
COMMERCE, ENERGY & INDUSTRY THEME WORKING GROUP**Postponement of the National Statistics Quality Review of Energy Statistics**

Issue.

The schedule of Quality Reviews for the Commerce, Energy and Industry National Statistics Theme Working Group timetables a review of Energy Statistics for 2004/05.

Action

The Commerce, Energy and Industry Theme Working Group have discussed the proposed review and have agreed that the quality review of Energy Statistics scheduled for 2004/2005 be postponed, and that the requirement for a quality review be reconsidered during 2007/08. There are several reasons for this decision:

- a) there is general customer satisfaction with the energy statistical output which suggests that there is no pressing need for a review at this point;
- b) there was a review of energy statistics in 2000, just prior to the introduction of formal National Statistics quality reviews, that made comprehensive recommendations for the development of energy statistics. Since then there have been individual survey reviews as well as consideration of energy statistics requirements as part of development of the Energy White Paper issued in 2003;
- c) there are a number of changes currently in train on energy statistics, including the development of a regional and local dimension to energy statistics and an e-project on the collection of better data at lower cost to businesses.
- d) the UK is widely regarded within the IEA (the energy component of the OECD) and EUROSTAT as a leading exponent of the production, dissemination and analysis of energy statistics;
- e) DTI resources are severely constrained and a review at this stage would divert management time from work to achieve the currently planned improvements in energy statistics;
- f) an evaluation of the need for a quality review against six criteria set down by ONS in "Guidance on the National Statistics Quality Review Programme, Version 1.5" confirms that there is no pressing need for a quality review of energy statistics at the current time.

Background.

The formal review of Energy Statistics was carried out in 2000, immediately before the programme of National Statistics Quality Reviews was agreed. Following the 2000 review, Ministers agreed a number of changes to the content and timing of energy statistics publications. Users were consulted on the changes, and they have been well received. Since this review and associated changes, there have been a number of developments in energy policy, and in the production and coverage of energy statistics. Some of these developments are still ongoing, and will result in additional data being made available to users of energy statistics.

The “Guidance on the National Statistics Quality Review Programme, Version 1.5” (ONS) sets out six questions in paragraph 15 that should be examined to decide whether a review is needed. These are as follows:

- what are the users’ needs from the output and does the output meet those needs?
- Are the inputs, processes and methodologies used appropriate, of sufficient quality and documented?
- Can we improve the information on quality which is available to users?
- Does the source output/statistical activity achieve or fall short of world class standards?
- Are the data producers following the principles espoused in the Protocol on Quality Management and if not, are there plans in place to achieve full compliance?
- Is the burden placed on data suppliers justified and held at the minimum required level?

The remainder of this paper considers each of these questions in turn.

Q1 What are the users’ needs from the output and does the output meet those needs?

Energy statistics produced by the DTI are used by many customers for a variety of uses. They are used by the ONS in the Index of Production and other parts of the National Accounts; by the Energy Group of DTI and other Government Departments for the development and monitoring of policy; by the International Energy Agency and Eurostat to ensure that the UK is meeting international requirements; and by energy companies for management information. The Commerce Energy and Industry National Statistics Theme Working Group consulted on a proposed workplan for the Group; during this consultation no adverse comments were raised by users; in particular no specific additional statistical requirements were requested, nor were there any comments on improvements required to existing series. In response to policy requirements and user demand, DTI are currently

developing the collection of a regional dimension to energy statistics (see below). The publication of statistical material formed part of the 2000 energy statistics review; this resulted in a number of changes to the content, timing and format of energy statistical publication, which have been well received by users. The review also identified a user requirement for better data on energy demand, because of the increasing policy focus on climate change.

- *The Energy White Paper and the requirements for regional data.* The DTI reviewed its energy policy during 2002 and 2003. One of the policy recommendations was the need for the Department to work in partnership with local authorities and regional bodies. For this to be successful, sound information is required, in particular to monitor regional targets on renewable electricity generation and energy efficiency. As a result, DTI have developed a programme of work to collect data on energy consumption at a local level. Three public consultations regarding the collection of regional and local authority gas and electricity consumption data have been undertaken. These have resulted in the publication of local authority and regional gas consumption data during 2003, and collection and publication of similar data on electricity consumption is likely to take place during the 2004/05 financial year. Work is also underway to investigate an appropriate methodology for the collection of regional oil and coal consumption data.
- *Additional data on energy consumption and demand.* Following the 2000 review, DTI released a new publication entitled Energy Consumption in the UK. The publication examines the factors which drive changes in energy consumption, the impact of increasing activity, increased efficiency, and structural change in the economy; it looks in detail at the transport, domestic, industrial and service sectors, as well as overall energy consumption. The publication helps to meet users requirements for enhanced energy demand information.

Q2 Are the inputs, processes and methodologies used appropriate, of sufficient quality and documented?

