Abstract

This chapter examines the relationship between the development of renewable energy technology and energy security by assessing a range of scenarios at the global, regional and sectoral levels. It provides insights into the future energy consumption and supply mix, and the rate at which certain natural resources may be depleted. It discusses the forecast for technological development that supports the increasing power generation from renewable sources, highlights scenarios of energy-related emissions to the atmosphere and analyses how energy prices might respond to the changing economic and technological conditions. Under certain conditions, it is likely that scenarios forecasting a significant increase in the volume of renewable energy will materialise. However, the core requirement is extensive government involvement in the promotion of renewable energy technologies.