Fact Sheets/Summaries

This document contains1-page fact sheets/summaries of the work done by the Oslo Group in preparation for chapters and selected topics for IRES. The sheets contain a brief summary, links to related papers and some questions for discussion or room for notes.

The preparation of these short summaries is an exercise we have done in preparation for the 4th Oslo Group Meeting in Ottawa in order to get a structured overview on each topic, relevant presentations, discussions and conclusions from the previous three meetings of the Oslo Group and the UN International Workshop on Energy Statistics for developing countries in Mexico. The purpose is to highlight and structure what has been covered and identify gaps for future work. At the end of each sheet we have formulated a few questions that we encourage you to look at ahead of the meeting. The list of questions is not exhaustive. The intention is to start a thought-process and build foundation for interesting and fruitful discussions.

Ms. Sara Øvergaard
Oslo Group Secretariat, 28.01.2009, Oslo, Norway.

Chapter 1 Introduction

Topic 1 Scope of official energy statistics

Summary
In the first meeting of the group, it was discussed that the distinction between official and non-official statistics is not always clear, especially not when several institutions are involved in the production of statistics. It was suggested to create a term that covers statistics that not really is official, but that is the best or only statistics available in the field. During the 3rd meeting it was again confirmed that the Oslo Group should ensure that the quality principles for the production of official statistics should be clearly articulated and promoted in IRES, and encouraged transparency in principles and legal foundation for coordinating official energy statistics in a decentralized system.

Relevant presentations from previous meetings

Official energy statistics in the Russian Federation. Country case with description of system of producing energy statistics, its challenges and advantages by Igor Uliyanov, Russia

Centralized systems for producing official energy statistics by Bjørn Bleskestad, Statistics Norway

Principles for Official Statistics - the importance of Official Energy Statistics by Olav Ljones, Chair of the Oslo Group, Deputy Director General, Statistics Norway

Goal and design of the survey on Official Statistics in energy statistics by Karoly Kovacs, Chief, Energy Statistics Section, United Nations Statistical Division

Official Statistics from a non-National Statistical Institute angle by Iain MacLeay, UK Department of Trade and Industry

Question
Should the Oslo Group try to formulate a strict division between official and non-official energy statistics? Or should the focus be on developing quality assessment tools of energy statistics?

Topic 2 User Needs

Summary
During the first OG meetings, important users of energy statistics for environmental purposes presented their use of energy statistics and their recommendations and wishes for improvements (e.g. energy consumption data coupled with technology and purpose of use for emission estimation). IMF and IAEA, as international organisations, presented their data needs, while the research section in Statistics Norway presented the use of international energy statistics in research. It has been emphasised the importance of focusing on basic energy statistics in the revision of the UN manuals in order to serve all user needs, taking into account international standard for National Accounts, emission to air, international organizations, governmental use in energy planning and SEEA. Much focus has been on energy statistics from the needs of environmental statistics and national accounts, although important users, IEA raised concern during the third meeting that the needs for energy planning were not sufficiently covered. User needs are to be covered in Chapter 1 Introduction of IRES.

Relevant presentations from previous meetings

The need for high quality energy statistics for greenhouse gas emission inventories by Alice Gaustad, the Norwegian Pollution Control Authority

Needs for international energy statistics in research on climatic changes by Asbjørn Aaheim, Cicero/Norway

The need of data and statistics from the perspective of energy end-use analysis by Ellen Skaansar og Terje Stamer Wahl, Norwegian Water Resources and Energy directorate

The needs for international comparable energy and environment statistics; a client's point of view by Andrii Gritsevskyi, IAEA

IMF areas of interest related to oil statistics by Maria Mantcheva, IMF

Use of international energy statistics in research. Presentation of an oil market model by Knut Einar Rosendahl, Research Department in Statistics Norway

Users needs by Ms. Jun Elin Wiik Toutain, Senior Adviser, Statistics Norway

London Group and Environmental Accounting (part 1) by Mr. Mark de Haan, Chair London Group on Environmental Accounting, Statistics Netherlands and (part 2) Ms. Ilaria DiMatteo, Statistician, Energy Statistics Section, UNSD

