Paper to the Oslo Group meeting in Ottawa February 2-6, 2009.
Session 4 Chapter 2.

Official Energy Statistics - IRES

Olav Ljones, Statistics Norway. olj@ssb.no

A. What is official statistics?

1. IRES will give recommendations based on the understanding of official statistics as it is formulated by UN Statistical Commission. A reference document is the Fundamental principles. These principles give some insight in the criteria for official statistics.
http://unstats.un.org/unsd/methods/statorg/FP-English.htm. See also Principles Governing International Statistical Activities (UNSD). The Handbook of Statistical Organization, Third Edition New York 2003, will also explain the concept of official statistics – for a better understanding of official statistics.

2. Other international organisations may give slightly modified criteria for official statistics that are relevant for national statistics and national energy statistics have to consider or adapt to. These principles may be regional and supranational like the principles for the European Statistical System (ESS). The European Code of practice and the system for peer reviews will be relevant also for energy statistics. Other organisations with active work in giving guidance on official statistics will be IMF and OECD.

3. Official statistics should meet the test of practical utility and be made available on an **impartial** basis by official statistical agencies to honour citizens´ entitlement to public information. It is necessary that people have confidence in statistics to be labelled official statistics. The producer has to follow strictly professional considerations, scientific principles and professional ethics.

4. The wording statistical agencies are used in the Fundamental principles. These wording have to be interpreted in a way that opens for an organisational model where official energy statistics may be produced outside the national statistical offices. This means that there are several organisational models that are compatible with the principles for official statistics. It is also important to remind that the system for governance of official statistics in a country may be important for the quality of the statistics. Basically it is important that when a decentralised model is used, that it is followed up with strong coordination instruments. Coordination is a key element but it is not easy to fulfil. One arena for national coordination has to be international reporting.

5. For official energy statistics it is important to include user contacts with regular consultations with key users. The full statistical program which includes data on energy variables should be evaluated regularly.

6. Another important characteristic of official statistics is metadata or information about definitions, data, statistical methods etc. One element of the information package has to be information about the laws and regulations.

7. Official energy statistics should be a public good – with free and equal access to all users. (IMF claims that if there are users that have pre access to some statistics – information about these exceptions should be made public.)

8. The national statistical offices will in many countries be in a political and legal position consistent with these principles. The possibilities for guaranteeing equal and free access to official energy

statistics have to be developed also when official statistics is produced by bodies outside the national statistical office.

9. For official statistics it is a claim that it should be produced based on the best methods and the highest professional standards. We may observe that there may be a need for knowledge in general statistical methods for official statistics and also subject matter competence. We may observe that in countries the best competence in energy matters including pure energy statistics will be found in bodies close to energy matters, while the competence in official statistics methods may be best in the National Statistical Office. It seems important to establish close professional cooperation between the various partners. The national objective should be to establish a close cooperation between energy experience and experience in official statistics.

10. The principle of following the best professional methods includes also the obligation to comment on erroneous use of statistics. It should also be mentioned that for official statistics including analytical reports made by the statistical authorities should be clear and distinct separated from policy comments and policy arguments made by the political authorities. If a government body has task both as a policy instrument and producer of energy statistics, a method for separating between official energy statistics and policy comments has to be established.

11. Official statistics should serve the users and democracy. In order to do this, it is stated that official statistics should be protected from political pressure. No pressure – either political or from the business sector – should be used as an excuse to modify the best method

12. An acceptable strategy for data capture is first to see if existing statistical data may be used for new purposes. Next step will be to see if data may be gathered from existing administrative data. Data has to be gathered using a traditional statistical survey if no existing and relevant data are available. Response burden has to be measured and limited as far as possible. There should be possibilities for exchange of data between institutions – if the principle of confidentiality and that data collected for statistical purposes. The statistics act will in many countries make the legal rules for the distinction between data collected for administrative purpose and data for statistical purpose clear. Energy data will be both commercial and politically sensitive which means that procedure for data collection and data management has to be clear and transparent.

13. The principles of confidentiality are as said important for official statistics. For energy data are sensitive. It should also be mentioned that it is typical for the energy industry that production is dominated by few big companies. This will create a challenge for the implementation of the confidentiality principle. The industry plays a dominant part of the national income generation and if the strict interpretation of confidentiality principle is followed the industry has to be disclosed by adding it to another industry. This solution may be criticised by the industry it self and make official statistics unclear and irrelevant and a pragmatic solution may be found. The principles behind the pragmatic solution should be transparent.

14. For official statistics it has during the last years been developed methods and techniques that may be used for delivering micro data for research purposes. It is important to find acceptable solutions for this also covering official energy statistics.

15. Consistency and coherence is perhaps one of the most important parts of the discussion of official energy statistics.

16. This quality claims should be met both for national (inland comparisons and for time series) and for comparisons between countries. To meet these principles it is essential to follow international classifications and agreements.

17. Statistics and official statistics may be defined in statistics act. It should be notified official statistics has no general defined boundary as regards topics. Energy - production and use will in all

systems of official statistics be touched – even when energy statistics may be defined to be outside. Energy may be conceptually precisely defined – but we may see different understanding of energy statistics.

