

## **Draft report of the Fourth Oslo Group Meeting**

### **An overview**

1. The Fourth Oslo Group meeting (2-6 February 2009, Ottawa, Canada) was dedicated to the review of the preliminary drafts and outlines of the IRES chapters prepared by UNSD based on the work of the Oslo Group and taking into account the format and structure of other international recommendations approved by the Statistics Commission for other areas of basic economic statistics. The meeting was hosted by Statistics Canada and gathered about 23 representatives from 14 countries and 4 international organizations (UNSD, IEA, IAEA and UNECE). The meeting was opened by Mr. Philip Smith, Assistant Chief Statistician, Statistics Canada, Mr. Olav Ljones, Deputy Director General, Statistics Norway and Chair of the Oslo Group and Mr. Andy Kohut, Director, Manufacturing and Energy Division, Statistics Canada.
2. The Oslo Group expressed its appreciation of Statistics Canada for hosting the meeting, for their logistical and substantive support to the event and for the excellent presentations on the programme on energy statistics in Canada. The Group also expressed appreciation for the papers, presentations and contributions made by participants and, in particular, welcomed efforts made by UNSD and Statistics Norway in providing substantial input into the process and urged the Oslo Group members to participate actively in the further preparation of IRES.

### **Status of the work**

3. During the session the following presentations were given: (i) Status of the work in the Oslo Group; (ii) IRES: the revision process; (iii) Update on the InterEnerStat Initiative; and (iv) Principles and timetable for Energy Statistics Compilers Manual (ESCM).

### **The Oslo Group:**

4. Supported the proposal to revise the schedule of the IRES preparation to allow more discussion on issues that are still not resolved (such as the scope of energy statistics, definition of the energy sector/industry, harmonized definitions, and list of data items);
5. Welcomed the efforts by UNSD to prepare preliminary drafts and outlines of the chapters of IRES for the meeting, and to organize the International Workshop on Energy Statistics, 2-5 December 2008, Aguascalientes, Mexico to give voice for developing countries to express their concerns in the collection, compilation and dissemination of energy statistics;
6. Congratulated the IEA and InterEnerStat in general for the progress made so far in the harmonization of definitions and look forward to the revised definitions based on the discussion during the last InterEnerStat meeting in October 2008. The harmonized definition will be very important for IRES as, inter alia, they will serve as the basis for the development of standard international energy classification;
7. Welcomed the proposed preliminary outline and schedule for the ESCM and agreed to regularly review and update the country practices as part of its work programme once the

preparation of IRES is completed; agreed that the outline of the ESCM will be finalized at a later stage;

8. Agreed with the proposal to have country practices available on the Group website. This would enable the country practices to be more easily consulted as well as more regularly updated; agreed also that the Oslo Group has to include in its work programme the review and update of the country practices on a regular basis;

9. Concluded that in order to have a complete provisional draft of IRES for a review at the next Oslo Group meeting, countries need to be actively involved in the revision process by contributing the draft text.

## **Chapter 1: Introduction**

10. A revised draft of chapter 1 based on the comments received by the Oslo Group on the electronic discussion forum was presented.

The Oslo Group:

11. Welcomed the chapter and acknowledged that this chapter has to be reviewed once a complete draft for the rest of the chapters is available;

12. Recognized that energy statistics is often compiled and disseminated by institutions other than the national statistical office. It is important to emphasize in IRES that the fundamental principles of official statistics on the basis of which IRES is developed, do not apply only to national statistical offices but any agency/institution involved in collection/compilation and dissemination of energy statistics. A footnote will be added to Box 1 to explain that, depending on the country situation, the compilation and dissemination of official energy statistics may be done by national institutions other than the national statistical offices.

13. Acknowledged the importance of clear institutional arrangements for the compilation and dissemination of energy statistics. It was recognized, however, that, depending on the specific situation of a country, different forms of institutional arrangements exist. Although IRES will not provide recommendations on the specific arrangement that a country should adopt, it will promote the establishment of clear and effective institutional arrangements (in particular, in chapter 10). Country examples will be provided in the ESCM;

14. Suggested that the 'flexible' character of the recommendations should be further explained in IRES to clarify what aspects in IRES can be adapted to country circumstances and what aspects countries should comply with. A balance is needed to allow for flexibility in the implementation while ensuring comparability.