Energy accounts and environmental economic instruments by Ms. Viveka Palm, Coordinator environmental accounts, SCB

Electronic searchable solution for the new manuals by Ms. Sara Øvergaard, Senior Executive Officer, Statistics Norway

During the International Workshop on Energy Statistics, Session 9: Uses of energy statistics, included presentations on Uses of energy statistics for compilation of energy accounts (UNSD), Energy indicators (IAEA), Country presentation from Cuba and South Africa and Energy statistics for estimating CO2 emission from fuel combustion (IEA)

Questions

Is user needs sufficiently covered in Chapter 1? If no, what is needed (e.g public needs, industries and industry organisations)?

How can we check/ensure that important user needs are covered in all chapters? (eg. user need analysis)

Chapter 2 Scope of Energy Statistics

Summary
When discussing scope of energy statistics in the Oslo Group meetings, three types of scope has been discussed; The scope of official energy statistics (separate summary), the scope of IRES and the boundaries of energy statistics. In the UN manual (F29) the scope is discussed Under Chapter III Boundary Problems, covering the system boundary and the boundaries between flows and stocks. At the third meeting it was agreed that IRES should focus on basic energy statistics and energy balances; and that IRES should contain a chapter on bridging energy balances and energy accounts. Chapter 2 in IRES recommend treating energy statistics as a complete system covering (a) production, import/export, transformation and final use/consumption of energy sources/carriers and (b) the main characteristics and activities of the energy sector.

Relevant presentations from previous meetings

International Recommendations for Energy Statistics (IRES): the revision process, guiding principles, scope and contents by Mr. Vladimir Markhonko, Chief of Trade Statistics Branch United Nations Statistical Division

Results of the Global Assessment of Energy Statistics and Balances by Ms. Ilaria DiMatteo, Statistician, Energy Statistics Section, United Nations Statistical Division

Overview of the existing handbooks of the UN by Karoly Kovacs, Chief, Energy Statistics Section, United Nations Statistical Division

Lessons from the IEA/Eurostat/OECD Energy Statistics Manual. A need for more? by Jean-Yves Garnier, Head of Energy Statistics Division, International Energy Agency

During the International Workshop on Energy Statistics, Session 2: What should be the scope of energy statistics?, was introduction by UNSD, and country presentations where provided from Ecuador, India and Canada.

Questions

The UN Manual (F29) read "…(the manual) does not consider the statistical problems posed by the definition and measurement of energy reserves, resources or prices and money values except in so far as such problems emerge through the interface between the concerns of this Manual and these other related spheres of study."

To what degree should the interface between resources/reserves and production, and prices and volume be discussed in IRES?

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Are there other interfaces between energy statistics and other statistics that should be identified and discussed?

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Chapter 3 Standard International Energy Classifications

Summary
During the first meeting of the Oslo Group it was raised as a problem that definitions of some energy sources vary in different classification systems, like HS, CPC and the energy manuals of IEA/Eurostat and UNSD. Different classifications make it difficult to compare and integrate energy statistics with other statistical systems nationally (i.e. energy, environmental, economical) and internationally. Possible solutions discussed where the revision of definitions and/or developing bridge tables between the different classifications systems. At the third meeting it was agreed that classifications of energy products should be addressed in IRES, and that a Standard for Energy Classifications and bridge tables to other classifications systems should be developed. The responsibility for the classifications rests on UNSD; InterEnerStat leads the work on harmonization of the definitions on products and flows, and the Oslo group is consulted in the process.

Relevant presentations during previous meetings

Classification of energy products – issues from a comparison of different classifications by Karoly Kovacs, United Nations

Do differences in principles, methods, conversion factors and classifications in countries and international organizations create problems for the work with international statistics? Main challenges, and needs for harmonization by Karen Treanton, IEA

To adopt link or develop bridges to international standard concepts and classifications in economic/ environment statistics to facilitate the integration and interface of energy statistics with other statistical systems by Knut Sørensen, Statistics Norway

InterEnerStat work on harmonization of definitions by Mr. Jean-Yves Garnier, Head of Energy Statistics Division, IEA

At the International Workshop on Energy Statistics, Session 3: Classifications in energy statistics, was introduced by UNSD. Country presentations where given by Brazil, South Africa and Russia. IEA presented the work on harmonization of definition (se presentation above).