An overview of the system used to collate and produce energy statistics is published annually in the Digest of UK Energy Statistics. The system is based around individual product commodity balances (which show flows of the commodity from its sources of supply through to its final use) and energy balances (which present the commodity balances in a common unit and show the dependency of the supply of one commodity on another). This system of energy balances demonstrates best international practice; the International Energy Agency regard the UK statistical system as a leader. However the DTI undertake regular assessments of the data collection methods. In particular the following targeted assessments have taken place since the last review of energy statistics:

- *A Departmental review of electricity surveys* took place during 2002/03, and reported in January 2004. It contained 12 recommendations for

changes, with 4 of these being dependent on electronic data collection being introduced. Of the remaining 8 recommendations, 6 have already been introduced, and the remaining two will be introduced in January 2005.

- DTI also completed *triennial reviews of the Quarterly Inquiry into Oil and Natural Gas* (PQ1100) early in 2004; a *review of the Quarterly Fuels Inquiry* (QFI) took place in 2002, and a further consultation exercise on its future took place in 2004. The conclusion of the PQ1100 review was that this should become an annual inquiry in order to improve data quality while decreasing the burden to both government and industry. DTI is working currently on enacting the proposed changes to PQ1100, and continues to work on the QFI to satisfy customer comments raised during the consultation process.
- *Triennial reviews of gas statistics and coal statistics* will commence shortly.
- *Data collection and storage project*. A project to facilitate the improved efficiency of data collection, making the best use of available technology whilst ensuring data quality and integrity is currently in its second phase. Components of this project include a review of the data collected on major fuels, a streamlining of the collection and validation processes – making the best use of the departments IT facilities. Dual running of the current and new systems will take place, and it is planned that the new system will be used from the summer of 2005.

Q3 Can we improve the information on quality which is available to users?

A key method of assessing the quality of energy statistics relates to monitoring statistical differences. Statistical differences are published every quarter in “Energy trends” and annually in “DUKES”. Statistical differences arise when data are collected from a variety of independent sources and reflect differences in timing, in definition of coverage of the activity, or in commodity definition. Differences also arise for methodological reasons in the measurement of the flow of the commodity. A non-zero statistical difference is normal and, provided that it is not too large, is preferable to a statistical difference of zero as this suggests that a data provider has adjusted a figure to balance the account. It is DTI’s aim to ensure that annual statistical differences are less than 0.5% of primary supply. Statistical differences for recent years are shown below:

Year	Overall statistical difference (thousand tonnes of oil equivalent)	Statistical difference as a percentage of primary supply.
1997	-1048	- 0.44%
1998	- 38	- 0.02%
1999	- 23	- 0.01%
2000	+ 921	+ 0.37%
2001	+ 674	+ 0.27%
2002	- 29	- 0.01%
2003	- 327	- 0.13%

Regular meetings are held between the energy statisticians to monitor quarterly and mid-year statistical differences, and to put in place work to improve the quality where it is felt necessary.

A further method of assessing quality relates to data revisions. The DTI has a published revisions policy for energy statistics, and reasons for substantial revisions are explained on the Internet version of the tables concerned. There are also challenging targets for revisions to the energy price data which are submitted to ONS for use in the Producer Prices Index and for volume data used for the Index of Production.

Q4 Does the source output/statistical activity achieve or fall short of world class standards?

The International Energy Agency regards the UK as a leader in the production of energy statistics. The statistical difference recorded by the UK in 2001 and 2002 (the latest years for which international comparisons are currently available) are the smallest of any OECD country which uses the recognised energy balance format. The following table highlights statistical differences in 2001 and 2002 for leading OECD countries.

Country	Statistical difference (% of primary energy supply)	
	2001	2002
OECD total	-0.15	-0.24
Canada	-0.73	+0.68
USA	-0.32	-0.79
France	+0.36	+0.25
Germany	-1.25	-0.81
Japan	+1.16	+2.61
Italy	-0.49	+0.18
UK	+0.27	-0.01

Q5 Are the data producers following the principles espoused in the Protocol on Quality Management and if not, are there plans in place to achieve full compliance?

As with all the National Statistics Protocols, DTI are putting in place measures to ensure that they are implemented throughout all statistical areas. The data collection and storage project, mentioned previously, is one of the key developments in the collection of energy statistics that will help to ensure that processes and methods used to produce energy National Statistics remain appropriate.

DTI hold regular meetings with energy data providers to ensure that robust and accurate methodology is used. Meetings are also held with the International Energy Agency and other key users to ensure that they are content with the outputs.

Q6 Is the burden placed on data suppliers justified and held at the minimum required level?

As previously mentioned, DTI carry out regular reviews of surveys that include a component examining the burden placed on the energy industry. The introduction of electronic data collection will continue to ensure that the overall burden is as small as practical whilst maintaining data quality.

The compliance costs to business of data collected by the DTI's Energy Markets Unit during 2003/4 was just under £350,000. Since the energy industry accounts for just over 3% of GDP, compliance costs are exceptionally low compared to the size of the industry.

Some of the oil related data collected by DTI are also collected on behalf of the UK Petroleum Industry Association, thus reducing the total cost of data collection to the petroleum industry.