## **Chapter 2: Scope of energy statistics**

15. During this session three presentations were made: (i) the preliminary draft of chapter 2; (ii) official statistics and IRES; and (iii) price statistics. A number of questions were posed to the group in order to define more clearly the scope of energy statistics in IRES and the development of energy statistics as part of official statistics. These questions include: (a) the inclusion in the scope of IRES of reserves and resources; (b) the definition of the energy sector; (c) the definition of energy and non-energy products as well as their boundaries; (d) the inclusion in IRES of price statistics; (e) the development of a data quality framework for energy statistics.

The Oslo Group:

16. Welcomed the preliminary draft of the chapter and agreed to provide textual contributions to improve the chapter;

17. Agreed that it is not necessary to bring many details on the physical description of energy in IRES and that the language should be kept as simple as possible and more technical description are presented in text boxes;

18. In general agreed that energy prices should be covered in IRES given their high policy demand and the extensive country experience in the collection of these statistics. The issue of presentation of this topic in IRES, whether in a separate chapter or together with the data items, will be addressed at a later stage. Further discussion on energy price statistics is needed and an issue paper should be prepared in order to describe the conceptual and practical issues in the collection, compilation and dissemination of price statistics. An issue paper on this topic will be put on the Work Plan 2009.

19. Discussed the possible inclusion of statistics on reserves and resources. In general the group felt that, although these statistics are important, they should not be included in IRES; however, IRES should cover the links between extraction/production and resources and reserves so that the resulting statistics can be comparable. The work being carried out under the leadership of UN-ECE in the harmonization of terminology and classification of mineral and energy resources is very important and will be the reference for describing the links between production and resources.

20. Regarding the issues (b) and (c) no conclusion was reached during the discussion. These issues will be dealt with within the subgroup working on this chapter.

21. In general supported the development of an international system for the monitoring of quality of national energy statistics and suggested this topic to be further investigated.

### **Chapter 3: Standard International Energy Classification**

22. During this session the following presentations were given: (i) preliminary draft of chapter 3 of IRES; (ii) definitions (and classification) of renewable and non-renewable energy sources; (iii) definitions (and classification) of primary and secondary energy products; and (iv) scope and recording of specific flows of nuclear fuels in IRES.

The Oslo Group:

23. Welcomed the preliminary draft of chapter 3 and agreed with its draft outline;

24. Agreed that:

(i) the Standard International Energy Classification focuses on products. A classification of transactions and economic activities and processes relevant for energy statistics are dealt with in IRES in a separate classification (tentatively in Chapter 5).

(ii) while developing the list of basic headings and their definitions the following is taken into account as much as possible: (a) Definitions should be based on physical/chemical characteristics of products; (b) Definitions should be as simple as possible; (c) The correspondence between headings of SIEC, HS, CPC and ISIC should be established;

(iii) the work on the harmonization of definitions in energy statistics by InterEnerStat lead by IEA will be the basis for the development of the Standard International Energy Classification

(iv) a coding system will be developed for the unique identification of a given product (product group) in the data collection, processing and dissemination;

25. Took note on the difficulties of providing a definition for renewable and non-renewable energy and recommended that, at the minimum, IRES would provide a listing of renewable and non-renewable energy products. The Group suggested to work on a definition of renewable and non-renewable in a larger context and suggested to work in close cooperation with the London Group on Environmental-Economic Accounting.

26. Suggested that the concept of primary and secondary energy products will not be a classification criterion of SIEC. A listing of primary and secondary energy products will be provided.

27. Recommended that given the complexity of the nuclear life cycle, the scope of nuclear fuels in IRES will be limited to the recording of heat and electricity generated from nuclear processes.

#### **Chapter 4: Measurement units**

28. A revised draft for Chapter 4 on measurement units was presented. The draft incorporated the comments from the Oslo Group members received on the discussion forum in 2008 and posed some questions to the group, in particular, on the preliminary recommendations which were formulated based on those in the UNSD Manual on Energy Statistics F 29.

