

About The Book

This book discusses the problems culminating in climate change and the methods adopted to decelerate it. The concepts of green energy and sustainability are vexed issues and have drawn maximum attention of scientists and administrators alike. However, newcomers to the field will need an understanding of the basic underlying points. This book simplifies a complicated picture by adopting a first principle approach, thereby broadening the understanding of climate change. It also emphasizes the need to look for alternate sources of energy, in particular bioenergy. The biological resources which are used to produce biodiesel, biethanol, biomethanol and their production on a large scale and their possible use in vehicular transport are discussed in detail.

With Sun, as the ultimate source of energy, the basics of photovoltaic conversion is elaborated from the first principle and so also the origin of nuclear energy. With reference to total carbon emission, the fixation of carbon by way of photosynthesis is discussed. The health implication of climate change, particularly the increase in earth temperature and subsequent impact on environment, is highlighted.

Content

- 1) Key Parameters in Climate Change
- 2) Green Energy
- 3) Bioenergy
- 4) Photovoltaic Energy
- 5) Nuclear Energy
- 6) The Carbon Cycle
- 7) Climate Change and Health Dynamics