



Work on new guidelines for energy statistics

Ralf Becker

United Nations Statistics Division

UNECE Expert Group on Resource Classification

Second Session, Geneva, 6-8 April 2011



UNSD publications on Energy statistics

- A suite of publications in support of energy-related information:
 - IRES (International Recommendations for Energy Statistics)
 - Statistical foundation (definitions, classifications, agreed data items, data collection strategy, data quality, energy balances)
 - Approved in 2011
 - SEEA-Energy (System of Environmental-Economic Accounting for Energy)
 - A standard for physical and monetary energy accounts
 - Will serve as an input in the revised SEEA
 - Expected for 2012



UNSD publications on Energy statistics

- Supporting document:
 - ESCM (Energy Statistics Compilers Manual)
 - Provides compilation guidance for:
 - energy statistics
 - energy balances
 - energy accounts
 - Includes: Best practices, examples of data collection methods



Process IRES

- Upon recommendation of the UN Statistical Commission (2006), UNSD has developed the International Recommendations for Energy Statistics (IRES)
- Work was carried out in cooperation with:
 - Oslo Group on Energy Statistics – convener: Statistics Norway
 - Inter Secretariat Working Group on Energy Statistics (InterEnerStat) – convener: IEA
- Adopted by the Statistical Commission in 2011



Process SEEA-Energy

- UNSD has embarked on the drafting of the SEEA-Energy as part of its regular work programme in beginning of 2008 under the auspices of the United Nations Committee of Experts on Environmental-Economic Accounting
- Work carried out in cooperation with:
 - London Group on Environmental Accounting
 - Oslo Group on Energy Statistics
 - InterEnerStat
- Expected completion: 2012



Work of InterEnerStat

□ Need for harmonization

- A decrease in quality of energy statistics at the end of the 90s: liberalization, lack of resources, ...
- A need to react: the IEA-Eurostat Manual, the Oslo City Group, the InterEnerStat Initiative
- Main objective of the InterEnerStat Initiative: to increase cooperation between international and regional organizations dealing with energy statistics for improving statistics



Work of InterEnerStat - early stages

- Review of definitions used by different agencies:
 - UN, Eurostat, Worldbank, UNECE, OLADE, APEC, IEA, OPEC, OAPEC, FAO, ...
- To hear from each organization what they do, what are their problems and their expectation for more co-operation
- Expectations from each organization regarding cooperation
- Organizations agreed to make harmonization of definitions of flows and products a priority



