

Commercial energy consumed in developing countries is overwhelmingly provided by oil products. For the developing world as a whole, in 1975, liquid fuels accounted for 61 percent and natural gas for 15 percent of the total commercial energy use. Rising costs have, however, severely restricted the ability of the developing countries to maintain imports and have contributed to delayed development and large balance of payments deficits. Real world prices for oil are projected to continue to increase. Simultaneously, reserve depletion and discovery rates for hydrocarbons indicate that production may peak around the turn of the century. Not only does this imply increased scarcity of hydrocarbon resources, but it also highlights the need to change to other energy sources.

There is clearly a link between increased GNP and increased commercial energy utilisation in developing economies. In 1977, the estimates of developing countries' rates of energy consumption growth, based on GNP projections, ranged from three to four percent. If growth is to be maintained, petroleum based energy sources must be augmented from alternative sources. The traditional non-commercial energy sources are also dwindling and cannot be expected to sustain the vastly expanded requirements.

Vast quantities of oil and natural gas are often used for the production of electricity for centralised systems. Hydro electric or geothermal generation can often be used to substitute for these hydrocarbons and installations can be of such a size as to have a major impact on the oil and gas requirements of the country concerned.

In the non-commercial subsector, wood, dung, and animal power constitute the main source of energy in rural areas of developing countries and charcoal is still used extensively in the cities. The short term possibilities of finding substitutes for them are limited. The replacement of such non-commercial fuels at present often implies a transition to kerosene which is itself becoming increasingly scarce and costly in foreign exchange. In the meantime, large-scale dependence on wood and dung has resulted in depletion of forests, soil erosion, desertification and a steady decline in crop yields.

Properly used, small and perhaps intermittent amounts of energy can be of critical value to the rural economy. Although the provision of such small amounts of energy is not, by itself, sufficient for the improvement of economic and social well-being, it is often a key factor.