

## Chapter V:

### Energy

This chapter presents the status of energy forms in ESCWA member countries between 2003 and 2006 covering crude oil and natural gas reserves; production; refining capacity and output; domestic consumption; electric power generation; peak load, installed capacity of power stations; electricity generated by different types of turbines; and the trends of total and per capita electricity consumption.

Data were collected from primary sources such as statistical abstracts and bulletins issued by authorities in member countries and from specialized sources, including the Organization of Petroleum Exporting Countries (OPEC) and the Organization of Arab Petroleum Exporting Countries (OAPEC), Arab Union of Producers, Transporters and Distributors of Electricity, and also from highly reputable international sources, namely, the Oil and Gas Journal and the BP Statistical Review of World Energy; Other sources of data included specialized studies published by ESCWA and international organizations, with priority given to United Nations sources.

Tables V-1 and V-2 provide oil and natural gas reserves in the ESCWA region. It shows the important role of the region in terms of global energy provision, with the ESCWA region accounting for some 50 per cent of the world total of oil and approximately 26 per cent of the world total of natural gas in 2006.

Table V-3 gives the total energy production in the ESCWA region. It indicates that the ESCWA region accounts for 26 per cent of total world crude oil production and 10 per cent of world natural gas production in 2006. The table also shows that crude oil constituted about 79 per cent of total energy production within the ESCWA region in 2006, while natural gas represented some 20 per cent and hydroelectricity accounted for less than 1 per cent of that production. Coal consumption was negligible.

:

( )

( )

"BP"

V-2 V-1

V-3

Table V-4 details oil production in the ESCWA countries and Table V-5 presents marketed natural gas production in the region. Table V-6 presents refineries' production in the ESCWA region.

V-4  
V-5  
V-6

Table V-7 illustrates electricity generation by type and Table V-8 examines electricity generation. Hydroelectricity represented 3 per cent of the total installed capacity of electric power stations in the region in 2006. The remaining 97 percent represents thermal electricity, including steam turbines, which accounted for 45 per cent, gas turbines (29 per cent), combined cycle turbines (9 per cent) while other sources count for 9 per cent.

V-7  
V-8  
V-7

Table V-9 shows oil consumption in the ESCWA region. Table V-10 looks at natural gas consumption in the ESCWA region. It can be noted that, oil consumption in the region increased by 1% from 2005 to 2006, and natural gas consumption increased by 8.1%.

V-9  
V-10

Electricity consumption by sector is presented in Table V-11. Table V-12 gives the total primary energy consumption in the ESCWA region and Table V-13 illustrates per capita energy consumption in ESCWA countries. Oil consumption accounted for approximately 60 per cent of the primary energy consumption in the region in 2006, natural gas consumption for some 37 per cent, hydroelectricity consumption for less than 9 per cent, while coal consumption was negligible.

V-11  
V-12  
V-13