Milestones in InterEnerStat work

Contribution to IRES

2nd draft of the InterEnerStat website



1st draft of the InterEnerStat website



Ad hoc Energy Group Meeting
UNSD, May 2005



InterEnerStat 1
November 2005

OCG 1

OCG 2

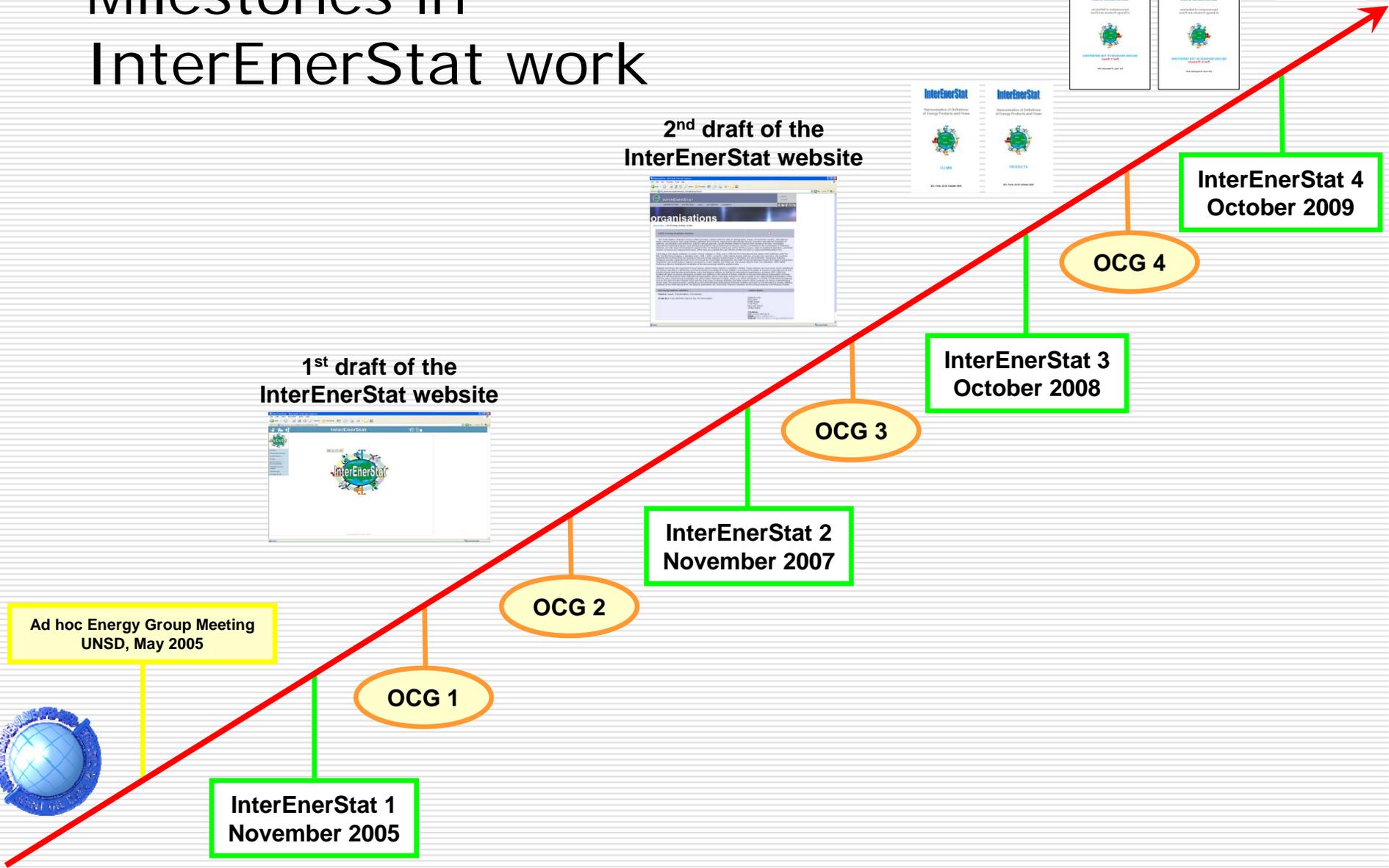
InterEnerStat 2
November 2007

OCG 3

InterEnerStat 3
October 2008

OCG 4

InterEnerStat 4
October 2009





Work of InterEnerStat - current status

- ❑ By end of 2010, an agreement has been found for the definitions of ALL THE PRODUCTS AND FLOWS.
- ❑ Definitions have been used in IRES (became basis of SIEC)
- ❑ It is important to highlight the commitment of all the 20+ organizations to arrive to an overall harmonization
- ❑ Harmonized definitions pave the way to harmonized questionnaires among organizations, decreasing the burden for countries and improving transparency and quality.
- ❑ Harmonization of questionnaires, joined training sessions are among the next candidate actions for InterEnerStat



Coverage IRES

- IRES covers a broad range of topics:
 - basic concepts, definitions and classifications, data items, data sources, data compilation strategies, energy balances, applications of energy statistics
- IRES provides a foundation for long-term development of energy statistics based on Fundamental Principles of Official Statistics



Content of IRES

- ❑ Chapter 1. Introduction
- ❑ Chapter 2. Scope of energy statistics
- ❑ Chapter 3. Standard International Energy Product Classification
- ❑ Chapter 4. Measurement units of and conversion factors
- ❑ Chapter 5. Energy flows
- ❑ Chapter 6. Statistical units and data items
- ❑ Chapter 7. Data collection and compilation
- ❑ Chapter 8. Energy balances
- ❑ Chapter 9. Data quality
- ❑ Chapter 10. Dissemination
- ❑ Chapter 11. Use of basic energy statistics and balances



Coverage of SEEA-Energy

- ❑ Agreed concepts, definitions, classifications, accounting rules and valuation principles on energy flows and energy resources
- ❑ Physical and monetary accounts for energy resource stocks
- ❑ Physical and monetary flow accounts related to energy
- ❑ Bridge tables between energy balances and energy accounts



Draft outline of SEEA-Energy

- ❑ Chapter 1: Introduction
- ❑ Chapter 2: The SEEA-E framework
- ❑ Chapter 3: Physical asset accounts *
- ❑ Chapter 4: Monetary asset accounts
- ❑ Chapter 5: Physical flow accounts
- ❑ Chapter 6: Monetary flow accounts
- ❑ Chapter 8: Integration of the accounts (including hybrid accounts)
- ❑ Chapter 9: Applications of energy accounts (including air emission accounts)

* UNFC covered in these chapters



SEEA-Energy: Physical and monetary asset accounts for energy resources

United Nations Statistics Division

- Record the opening and closing stocks as well as changes in stocks of energy resources (below ground) in the accounting period due to extraction, discoveries, reclassification or natural causes etc.
- Monetary asset accounts show the value of proven energy resources
 - Provide an indication of the contribution of energy resources to the wealth of a nation
- Inventories of energy products (above ground)



Energy resources in IRES

- IRES focuses on energy products (based on SIEC)
- Energy resources are included in data items defined in IRES
- The SEEA-E classification of underground resources will be used for this
- To improve the use of data collected, the resource classification should be linked as close as possible to the energy product classification (SIEC)
 - Part of harmonization of energy-related definitions and classifications



Classification of energy resources in SEEA-Energy

- Criteria for incorporating UNFC in the SEEA:
 - Use the highest level possible, i.e. no more details than needed
 - The abbreviated UNFC seems appropriate
 - Focus is on assets/deposits in SEEA-Energy – not on projects
 - Only known deposits are included – not potential deposits
- Current suggestion for UNFC based SEEA-Energy classification:
 - A. Commercial Recoverable
 - B. Potential Commercial Recoverable
 - C. Non Commercial and Other Known Deposits



Current proposal for classification of underground resources in SEEA-Energy:

United Nations Statistics Division

- Oil and gas
 - Natural gas
 - Crude oil and natural gas liquids
 - Oil Shale
 - Natural bitumen and extra heavy oil (excl oil from oil sands)
- Solid fossil energy resources
 - Coal and lignite
 - Peat
- Other energy resources
 - Uranium and thorium ores
 - Others

- Discussions are still ongoing



Future work on SEEA-Energy

- ❑ Summer 2011: Expert Group meeting on the SEEA-Energy
- ❑ Fall 2011: Global consultation on the draft document
- ❑ December 2011: Final draft submitted to the UN Committee of Experts on Environmental-Economic Accounting
- ❑ February 2012: Submission to the UN Statistical Commission for adoption



Contacts

□ IRES

Web: <http://unstats.un.org/unsd/energy/ires>

E-mail: energy_stat@un.org

□ SEEA

Web:

[http://unstats.un.org/unsd/envaccounting/
seeae](http://unstats.un.org/unsd/envaccounting/seeae)

E-mail: seea@un.org