UNITS OF MEASUREMENT AND CONVERSION

Metric units of measurement are used throughout the *Yearbook*. The comparison between different fuels is presented in metric tons of coal equivalent (TCE, Table 5), and terajoules (Tables 1, 2, 3 and 13) on the basis of the heat energy which may be obtained from each of them.

To convert figures from the original unit to terajoules (TJ), country-specific net calorific values (NCVs) are used where applicable and available, and default NCVs are used where applicable but country-specific data are unavailable. Table I provides the default NCVs for converting energy data from mass or volume to terajoules, whereas the country-specific factors are available on the United Nations Statistics Division Website[7]. Unless otherwise stated in the Table Notes, in the case of solid fuels, liquid fuels and gases, the conversions are based on the net calorific value.

One TCE, in turn, is defined as 0.0293076 TJ, or 29307.6 MJ. This is derived from the standard coal equivalency of 7000 calories per gram (which corresponds to a high grade of coal and should not be confused with the average or default coal quality).

The procedure to convert from original units to the common unit terajoule is as follows:

- Data in original (mass – or volume in the case of fuelwood) units multiplied by the country-specific factors or the default factors from Table I will give data in terajoules.

Further, to convert electricity data to terajoules, the following energy equivalence is applied: 1 GWh = 3.6 TJ.

Data on natural gas are collected in terajoules on a gross calorific value basis by convention. When comparing natural gas with other energy sources, it is more appropriate to compare useful energy, and thus the data have been converted to be on a net calorific basis by multiplying them by 0.9.

[7] unstats.un.org/unsd/energystats/pubs/yearbook/