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Process and Outline for the Energy Statistics Compilers Manual
Paper prepared by UNSD

(for discussion)

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Energy Statistics Compilers Manual
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The *Energy Statistics Compilers Manual* (ESCM) is an integral part of the implementation process of the *International Recommendations for Energy Statistics* (IRES) and the *System of Environmental-Economic Accounting for Energy* (SEEA-Energy). IRES provide data compilers with a complete set of recommendations covering all aspects of the statistical production process framework, thus covering a broad range of topics from basic concepts, definitions and classifications to data sources, data compilation strategies, energy balances, energy accounts, data quality and statistical dissemination. IRES have been developed to provide a firm foundation for the long-term development of official energy statistics based on the Fundamental Principles of Official Statistics. While IRES provides internationally agreed recommendations, the ESCM is expected to provide practical guidance to assist countries in the implementation of IRES. A such, the ESCM will cover the conceptual framework, the institutional arrangements and the statistical production process for energy statistics.

Following the adoption of IRES by the United Nations Statistical Commission in February 2011, the activities of UNSD will now focus on the implementation of IRES whose main component is the preparation of the ESCM In particular the Commission requested that clear guidelines on data sources, on the use of administrative data and on best practices applicable to a wider range of countries be considered in the *Energy Statistics Compilers Manual* to be prepared in sufficient consultation with relevant Member States and institutions.

The statistical community is also engaged in the preparation of SEEA-Energy which will contain concepts, classifications, tables and accounts consistent with the SNA. The SEEA-Energy is expected to be completed by the end of 2011 and submitted to the UNSC for adoption in 2012.

In view of the above initiatives, the ESCM will therefore cover the implementation of the recommendations contained in IRES as well as the SEEA-Energy to ensure that countries set up a multi-purpose information system.

This note presents the organization of the preparation process and describes the revised outline of the ESCM which takes into account comments received during the Second Expert Group on Energy Statistics, New York, 2-5 November 2010. The Oslo Group is invited to discuss and agree on the suggested process for the preparation and outline of the ESCM and identify concrete list of deliverables for its preparation.

1. Organization of the preparation

The ESCM is part of the implementation of IRES, which encompasses other activities such as the organization of training workshops, preparation of training materials and the extension of the knowledge-base platform of the United Nations Statistics Division to cover energy statistics. The ESCM should therefore be seen in combination with the other UNSD initiatives aimed at providing energy statistics

compilers and energy analysts with the necessary information to understand the statistical process behind the data, as well as the country practices.

It is envisaged that the ESCM will be published as hard copy publication. However, since collection and compilation practices in energy statistics are constantly evolving, an electronic version of the document will be developed and periodically updated to reflect the new methodological developments and to keep the compilers abreast with country practices.

The guidance provided in the ESCM will heavily draw on country practices. Thus, the collection of country practices through, for example, the template for country practices developed by Statistics Norway, will be the basis for the drafting of the text. It is envisaged that the country practices will be made available online through a searchable database and incorporated into the knowledge base platform of UNSD (available online at: http://unstats.un.org/unsd/EconStatKB/Knowledgebase.aspx). To this end countries are strongly encouraged to send to UNSD material that is relevant for the collection and compilation of energy statistics.

The preparation process is envisaged in three stages: in the first stage country practices and textual inputs will be collected; the second all the material will be consolidated into a draft ESCM; and in the third stage consultation and review of the draft manual will take place. For the second stage, the Oslo Group should identify countries that would act as coordinator for individual chapters which would entails, among others, reviewing submitted country practice, soliciting additional inputs and preparing draft chapters. It should be noted, that, while the collection of country practices is envisaged to take place on a continuous basis, countries are strongly encouraged to send UNSD relevant material by December 2011.

The ESCM is planned to be finalized by 2013. It is expected that the Oslo Group will be the main content provider for the ESCM. Consultations with the London Group on Environmental Accounting are planned to take place in order to seek contributions from countries compiling the energy accounts and to reflect their practices. It is expected that the material received will be consolidated in 2012 into a first complete draft of the ESCM which will be discussed at the Oslo Group and in the London Group meetings in 2012 and 2013. UNSD will be involved in the preparation process, consolidate and edit inputs into the successive versions of the draft ESCM and publish the ESCM.

2. Annotated outline of the ESCM

Chapter 1   Conceptual framework

The purpose of this chapter is to present to the compiler with a brief summary of the conceptual framework for energy statistics established by IRES and to explain the relationships of energy statistics with economic, environment and other relevant statistics in the preparation of energy balances and accounts, such as 2008 SNA, the SEEA and the SEEA-Energy.

Chapter 2   Legal foundations and institutional arrangements

This chapter will provide details on the existing national systems of energy statistics including the legal framework and appropriate institutional arrangements. The advantages and disadvantages of various

systems will be discussed and examples of country practices will be provided. Ways to improve the national systems of energy statistics will be elaborated based on principles guiding effective institutional arrangements promoted by IRES. The chapter will contain examples of the national systems of energy statistics of several countries and describe their plans on how to move forward.

Chapter 3   Classification

This chapter will provide details on the relevant classifications for energy statistics such as the Standard International Energy Product Classification (SIEC); the classification of the economic activities for energy statistics used for the energy industries and energy consumers (based on the International Standard Industrial Classification (ISIC)); and the classification of energy resources. Specific issues in the correspondence tables with other international classifications, such as the Central Product Classification (CPC) and the Harmonized System (HS) will be discussed. Issues in the identification of relevant breakdown will be described together with example on how to address these issues.

Chapter 4   Data sources and data collection

This chapter is based on the list of data items presented in Chapter 6 of IRES. It is suggested that the presentation of data sources and data compilation be organized in this chapter by Section of SIEC (e.g. Coal, natural gas, Oil, electricity and heat, etc.). For each SIEC section, a physical description of the main processes of the products would be presented and the relevant data sources for types of data items (production/transformation, trade, stocks, bunkers, consumption) will be discussed. Data editing, imputation and validation will also be provided together with a description of methods regarding measurement units. The chapter will also include a description of any relevant adjustments that are needed for the energy accounts.

Chapter 5   Compilation of energy balances

This chapter will provide practical guidance for the compilation of energy balances. In particular, it will describe how to use the data items presented in Chapter 6 of IRES in the balances; data editing and the validation rules inherent to the energy balances. This chapter will also present secondary data sources that can be used for the compilation of balances when partial data items are available as well as data estimation and reconciliation.

Chapter 6   Compilation of energy accounts

This chapter will provide practical guidance on the compilation of the energy accounts of the System of Environmental-Economic Accounting for Energy (SEEA-E). This chapter will also describe the use of secondary sources, such as, for example, the energy balances. This chapter is also intended to provide guidance on the compilation of bridge tables between energy balances and energy accounts in order to reconcile and understand the differences between the two tabulations of energy statistics.

Chapter 7   Energy indicators and Greenhouse gas emissions

This chapter will provide examples of country practices in the compilation of various energy indicators including those for sustainable energy development. It will also identify the relevant energy statistics that are necessary for the calculation of greenhouse gas emissions.

Chapter 8   Data quality and metadata

This chapter will provide guidance on the compilation of quality indicators and the preparation of metadata for energy statistics. Examples of country practices will be provided.

Chapter 9   Data dissemination

This chapter is intended to describe country practices in the dissemination of energy statistics (e.g. format, time of release, dealing with data revisions, etc.) and, in particular, dealing with confidentiality.