Questions
It has been suggested by the UNSD that if the SIEC is not ready before submission of IRES to the Statistical Commission, it should be published as a separate document. Does the Oslo Group agree with this?

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Chapter 4 Units of Measurement and Conversion Factors

Summary
During the 1st meeting of the Oslo Group on Energy Statistics, IEA clarified the challenges different units of measurement and conversion factors raised for international statistics, and internally in countries between organizations. UNSD presented the relevant chapters in the UN manual (F44, 1987) on definitions, units of measurement and conversion factors, which include chapter II on Units of Measure and chapter III on Conversion Factors. The manual recommends that energy statisticians use the International System of Units (SI). Conclusions from the second meeting state that energy consumption should be presented in net calorific value. The International Workshop on Energy Statistics arranged by UNSD also discussed the development of default standard calorific values, possibly by geographical regions, which would be used in the absence of country specific calorific values.

Relevant presentations during previous meetings
Do differences in principles, methods, conversion factors and classifications in countries and international organizations create problems for the work with international statistics? Main challenges, and needs for harmonization by Karen Treanton, IEA

Overview of the existing handbooks of the UN; Energy Statistics: Definitions, Units of Measure and Conversion Factors (UNSD) by Karoly Kovacs, Chief, Energy Statistics Section, United Nations Statistical Division

Gross and net calorific value by Ms. Karen Treanton, Head of section for annual statistics and balances, energy prices and taxes, energy statistics division, IEA

During Session 6 at the International Workshop on Energy Statistics, IEA held an introduction to the topic, while Russia presented their use of TCE (Ton of Coal Equivalent).

Questions
How should the Oslo Group advice on the balance between the need for accurate data on energy statistics and the respect for respondent's confidentiality?

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Chapter 5 Flows, Stocks and Related Concepts

Summary
During the third meeting it was agreed that data items covering flows and stocks was to be addressed in IRES. According to the IRES outline, the chapter will contain:

(a) Clarification of the boundary between flows and stocks,
(b) Description of the relationship between stocks and other related concepts
(c) Definition of the boundary between energy and non-energy flows,
(d) General definitions of particular energy flows (energy production, transformation, non-energy use, final energy use/consumption)
(e) Description of the differences between flows/stocks defined on the basis of territory and residence principles
(f) Details on classifications of the energy sector and energy users and households.
(g) Recommendations on measurement of flows and stocks in standard units of volume, weight and energy
(h) Issues relevant to a monetary measurement are introduced and discussed.

Relevant presentations from previous meetings

Geothermal energy by Mr. Paul Westin, Head of Unit, Swedish Energy Agency

Solar energy by Mr. Andrii Gritsevskyi, Energy System Analyst, IAEA

Biomass statistics - A lot of problems and two solutions Presentation 1 by Mr. Wolfgang Bittermann, Head of Energy Statistics, Statistics Austria Presentation 2 by Mr. Bernard Lang, Austrian Energy Agency and Mr. Dietmar Hagauer, DI, Austrian Energy Agency

Renewable - non-renewable energy by Mr. Andrii Gritsevskyi, Energy System Analyst, IAEA

Tracking by Mr. Andrii Gritsevskyi, Energy System Analyst, IAEA

Questions
The UN Manual (F56) describes how to develop country specific flow diagrams for energy commodities (p.129, Annex III – VII). Should this be included in the revised manuals (IRES or ESCM), or left out?

It seems like this topic has not been sufficiently addressed by the Oslo Group. How can we provide more input to this chapter?

Chapter 6 Statistical Units and Data Items

Summary
During the third meeting of the Oslo Group it was agreed that statistical units and data items where to be included in IRES. It was also agreed that while providing recommendations on data items and their definitions care should be taken that (a) necessary data sources are available in at least some countries to compile such data, (b) collection of such data items will not create significant additional reporting burden, and (c) collection procedures can be implemented by most countries to ensure improved cross-country comparability. The Oslo Group is invited to provide guidance on the structure of the presentation of the data and the scope of data items.

