fuel sectors include, when the data is available and where the data has been collected.

This publication is available from: www.gov.uk/government/publications/sub-national-electricity-and-gas-consumption-statistics-analysis-tool

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