## **INTRODUCTION**

This is the twentieth issue of *Energy Balances* and *Electricity Profiles* published by the United Nations Statistics Division. The publication presents energy data for selected countries<sup>1</sup> in a format which shows the overall picture of energy production, conversion and consumption for fuels utilised in the country. Such a publication is useful in assessing and analysing production and consumption patterns in detail on an internationally comparable basis.

Since it began publishing energy balances, the Statistics Division has adopted the matrix type of overall energy balance that shows energy sources in the columns and energy flows in the rows. The format is described in detail in the technical report entitled *Concepts and Methods in Energy Statistics, with Special Reference to Energy Accounts and Balances*<sup>2</sup> and is also discussed in the publication *Energy Statistics: A Manual for Developing Countries.*<sup>3</sup> However, in 2011 the United Nations Statistical Commission endorsed the draft version of the *International Recommendations for Energy Statistics*<sup>4</sup> (IRES) and the United Nations Statistics Division is in the process of incorporating these new standards into the published energy balances.

The level of detail of this matrix structure takes into account the need for disaggregation of the energy sector and final demand, while at the same time, owing to the limitations in the quantity and quality of the currently available energy information, coverage has to be restricted to the main sectors only. Furthermore, it should be recognized that unlike national energy balances designed for individual countries' various specific needs, the energy balance format of the Statistics Division has to accommodate the whole spectrum of national energy data which it receives from national statistical offices and through official national publications.

The electricity profiles provide detailed information on production, trade and consumption of electricity, on net installed capacity and thermal power plant inputs.

World energy data is published by the United Nations Statistics Division in the *Energy Statistics Yearbook*, which contains annual data on production, trade, stock changes, bunkers and apparent consumption for individual commodities for approximately 224 countries and areas of the world.

## **GENERAL NOTES**

The conversion to joules of electricity generated by all non-thermal sources (hydropower, nuclear, geothermal, wind, tide, wave, marine, solar and other non-specified) refers to the output, being based on the energy content of the electricity generated (the equivalent of assuming a 100 per cent efficiency if data are taken as the energy input to produce electricity).

Data on fuel input into thermal power plants may not adequately cover the fuel used by selfproducers of electricity. The estimated efficiencies may therefore be too high. Inputs from other kinds of fuels that are not listed are included under "others".

The information presented in this publication is available in electronic format. Requests for information should be directed to the Industrial and Energy Statistics Section of the United Nations Statistics Division at <u>energy stat@un.org</u>. Further information on the Statistics Division's energy statistics programme is available at the following web-site:

http://unstats.un.org/unsd/energy/

<sup>&</sup>lt;sup>1</sup> Energy balances for OECD countries are published on a regular basis by the International Energy Agency of the Organisation for Economic Co-Operation and Development (IEA/OECD).

<sup>&</sup>lt;sup>2</sup> Statistical Papers, Series F, No. 29 (United Nations publication, Sales No.E.82.XVII.13).

<sup>&</sup>lt;sup>3</sup> Statistical Papers, Series F, No. 56 (United Nations publication, Sales No.E.91.XVII.10).

<sup>&</sup>lt;sup>4</sup> Available at <u>http://unstats.un.org/unsd/energy/ires/default.htm</u>