Relevant presentation from previous meetings
No presentations focusing strictly on this topic has been given

Question
What view should the Oslo Group have on the scope of data items?

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Chapter 7 Data Sources and Data Compilation Strategies

Summary
During the third meeting of the Oslo Group it was agreed that this chapter should give overview of main types of data sources, the key elements of data collection strategies/ data compilation methods for energy statistics, guidance on the compilation of metadata and importance and principles of effective institutional arrangements (see next topic).

Relevant presentation from previous meetings

National Energy Statistics Collection Do's and Don'ts: Lesson Learned by Tara Billingsley, USA

Requirements, methodologies and data collection strategies on energy statistics by Mr. Carlos Roberto López-Pérez, Director of Natural Resources and Environmental Statistics, National Institute of Statistics, Geography and Informatics

Data collection issues and procedures by Mr. P. K. Ray, Additional Director General, Central Statistical Organization

At the International Workshop on Energy Statistics, the session on data compilation issues was introduced by Statistics Norway, and country presentations where given by Cuba, Indonesia, Iran, Mexico, Nigeria and Russia.

Question
The IMF standard Dissemination Standards Bulletin Board is used by EUROSTAT to present Energy Statistics Metadata. Is this a good starting point?

Chapter 7 Topic 3 Institutional Arrangements

Summary
Chapter 7 in IRES will cover the importance and principles of effective institutional arrangements. UN manual (F29) recommends having one central body responsible for data collection. This can be the Central Statistical Office, statistical office within one of the fuel ministries, ministry with overall control over energy planning and monitoring or a National Energy Institute outside government. During the third meeting the Oslo Group encouraged transparency in principles and legal foundation for coordinating official energy statistics in a decentralized system. During the International Workshop on Energy Statistics, some developing countries expressed that they wanted IRES to provide specific recommendations regarding institutional arrangements.

Relevant presentations from previous meetings
Centralized systems for producing official energy statistics by Bjørn Bleskestad, Statistics Norway
Joint data collection system for energy statistics in government departments in Canada by Bob Pagnutti, Canada
Energy Statistics in Germany: Characteristics and Challenges by Katja Gerling, Germany
Official Statistics in Sweden and the project eNyckeln by Anders Jönsson, Swedish Energy Agency
The challenge of reform - energy statistics in Australia by Kai Wallenius, Australian Bureau of Statistics
Official Statistics from a non-National Statistical Institute angle by Iain MacLeay, UK Department of Trade and Industry
Join all forces: the successful cooperation between data providers, statistics compilers, and statistics users in Austria by Mr. Wolfgang Bittermann, Head of Energy Statistics, Statistics Austria
Official energy statistics in the Russian Federation. Country case with description of system of producing energy statistics, its challenges and advantages by Igor Uliyanov, Russia

Questions

How far should IRES go in recommending specific institutional arrangements?

Chapter 8 Energy Balances

Summary

Many presentations have covered topics related to the energy balance during the Oslo Group meetings (Energy balances and national accounts, bridge tables, data collection practices, institutional arrangement for Energy Balance compilation), but few have concentrated on the actual format and set-up of the energy balance. During the first meetings it was said that there exist almost as many energy balance formats as there are countries. While EU countries generally follow IEA/OECD/EUROSTAT Guidelines, they do consult with the UN manuals. Some countries are confused about which guideline to use, and end up taking bits and parts from both which are relevant to their country. It's also a challenge for the international organizations to convert national differences in energy statistics to international comparable energy balances. Some of the problems with comparability are a result of unclear or unavailable definitions and standards for compiling the energy balance and uncertainty about data collection methods. One recommendation from the countries includes creating an overview of energy balance compilation practices in countries and international organizations.

Relevant presentations from previous meetings

Are the energy balances for different countries comparable? Karoly Kovacs, United Nations

The needs and possibilities for improving the Energy Balance system by Ann Christin Bøeng, Senior Adviser, Statistics Norway

Irelands Energy Balance System - recent changes in construction and presentation by Martin Howley, Manager Energy Policy Statistics Support Unit, Sustainable Energy Ireland

From Energy Questionnaire to Energy Accounts and Balances... and back by Dr. Andrii Gritsevskyi, Energy System Analyst, International Atomic Energy Agency

At the International Workshop on Energy Statistics the session on compilation of energy balances was Introduced by the IEA and country practices from Brazil, Ecuador, Indonesia, Mexico and South Africa was presented.