The Oslo Group:

29. Welcomed the revised draft and supported its structure.

30. Advised that the measurement units cannot be recommended for data collection, in order to allow countries to choose the measurement unit that is closest to the units used by the data providers. The Group, however, agreed that some measurement units can be recommended for data dissemination acknowledging that these recommendations are based on common practises; and organizations and countries may use other units provided that clear conversion factors are provided;

31. In general, agreed with the recommendation to use Standard International Units (SI);

32. Acknowledged that an increasing number of countries are now in the position of recuperating latent heat and thus using Gross Calorific Values rather than Net Calorific Values. A number of countries expressed interest in this topic. An issue-paper to further discuss the pro and cons of the gross versus Net Calorific values and further collecting country experience will be put on the Work Plan 2009.

33. Recommended the following improvements for the chapter:

(i) use a consistent language within the chapter

(ii) move some of the tables to the annexes

(iii) the section on efficiency and useful energy is to be moved from this chapter (possibly to chapter 11);

(iv) No description will be given on how to convert TCE and TOE to TJ as now it is a common practice to use a default conversion factor for these units.

(v) consult Food and Agriculture Organization of the United Nations - FAO on the tables on Fuel-wood which were based on FAO work in the UNSD Manual F 44 to revise and/or update them. UNSD will contact FAO on this.

## **Chapter 5: Flows, Stocks and Related Concepts**

34. During this session the following presentations were given: (i) annotated outline of chapter 5 of IRES; (ii) Definition (and classification) of auto-producers of energy; (iii) Treatment of micro power plants; and (iv) The UNFC terminology and its potential use in international energy statistics.

The Oslo Group:

35. Agreed the general structure and intended content of the chapter and suggested the following improvements:

(i) the title of the chapter will be changed;

(ii) the discussion on the residence and territory principle will be removed from this chapter (it was suggested a reference be given in Chapter 2 and a more detailed description in chapter 11); and

(iii) a description of how the energy and transformation sectors are related should be provided;

36. Acknowledged that the work on harmonization of definitions in energy statistics by InterEnerStat will be the basis for this chapter and the chapter cannot be completed until the work of InterEnerStat is close to finalization.

37. Did not reach a conclusion on the definition of the energy sector/industries, whether it should be defined only in terms of principal activity or in terms of principal, secondary and ancillary activities. This issue will be further discussed within the team of countries on this chapter.

38. Discussed the boundary of production for energy statistics to include statistics such as flaring and venting which are important for environment statistics and climate change. The Group agreed that the production boundary does not necessarily need to be changed provided that these statistics are collected. In addition, these statistics are important to link primary production to the quantity of fuels extracted from reserves and resources.

39. Took note of the presentation on auto-producers and, although it was not clear how the proposed changes relate to the concepts of “Main activity producers” and “Auto-producers” used in energy statistics, the group acknowledged the importance of recording secondary and ancillary activities for electricity generation and secondary activities for heat generation.

40. Took note of the issue of cut off points for micro-power plants that is faced in Statistics Norway. The group, however, agreed that this would not be included in IRES as it was perceived as an example of data collection practice and no general recommendations can be provided. This issue will be included in ESCM.

41. Reiterated that although statistics on reserves and resources are important, the group felt that they should not be covered in the list of data items in IRES (see conclusion 20).

## **Chapter 6: Statistical units and data items**

42. A preliminary draft of chapter 6 was presented and discussed.

The Oslo Group:

43. Welcomed the revised draft and supported its structure.

44. Acknowledged that also this chapter should address issues related to structural and short-term statistics (in addition to chapter 7) and statistical units.

45. In general agreed with the draft recommendations provided in the preliminary draft of the chapter, the list of characteristics of the statistical units and the structure of the data items. A suggestion was brought up to change the name of the chapter. If there is not better name, the name of the chapter will not change.

46. Recognized that the recommendation on the use of the establishment as statistical units need to be carefully considered as this choice may depend on the statistics to be compiled (for example, monetary and physical information, and production and consumption statistics). In addition, a number of countries use the enterprises as statistical units for their data collection instead of the establishment. Some use even “local units” smaller than the establishment. The choice of the statistical units will be reviewed by the team working on chapter 6.

47. More discussion is needed to define the list of data items. Although it was acknowledged that the one presented was a good starting point, some felt the need to restrict the data items to those linked to the balances, others to the minimum data set and others felt that the list should have a wider scope within which countries are able to find variables relevant to their country situation. Given that in other International recommendations approved by the Statistical Commission the list of data items is purposely broad and not limited to a minimum data set to allow countries at different stage of development of an energy statistics programme to be able to find, within the list, the relevant items for their own statistical purposes, it was suggested that the list of data items will retain this characteristics. A minimum data set will be developed from this list.