18. If official energy statistics is covered by the NSO – we may observe several national models for the organisational solution. Energy statistics may be produced by a separate unit (section/office) or as a part of other statistics. In what department will energy be located? We will find many examples but with strong links to both economic statistics and environment statistics. What will be the tasks for the Energy statistics unit?

- Statistics for the energy producing industries.
- Distribution and sales of energy.
- Import and export of energy.
- Prices for energy goods.
- If we have special energy surveys – the responsibility for this survey will be located to the energy unit.

19. In new thinking on organisational models for official statistics the traditional stove pipe survey and operation is left and new models for integrated surveys data collections, storage of data in common data ware houses etc – we will also fins these solutions for energy. The use of energy in establishments is important statistics. In principle the quality claim for official statistics means that when all statistics on production and import is added together we should be able to balance with all the various use/and consumption.

20. For energy statistics it has for around 30 years been a clear objective to develop these balancing principles – including some thermodynamic principles and some economic accounting into a common scheme for energy balances. In the beginning there was no clear distinction between energy balances and energy accounts. Especially the trends in the use of the term energy accounts have developed in several directions. For the further development of official energy statistics it is important to avoid confusion. Especially it may be confusion as regards the very wide family of type of accounts that are to be found as energy accounts (See paper from Olav Ljones Ref). Energy balances should be a part of energy statistics. There are many other accounts that will include energy data. We will have many types of energy accounts and National Accounts. The totality, structure and dissemination of such accounts may be outside the responsibility of energy statistics but it is the responsibility of energy statistics to prepare data for all these accounts. Consistence in energy statistics is a prerequisite.

21. Energy production and the use in households and enterprises will be an important part of national accounts. National **Accounts** is a fully integrated part official statistics. National accounts and the use of data for this purpose give very important feed back to the various parts of official statistics about consistence and quality. To prepare data for use in National Accounts has to be in one way or another a part of energy statistics. How much of this work that is done by the energy statisticians and how much is done by e.g. the national accountants will vary, based on national traditions.

22. National statistics should be a part of the international statistical cooperation to fulfil the criteria for official statistics. This means that when the international standards and principles for energy statistics are consistent with the general quality claims for official statistics, the national system for energy statistics will follow the principles for official statistics.
The work with the international standards and principles for energy statistics is an important tool for stimulating international energy statistics to be official energy statistics.

23. National delivery of energy statistics to international organisations will be important for making national energy statics in compliance with the criteria for official statistics.

24. Competence in methods and energy topics are fundamental and should be taken care of. International participation will stimulate staff in their competence building.

One result from staff participation in international meeting is a better understanding of the benefits and arguments behind international recommendations.

B. Why is official statistics important also for energy?

25. Energy is from several reasons among the most important themes. Energy is a very important commodity for all economic and human activities. Energy as a commodity will also be of a very global character. It is clear that energy politics will gain from improved statistics and that energy statistics both on national level and on international level is further developed based on the principles of official statistics.

26. This recommendation is based on the user perspective – and quality. Quality should be defined with a wide scope.

27. The argument in favour of official statistics has to be fully based on user perspective. The use of energy statistics is among the most important parts of official statistics. This has been discussed in other chapters. .

28. With regard to global economic trends, energy and energy markets are crucial. Energy is one of the most traded goods. Important changes have occurred in energy markets both internationally and nationally, and good and relevant knowledge about energy is important for these markets. The globalisation of the energy market also makes it important to give priority to the principles of international comparability and use of international standards and concepts.

29. In most countries, energy is a sensitive political question. Data collection and the dissemination of statistics can also be politically sensitive. It is therefore important that the professional role of the body with responsibility for energy statistics is clearly described and accepted.

30. As stated in the UN principles, official statistics should serve the users and democracy. In order to do this, it is stated that official statistics should be protected from political pressure. No pressure – either political or from the business sector – should be used as an excuse to modify the best method. Since energy is both politically and economically important, it is perhaps naive to neglect the problems of pressure towards energy statistics with the aim of painting a biased picture.

31. The user group should also be diversified. Official statistics have to be disseminated in an open manner so that all individuals/firms/organisations etc. will have open and equal access to them. Official statistics have to be a pure public good.

32. One observation seems to be that the structure of statistics on energy and especially the role of official statistics in the field of energy do not seem to match the important role energy plays in many societies - also globally.

33. The reason for the emphasis on official statistics is to improve the quality of energy statistics. Quality is defined in a multidimensional way and does not only cover accuracy, but also relevance, timeliness, consistence, objectivity, confidence etc. It is important to make energy statistics relevant to users, both national and international, and it is important that the users have confidence in the quality and objectivity of the energy statistics. In order to achieve these aims, it is important to produce energy statistics according to the principles of official energy statistics.

C. Recommendations Actions for more official energy statistics

34. An action plan for official energy statistics has to fully respect national solutions for how official statistics is organised. The international organisations should also be active in stimulating the National Official Statistical system to be active participants in a process for improving official energy statistics. The action plan for official energy statistics – as a task for the international official statistical community could include actions as:

1. International recommendations. Concepts, Classifications. Methods, Balances and consistency. Energy produced and used. In physical terms and value terms.
Consistency between international classifications < this work is in good progress>

2. International databases of national official energy statistics. The databases should cover both data, statistics etc and "national best practices" for how to organise the system for official energy statistics.

3. An international system for the monitoring of quality of national energy statistics.

4 An international programme for capacity building