SUPPLY–DEMAND OVERVIEW

ENERGY SUPPLY

In 2003, Danish total primary energy supply (TPES) was 20.8 million tonnes of oil equivalent (Mtoe). This represents an increase of 5.3% from 2002, which is primarily due to increased electricity exports from domestic coal generation. Because coal is only about 40% efficient, while electricity is considered to be 100% efficient, coal imports to generate exported electricity result in a net increase in a country’s TPES. From 1999 to 2003, annual TPES growth averaged 0.01% although it varied substantially over that time from a low of –3.8% in 1999 to a high of 5.3% in 2002. The fluctuation is largely explained by changes in electricity exports, which are linked to changes in the domestic electricity production of both Norway and Sweden owing to rainfall in any given year. From 1973 to 2003, TPES increased by 0.3% annually. By way of comparison, the average annual TPES growth for all OECD countries from 1971 to 2002 was 1.5%.

Figure 1
Total Primary Energy Supply, 1973 to 2030

Oil is Denmark’s dominant primary fuel, accounting in 2003 for 40.3% of the total. This percentage share represents a dramatic decrease from 1973 when oil accounted for 88.6% of total primary energy. Oil’s place has been taken by coal, which in 2003 accounted for 27.3% of TPES, natural gas...