48. The boundaries of how broad is the scope of the list of data item will be further discussed within the team on this chapter taking note that this discussion goes hand in hand with that on the scope of energy statistics in IRES.

## **Chapter 7: Data sources and data collection practices**

49. During this session the following presentations were given: (1) annotated outline of chapter 7 of IRES; (2) Seasonal adjustment of electricity; and (3) Efficiency coefficients of energy commodities.

The Oslo Group:

50. Agreed on the general structure presented and suggested that the chapter:

(i) focus on the aspects specific to energy statistics and make reference, to the extent possible, to general concepts already described in other international recommendations;

(ii) stress the importance of a legal framework for energy statistics

51. Acknowledged that data collection and compilation practices vary in countries and countries should choose the best strategy within their legal and institutional circumstances

52. Agreed that IRES will only make a reference to temperature and seasonal adjustments, but detailed methods and practices will be dealt with in the ESCM;

### **Chapter 8: Energy balances**

53. An outline of chapter 8 was presented and discussed.

The Oslo Group:

54. In general agreed with the focus of the chapter to provide general principles for the compilation of balances allowing countries to adapt the presentation of the balances to better respond to their energy concerns.

55. Suggested that more text should be provided in the chapter on the uses of balances;

56. Agreed that the discussion of primary and secondary products is particularly relevant within the context of the energy balances;

57. Acknowledged that the formats of the energy balances by international organizations do not have major substantial difference (with the exception of international aviation bunkers) and general principles could be easily formulated;

58. Agreed to form a sub-group on energy balances to further discuss and provide substantive inputs into the drafting of IRES, given the importance of this chapter for IRES and the short amount of time ahead of the group to deal with issues in energy balances thoroughly.

### **Chapter 9: Data quality**

59. A preliminary draft of chapter 9 was presented and discussed.

The Oslo Group:

60. Welcomed the preliminary draft and agreed with its general structure and the proposed recommendations;

61. Suggested the following for inclusion in the chapter: make more references to the Fundamental principles of official statistics; include more energy specific examples; mention that the overall data quality also depend on the process quality; and describe the use, for example, of energy balances, statistical difference and price statistics as tools for checking data quality.

62. Supported the proposal to develop a system for monitoring data quality for energy statistics.

### **Chapter 10: Data dissemination**

63. A preliminary draft of chapter 10 was presented and discussed.

The Oslo Group:

64. Welcomed the preliminary draft and agreed with its general structure and the proposed recommendations;

65. Reiterated the importance of developing recommendations on data dissemination within the Fundamental Principles of Official Statistics.

66. Acknowledged that the issues of confidentiality need to be further addressed in energy statistics as it is often the case where there are very few data providers and a balance needs to be made to ensure the confidentiality of the respondents and the need for information. Statistics Norway offered to prepare an issue paper on confidentiality.

## **Chapter 11: Use of energy balances in the compilation of energy accounts and other statistics**

67. An annotated outline of chapter 11 was presented and discussed. The presentation also included a list of issues related to basic energy statistics which were identified by UNSD during the preparation of the SEEA-E.

The Oslo Group:

68. Agreed with the annotated outlines and suggested the following:

- (i) the use of a consistent terminology throughout the chapter; and
- (ii) the inclusion of a section on energy efficiency indicators;

69. Concluded that the use of energy statistics for the calculation of GHG emissions is very important. However, IRES should not provide a technical and detailed explanation of the methodology used to calculate GHG emission, as this is covered in the IPCC Guidelines, but rather identify the energy statistics that are needed for such calculations;

70. Acknowledged that in energy statistics the non-energy use is generally recorded for fossil fuels while for bio-fuels and wastes generally only the use for energy purposes is recorded given the relatively low share of energy use as compared to non energy use. For allocation purposes it may be useful to have information on the overall quantities of a certain commodity (whether used for energy or non-energy purposes). For the time being this can be done integrating energy statistics with other statistics such as waste statistics, agricultural statistics, etc.

71. Agreed that the issue of developing a classification by purpose should be further investigated and suggested the preparation of an issue paper as a way forward. An issue paper on this topic will be put on the Work Plan 2009.

