

## Chapter 8 Energy Balances

*This is an indicative brief outline of Chapter 8. A detailed annotated outline of the Chapter is to be developed after OG4.*

*It is envisaged that the Chapter will be based on the UN technical report “Concepts and Methods in Energy Statistics, with special reference to energy accounts and balances” (1982) and on “Energy Statistics Manual” by IEA/OECD and Eurostat. It will focus on the general concepts and principles relevant to energy balances. The more technical issues of balances compilation and details on good practices in the compilation of energy balances will be provided in the ESCM. The Oslo Group is invited to provide comments on the suggested structure and coverage of the chapter.*

### **A. Concept and the general format of energy balance**

This section will describe the concept and the general format of balances. It will distinguish between the *energy commodity (products) balances*, which are compiled for an individual source of energy (e.g. coal), or for a group of closely related energy sources (e.g. petroleum products) measured in the original units (e.g. tons) and/or energy units, and *overall energy balances* which are compiled for all sources of energy used in a given country in energy units. A description can be provided here on the top-down and the bottom-up approaches to balances formats.

### **B Principles of energy balances compilation**

This section is intended to describe principles to the energy balance compilation including details on the steps to be taken to progress from individual commodity balances to overall energy balances. It will describe the conversion of individual fuel data to common energy units, balances reformatting and setting an energy value to production of primary energy. Regarding reformatting it will be indicated that after the commodity balances are converted to a common energy unit, it may be necessary to aggregate (some) energy products into groups in order to give an overall picture of the energy situation in a country and to rearrange some of the rows and introducing a sign in the transformation sectors. There are different ways in which an overall energy balance can be displayed. The recommendations on the various forms of presentation will be provided. This section will describe also how to define the form of primary energy in the energy balance [Note this is also affected by the discussion on definition and classification of primary and secondary energy products], the principles for assigning and energy value to the primary energy production (partial substitution methods and the physical energy content) and give recommendations on which one to use.