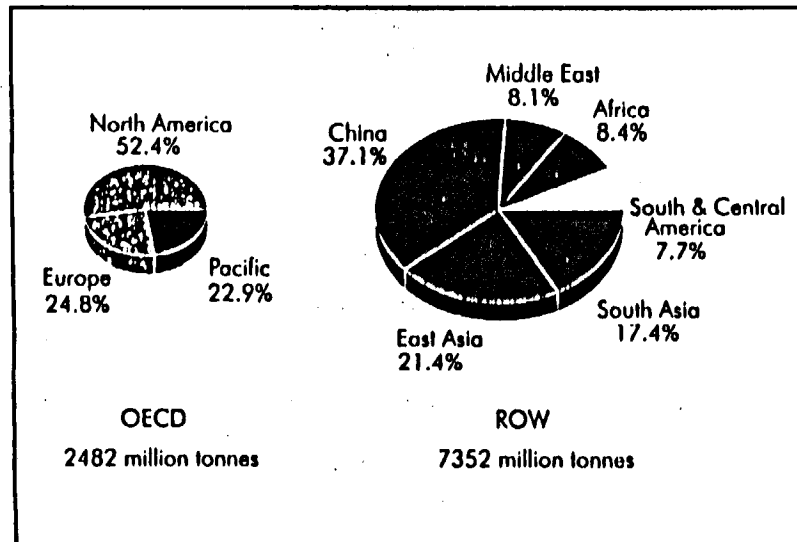


Table 2.2: World Carbon Dioxide Emissions
(billion tonnes of carbon dioxide)

	1990	2000		2010	
		ES	CC	ES	CC
OECD	10.4	11.1	11.6	11.6	12.9
North America	5.6	6.0	6.4	6.2	6.9
Europe	3.4	3.5	3.6	3.7	4.1
Pacific	1.4	1.6	1.6	1.7	1.9
FSU/CEE	5.2	3.3	3.5	3.8	4.4
ROW	6.0	8.8	8.9	12.8	13.4
China	2.4	3.5	3.5	5.1	5.1
East Asia	0.9	1.6	1.6	2.3	2.5
South Asia	0.7	1.1	1.1	1.8	2.0
Other	2.0	2.6	2.7	3.6	3.8
World	21.6	23.2	24.1	28.2	30.7

Rounding may cause totals to differ from the sum of individual components.

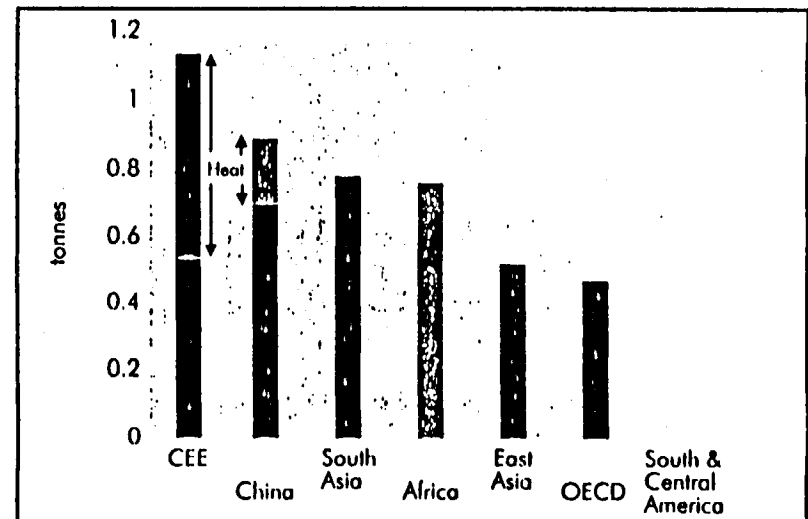
Figure 2.1: Increase in Annual CO₂ Emissions, 1990-2010
Capacity Constraints Case



It is interesting to note that, on the basis of the projections presented here, India and China alone account for a larger amount of the increase in emissions between 1990 and 2010 than do all OECD countries combined, as illustrated in Figure 2.1. Moreover, these two countries will account for over 50 per cent of ROW emissions by 2010. What makes this comparison impressive is that, in 1990, China and India accounted for less than one third of the level of total OECD emissions.

The major fuel for power generation in two of the fastest growing non-OECD countries, India and China, is coal, the most carbon intensive of the fossil fuels. In 1992, coal accounted for around 74 per cent of total electricity generation in China, while, in India, it accounted for almost 72 per cent. As illustrated in Figure 2.2, CO₂ emissions per TWh of electricity generated in China and South Asia are among the highest in the world. It is often difficult to separate inputs to heat generation from those to electricity generation. If allowance is made for heat generation on the basis of output shares, the CO₂ emissions per TWh for regions with a large amount of cogeneration, i.e., China and CEE, are much reduced.

Figure 2.2: CO₂ Emissions per TWh of Electricity Generated, 1992



In the absence of the assumed ongoing improvements in the efficiency of power generation in the ROW countries, their combined growth in emissions would be even faster. One obvious implication is that