ENERGY TRENDS AND INTENSITY MEASURES

Both total primary energy supply (TPES) and total final consumption (TFC) have risen considerably less in the UK than in the OECD countries as a whole. The UK TPES in 2004 was 234 Mtoe, only 6% higher than in 1973. The OECD countries as a whole saw an increase in TPES of 46% over the same period.[15] The modest UK TPES growth is largely a result of decreased coal use and its replacement by more efficient energy sources. In 2004, the UK TFC was 164 Mtoe, an increase of 11% since 1973. TFC grew by 35% for the OECD countries as a whole over the same period. These trends have continued in recent years. From 2000 to 2004, UK TPES grew by a total of 0.3% (compared to 3.4% for the OECD as a whole) and TFC grew by 1.6% (compared to 4.0% for the OECD).

In 2004, UK aggregate energy intensity, as measured by a ratio of the country's TPES in tonnes of oil equivalent (toe) over its national gross domestic product (GDP, in thousands of 2000 USD), was 0.147 toe per USD 1 000. This was the fifth-lowest energy intensity in the IEA (behind Japan, Switzerland, Denmark and Ireland) and 26% below the OECD average. Figure 8 compares UK national energy intensity to the IEA average as well as to selected countries.

Such snapshot aggregate measures of energy intensity, however, can lack statistical integrity. For example, the results depend to a great extent on the choice of a base year for the GDP figures and the means chosen to get national GDPs portrayed in the same units for all countries (whether by exchange rates or purchasing power parity. In addition, the numbers are heavily influenced by economic structure (*e.g.* the presence of energy-intensive industry) and geography (*e.g.* cold winters and hot summers). An alternative and often more revealing analysis can be gained from observing the progression of the intensity figures over time. From 1973 to 2004, UK TPES per unit of GDP fell by 46%. Over the same period, this intensity ratio fell by 36% for the OECD as a whole. Shorter-term measures also show UK's reductions to be more pronounced than the OECD as a whole. Table 10 looks at the fall in energy intensity over a range of time periods for the UK, the IEA as a whole and five other IEA countries.

Disaggregated measures of efficiency and/or intensity can help identify areas in an economy where a country may be more or less energy-efficient compared to other countries. At the same time, such measures can be misleading

15. This and all averages in this section represent a weighted average of countries' data.