Department of Energy & Climate Change

Statement on Quality Strategy Principles and Processes

Department of Energy and Climate Change (DECC)

Definition
Statistical quality is defined as meeting users' needs with particular reference to the relevance, accuracy, timeliness and punctuality, accessibility and clarity, comparability and coherence of the statistics collected, analysed and reported.

Four principles underpin the delivery of statistical quality in the Department of Energy and Climate Change:

- Users are identified and dealt with in a spirit of consultation and responsiveness, and their needs prioritised and met within available resources.
- Methodologies, processes and practices are documented to the correct level of detail for their purpose, kept up to date and published.
- Statistical processes and outputs are monitored and measured against standards with a view to their maintenance and improvement.
- Suppliers are respected and dealt with ethically, legally and effectively.

The key components of statistical quality in the Department of Energy and Climate Change are given below. To see how these principles and their key components are put into practice, reference should also be made to the other Department of Energy and Climate Change statistics governance documentation available at: https://www.gov.uk/government/collections/decc-statistics-governance, which overlap with and reinforce particular aspects of delivering statistical quality in the Department of Energy and Climate Change.

Andrew Ray
DECC Head of Profession for Statistics

Definition	Key aspects	Users can expect
Relevance The degree to which the statistical output meets user needs for both coverage and content.	Any assessment of relevance needs to consider: • who are the users of the statistics • what are their needs; and • how well does the output meet those needs?	To be appropriately consulted about their needs and DECC will seek to review data collections and statistical outputs on an ongoing basis to ensure that they continue to meet user needs.
Accuracy For survey data: the closeness between an estimated result and the (unknown) true value**.**	Accuracy can be split into sampling error and non-sampling error, where non-sampling error includes: • coverage error • non-response error • measurement error • processing error; and • modelling assumption error.	The majority of energy data is collected via census of known small populations of producers and suppliers. DECC will provide detailed guidance of methods used, and other relevant criteria to allow users to make informed judgements on quality, on our website. Where data are collected from surveys an assessment of sampling and non-sampling errors will additionally be covered in the methodology notes.
For administrative data sources: how well the information is recorded and transmitted and includes:	• completeness • timeliness of recording and transmission • accuracy of recording of data items • correct use of coding; and • correct interpretation.	All DECC statistical releases will be accompanied either in the release or on our website with : • details of how the underlying data are collected to allow users to understand the strengths and limitations • contain a description of data quality issues; and any impact this may have on analysing changes over time • be compliant with, and contain specific details of DECC's revisions policy

Definition	Key aspects	Users can expect
Timeliness and Punctuality Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the time lag between the actual and planned dates of publication.	An assessment of timeliness and punctuality should consider the following: • production time • frequency of release; and • punctuality of release.	DECC will publish Statistical releases as soon as possible after the relevant time-period. Releases will comply with the Code of Practice on pre-announcing dates. Releases will fully comply with the Protocol 2 in the Code of Practice.
Accessibility and Clarity Accessibility is the ease with which users are able to access the data. It also relates to the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.	Specific areas where accessibility and clarity may be addressed include: • needs of expert and non expert users • consistency of standard in relation to revisions, rounding, data suppression and spreadsheet type • assistance to locate information • clarity; and • dissemination.	All statistical publications will be published in line with DECC's website accessibility policy. All publications will use Plain English wherever possible. Data will be presented in a clear and understandable format. All publications will contain contact details of the lead statistician.
Comparability The degree to which data can be compared over time and domain	Comparability should be addressed in terms of comparability over: • time • spatial domains e.g. sub-national, national; and • domain or sub-population e.g. MSOA,IGZ.	DECC will use harmonised concepts and definitions in statistical publications wherever they are available. Any statistical publication which does not use harmonised definitions will explain why this has not been used and any plans to move it onto a harmonised basis.

Definition	Key aspects	Users can expect
Coherence The degree to which data derived from different sources or methods but which refer to the same phenomenon are similar.	Coherence should be addressed in terms of : • data produced at different frequencies • other statistics in the same domain • sources and outputs • coverage of different databases and surveys • data published at different geographic levels; and • definitions and coding used for different data sources.	As standard practice, DECC will release related statistical publications on the same day and at the same time in order to aid user understanding unless this would mean significant delay to one set of figures in order to present the coherent set of releases. Where related statistics are published across several publications DECC will make it clear to users where the related information can be found. DECC will continue to use the internationally recognized Energy Balance Framework to ensure consistency between energy production and use. DECC will ensure consistency and understanding exists for users between energy production and use of emissions data.