72. Took note of the issues related to basic energy statistics which were identified by UNSD during the preparation of the SEEA-E. While some of them are already being under discussion (such as the scope of data items, harmonized definitions and measurement units), others may be taken up by the group.

## **The Way Forward**

73. It was agreed that teams would be established for each chapter and virtual meeting(s) would be held before the next Oslo Group meeting in order to review the initial drafts. UNSD is responsible for coordinating the work of the teams. Some members of the Oslo Group have volunteered to actively participate in teams according to their resources availabilities. The table below is based on the discussion during the meeting.



<b>Chapter</b>	<b>Teams</b>
Chapter 1: Introduction	UNSD
Chapter 2: Scope of energy statistics	Stats Canada, UNSD
Chapter 3: Standard International Energy Classification	Stats Canada, UNSD
Chapter 4: Measurement units and conversion factors	UK, UNSD
Chapter 5: [Flows, stocks, and related concepts] <i>to be renamed</i>	UNSD
Chapter 6: Statistical units and data items	UNSD
Chapter 7 : Data sources and compilation strategies	ABS, UNSD
Chapter 8: Energy balances	IEA, SEI, Stats Austria, Stats Canada, Stats Netherlands, Statistics Norway, Sweden Energy Agency, UK, UNSD
Chapter 9: Data quality and metadata	ABS, Stats. Canada, Stats Austria, UNSD
Chapter 10: Dissemination	Statistics Norway, UNSD
Chapter 11: Use of energy statistics and in the compilation of energy accounts and other statistics	Stats Austria, Stats Denmark, Stats Netherlands, UNSD

74. A work plan for the year 2009 will be drafted by the secretariat of the Oslo Group in consultation with UNSD and circulated to the Oslo Group for its approval.

#### **Time and place of the next meeting**

75. The Oslo Group welcomed the invitation from Sustainable Energy Ireland to host the Fifth Oslo Group Meeting in Ireland in 2010.

ANNEX 1:

**Agenda of the 4<sup>th</sup> Oslo group Meeting  
2-6 February 2009  
Ottawa, Canada**

**Monday 2 February - Chair: Mr. Andy Kohut**

***Registration (08:30)***

***09:00-10:00 Session 1: Inauguration***

- Welcome address, Mr. Philip Smith, Assistant Chief Statistician, Statistics Canada
- Opening address from the chair of the Oslo Group, Mr. Olav Ljones, Chair of the Oslo Group, Statistics Norway
- Inauguration, Mr. Andy Kohut, Director, responsible for the Energy Statistics Program, Statistics Canada

***10:00-10:15 Coffee/Tea***

***10:15 -12:00 Session 2: Status of work***

- Status of the work in the Oslo Group, Mr. Atle Tostensen
- IRES: the revision process, Mr. Vladimir Markhonko, UNSD
- Work on the harmonization of definitions in InterEnerStat, Mr. Jean-Yves Garnier, IEA
- Principles and timetable for ESCM, Mr. Vladimir Markhonko, UNSD
- Discussion

***12:00-13:00 Lunch***

***13:00-13:30 Session 3: Chapter 1. Introduction***

- Introduction to chapter 1, Mr. Vladimir Markhonko, UNSD
- Discussion

***13:30-15:00 Session 4: Chapter 2. Scope of Energy Statistics***

- Introduction to chapter 2, Mr. Vladimir Markhonko, UNSD
- Official Energy Statistics - IRES, Mr Olav Ljones
- Energy prices in energy statistics (and IRES), Mr. Atle Tostensen
- Discussant: Mr. Carlos Roberto López-Pérez
- Discussion

***15:00-15:15 Coffee/Tea***

***15:15-17:15 Session 5: Canada's Energy Statistics***

- Profile of Energy in Canada, Mr. Andy Kohut
- Quality Management at Statistics Canada. Ms. Laurie Reedman
- Energy use in Canada, Mr. John Appleby
- Canada's National GHG Inventory, Mr. Frank Neitzert