Questions

It seems like a detailed analysis of the main differences in the Energy Balance set up between the organizations have not been done. Is this necessary, and if so, how should it be done?

Chapter 9 Data Quality

Summary
During the 1st meeting of the Oslo Group the importance of good communication between users and producers of energy statistics to ensure quality and relevant statistics was stressed, and that the institutional framework for data collection and processing can affect the quality of the statistics. A recommendation from the meeting was make a distinction between official and non-official statistics, because this would make it easier for the users to evaluate the quality. At the third meeting it was concluded that strengthening of energy statistics as an effective part of official statistics does not necessarily mean that more of them have to be produced by a centralised national statistical office. Many national solutions can be used. The main point is that the quality principles for the production of official statistics are followed for energy statistics; Agreed in this connection that the quality dimensions should be clearly articulated and promoted in the revised international recommendations. Recommendations on a national energy data quality framework will be included, and Statistics Canada has presented data quality framework as a good example of how it can be done.

Relevant presentations from previous meetings

The IEA Report Card: An effective way of highlighting energy quality issues by Karen Treanton, Head of Energy Balances, Prices and Emissions Section, International Energy Agency

IMF Data Quality Assessment Framework by Maria Mancheva, Senior Economist, Real Sector Division, Statistics Department, International Monetary Fund

Quality control and assurance, Mr. Justin Lacroix, Assistant Director, Manufacturing, Construction and Energy
Division, Statistics Canada

Questions
The IMF Data Quality Assessment Framework was suggested as a foundation for developing an Energy Data Quality Framework during the first meeting. Is this approach still relevant?

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Could the IEA Report Card approach be used as foundation for a public quality assessment tool?

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Chapter 10 Dissemination

Summary
During the third meeting of the Oslo Group it was agreed that IRES would contain guiding principles for energy statistics disseminations, which include recommendations on confidentiality, equality and objectivity. It was recognized that adjustments may be necessary for energy statistics in defining and dealing with confidentiality and the release of information. Countries where encouraged to submit best practice strategies for dissemination.

Presentation

Dissemination by Mr. Martin Howley, Manager, Energy Policy Statistical Support Unit, Sustainable Energy Ireland

During the International Workshop on Energy Statistics, UNSD introduced Session 8: Data quality assurance and dissemination. Country practices from Egypt, India and Canada was presented.

Questions

This is also a topic that is not so well covered, how can the Oslo Group contribute further to this work?

Visualization and graphical illustrations are important for user friendliness and making energy data more understandable. Is this something the Oslo Group should work more on in the future?

Chapter 11 Use of Energy Balances in Compilation of Energy Accounts and Other Statistics

Summary
During the third meeting, Statistics Norway presented the idea of developing a multipurpose system of energy supply and use; a system of basic energy statistics which forms a common data foundation that would allow extraction of consistent data for different users' needs, including energy balances and accounts. This approach was not endorsed by the members of the Oslo Group, and it was agreed that IRES should focus on basic energy statistics and energy balances, and rather contain a chapter on bridging energy balances and energy accounts. UNSD is preparing a complementary document *System of Environmental-Economic Accounting for Energy* (SEEA-E) which will provide the international statistical standard for energy accounts. While IRES will comply to the extent possible with the SEEA-E conceptual structure and data needs, SEEA-E will develop its accounting standards on the basis of the IRES.

Relevant presentations from previous meetings

Austria's work on developing bridge tables between energy balances and the SNA by Ms. Barbara Mayer, Statistician, Statistics Austria

Basic Energy Statistics versus Energy Accounts SNA by Mr. Hans Pouwelse, Senior researcher, Statistics Netherlands

During the International Workshop in Energy Statistics in Mexico, UNSD gave a presentation on the SEEA-E and its relation to IRES.

Question
How can the Oslo Group in the best way contribute so that SEEA-E and IRES is compatible?