

# **The Energy Statistics Compilers Manual - with focus on energy accounts**

Session on International Energy Statistics  
London Group on Environmental Accounting  
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# Purpose and overview of the presentation

- **Purpose:**
  - to present ongoing work with the ESCM and particular the chapter on energy accounts.
  - to receive comments from the LG
- **Overview of this presentation:**
  - ESCM
  - Process of work
  - Coverage of the energy account chapter in ESCM
    - proposed content of the chapter
    - main compilation issues to cover
    - tables & country examples
  - Further work

# Energy Statistics Compilers Manual (ESCM)

- Objective of the ESCM
  - to provide practical guidance for the implementation of IRES.
  - to include examples of country best practices.
- The target audience are all institutions involved in the collection, compilation and dissemination of energy data.
- Different countries, all part of the “Oslo group on energy statistics”, take the lead on particular chapters.
- Timeframe: to be “completed” by spring 2014 (“living” on-line-document).

## Content of the ESCM

- Legal foundations and institutional arrangements
- Classifications
- Data sources and collection
- Compilation of energy balances
- **Compilation of energy accounts**
- Energy indicators and GHG-emissions
- Data quality and meta data
- Data dissemination, confidentiality, revisions

## Process of work and present status

- The ESCM was main focus at the Oslo group meeting in Helsinki October 2012.
- Process for the chapter on energy accounts is behind the others, work started up as late as spring 2013.
- Spring 2013 focus was on what core areas of SEEA-E to include in the ESCM.
- First suggestion on the content of the energy account chapter in ESCM was presented during a “virtual meeting” (VM) summer 2013 → very divided comments.
- Draft chapters were discussed at the last Oslo-group meeting in Baku in September 2013 included a revised proposal for content of the energy account chapter.

## Proposed content of the chapter on energy accounts

- 6.1 Introduction (purpose - very short)
  - 6.2 Physical energy flow accounts (incl. bridging to EB)
  - 6.3 Monetary flow accounts and other transactions related to energy
  - 6.4 Physical and monetary asset accounts
  - 6.5 Summing up/concluding remarks (...?...)
- Wide-ranging issues to be covered
    - challenge to keep it “short”.
    - incl. “country best practices” → presenting different approaches
  - Some of the areas that originally was included as possible issues to cover in this chapter was recommended to be moved to other chapters in ESCM.

## What tables to refer to?

- Preferable refer to core tables, but what if core tables are not decided upon in due time?
  - refer to specific tables in the SEEA – Energy?
  - or refer to more general tables in the SEEA CF, i.e. **simplified tables** (that can be made more detailed if basic data is available)?
- Many of the important compilation issues for energy accounts can be described and discussed without knowing the final core tables.

# Main issues to be covered in sub-chapter on physical energy flow accounts

- Different compilation strategies in use
  - most countries use the “energy balances first” approach.
  - some countries use a more integrated PEFA/EB approach.
- Focus on differences b/w the flow accounts and the balances
  - techniques and sources in use for the breakdown by industries
  - adjusting according to resident/territory principle
  - flows from/back to the environment
  - losses
  - bridge tables.
- Statistical discrepancies - two different ways of approaching this issue:
  1. How to minimise statistical discrepancies
  2. What to do if statistical discrepancies exist



## Main issues to be covered on monetary flow accounts & other monetary transactions related to energy

- In addition to monetary energy flow accounts (MEFA), this issue would also cover energy related transactions within EPEA, taxes, subsidies, EGSS and ReMEA.
- Very few comments in the VM were related to this issues.
- Compilation issues related to the monetary energy flow accounts:
  - converting between physical and monetary flow accounts using energy prices.
  - energy prices as well as energy product classification need to be discussed,
  - Need country examples from those countries that use the physical flow accounts to compile the monetary flow accounts/national accounts.
- How to deal with the other monetary transactions related to energy?

## Physical and monetary asset accounts for energy resources.

- First part of this part will focus on how to measure the level of sub-soil assets in physical terms,
- while the second part will focus on how to place value on these
- Asset accounts are well covered in SEEA CF and SEEA-E, but there are some issues that need better coverage when it comes to compilation issues.

## Physical asset accounts

### - how to classify the energy resources?

- Recommending to use the UNFCCC-Classification for Fossil Energy and Mineral Reserves and Resources that recently has been developed.
  - Are there any countries that have taken this UN-classification system in use?
- Note: Not necessarily National Statistical Offices that are responsible for the classification of energy resources.
- Although the asset accounts are in physical terms, the size of the stock depends upon the price. It is therefore important to discuss influence of prices on these data
  - need to know assumptions on prices to understand the data.

# Monetary asset accounts

## - how to put value on the energy resources?

- SEEA recommends to calculate the total monetary value of the energy resources as the present value of all future net resource rent that the stock of asset are expected to yield.
- The valuation of the energy resources is highly dependent on
  - forecast of future prices & extraction levels
  - the choice of the discount rate and
  - the assumptions made in relation to the normal rate of return to fixed capital.
- Assumptions make a big difference!
- The chapter will present sources in use to obtain the data needed for the estimations, as well as discussing the effect of choosing different assumptions.
- Uncertainty analysis.

## The way forward

- Based on input from the London group members, a draft chapter will be written and circulated to the LG and the OG.
- First draft of chapter to be finalised before the end of 2013.
- Create a group of volunteer countries to contribute in the commenting and revisions of first draft of the chapter.
- All ESCM-chapters are (probably) to be circulated for comments in January 2014 – incl. the first draft chapter on energy accounts.
- Remember that the ESCM is planned to be a “living” documents.  
- but need to decide what this mean in practice.

Thank you for your attention!

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