**Tuesday 3 February – Chair: Mr. Atle Tostensen**

**09:00-11:45 Session 6: Chapter 3. Standard International Energy Classification**

- Introduction to chapter 3 and issue 3.1: Proposed scope and classification scheme of SIEC, Mr. Vladimir Markhonko, UNSD
- Issue 3.2: Definition (and classification) of renewable and non-renewable energy sources, Mr. Andrii Gritsevskiy, IAEA
- Issue 3.3: Definition (and classification) of primary and secondary energy products, Ms. Sara Øvergaard
- Issue 3.4: Nuclear fuels: scope in IRES and recording of specific flows, Mr. Andrii Gritsevskiy, IAEA
- Discussant: Mr. Paul Westin
- Discussion

**11:45-12:00 Photo Session**

**12:00-13:00 Lunch**

**13:00-17:00 Social event: City Tour organized by Statistics Canada**

**Wednesday 4 February – Chair: Mr. Olav Ljones**

**09:00-10:00 Session 7: Chapter 4. Units of Measurement and Conversion Factors**

- Introduction to chapter 4, Mr. Leonardo Souza, UNSD
- Discussant: Ms. Karen Treanton, IEA
- Discussion

**10:00-10:15 Coffee/Tea**

**10:15-13:45 Session 8: Chapter 5. Flows, Stocks and Related Concepts**

- Introduction to chapter 5, Ms. Ilaria DiMatteo, UNSD
- Issue 5.1: Definition (and classification) of autoproducers of energy, Ms. Jun Toutain
- Issue 5.2: Treatment of micro power plants, Mr. Atle Tostensen
- The UNFC terminology and its potential use in international energy statistics, Mr. George Kowalski
- Discussant: Mr. Thomas Olsen
- Discussion

**12:00-13:00 Lunch**

**13:45-15:00 Session 9: Chapter 6. Statistical Units and Data Items**

- Introduction to chapter 6, Issue 6.1a: Statistical units, and Issue 6.1b: List of data items, Ms. Ilaria DiMatteo, UNSD
- Discussant: Mr. Iain MacLeay
- Discussion

**15:00-15:15 Coffee/Tea**

**15:15-17:15 Session 10: Chapter 7. Data Sources and Data Compilation Strategies**

- Introduction to chapter 7, Mr. Leonardo Souza, UNSD
- Summary of contributions to the Oslo Group, Ms. Sara Øvergaard
- Issue 7.1: Seasonal adjustment of electricity consumption, Ms. Sara Øvergaard
- Issue 7.2: Efficiency coefficients of energy commodities, Ms. Jun Toutain

- Discussant: Mr. Hans Pouwelse
- Discussion

***17:15-21:00 Dinner sponsored by Statistics Canada.***

**Thursday 5 February – Chair: Mr. Vladimir Markhonko**

***09:00-12:00 Session 11: Chapter 8. Energy Balances***

- Introduction to chapter 8, Mr. Leonardo Souza, UNSD
- Principles of energy balances, Ms. Karen Treanton, IEA
- Energy Balances – Data and models for energy balance compilation, Mr. Wolfgang Bittermann
- Discussant: Mr. Graeme Brown
- Discussion

***12:00-13:00 Lunch***

***13:00-14:30 Session 12: Chapter 9. Data Quality***

- Introduction to chapter 9, Ms. Ilaria DiMatteo, UNSD
- Quality reports and the assessment of the overall uncertainty of energy balances, Mr. Wolfgang Bittermann
- Discussant: Mr. Martin Howley
- Discussion

***14:30-14:45 Coffee/Tea***

***14:45-16:15 Session 13: Chapter 10. Dissemination***

- Introduction to chapter 10, Ms. Ilaria DiMatteo, UNSD
- Discussant: Mr. Olav Ljones
- Discussion

***Social event:***

NHL Hockey game

**Friday 6 February - Chair: Mr. Olav Ljones**

***09:00-10:30 Session 14: Chapter 11. Use of Energy Balances in Compilation of Energy Accounts and Other Statistics***

- Introduction to chapter 11, Ms. Ilaria DiMatteo, UNSD
- Discussant: Mr. Wolfgang Bittermann
- Discussion

***10:30-10:45 Coffee/Tea***

***10:45-12:30 Session 15: Summary and the way forward – List of issues for 2009***

- OG5 and further, Mr. Olav Ljones
- The way forward, time schedule, meeting activity, etc, Mr. Vladimir Markhonko, UNSD
- Discussion

## ANNEX 2.

### List of participants

#### Australia

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