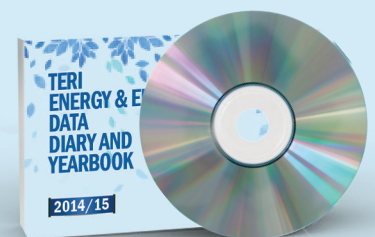


TERI ENERGY & ENVIRONMENT DATA DIARY AND YEARBOOK

2014/15



The Energy and Resources Institute



with complimentary CD

Preface

India's current and future economic growth would have major implications for the state of the environment and the conservation of natural resources. At the same time, there is a growing need for all countries in the world to deal with the challenge of climate change, which over time would require a shift away from fossil fuels, unless there are technologies employed for carbon capture and storage. In the case of India, growing imports of fossil fuels also raise major issues of energy security, which have to be seen in the context of a large part of the population not having access to modern forms of energy.

The Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) has highlighted the seriousness of the impacts of climate change if emissions of greenhouse gases are not mitigated adequately. South Asia as a region is particularly vulnerable to the impacts of climate change with the possibility of growing water stress and risks to food security. The increase in the frequency and intensity of extreme events, particularly heat waves and extreme precipitation events projected by the IPCC, has also growing relevance to India. At the end of the year, the 21st Conference of the Parties under the United Nations Framework Convention on Climate Change would take place in Paris. All the countries of the world are expected to declare their Intended Nationally Determined Contributions (INDCs) to map out the reduction in the emissions of greenhouse gases, which is expected to take place as part of global efforts to deal with climate change. At the same time, the UN General Assembly is working at the formulation and acceptance of Sustainable Development Goals. This would involve the need to scale up efforts towards promoting transparency in sharing information and data.

In all the efforts that have to be made in India for ensuring proper analysis and formulation of strategies to ensure energy security, environmental protection, and dealing with climate change, a wealth of data would be required and would have to be made available in the public domain.

The Energy and Resources Institute (TERI) takes pride in presenting the twenty-ninth edition of

its flagship publication *TEDDY (TERI Energy and Environment Data Diary and Yearbook)*, which provides the latest updated information and statistics on energy and environment in India. Energy supply and energy demand have both been discussed in great detail within the energy sector. *TEDDY* has been a frequently used reference document for several international peer-reviewed journals and policy documents. Energy supply has been discussed at length in chapters on coal and lignite, petroleum and natural gas, power, and renewable energy sources and technologies. The section on energy demand covers extensively the major energy-consuming sectors of agriculture, industry, transport, and domestic entities. The section on local and global environment examines local environmental issues and their impacts on society; it also discusses various facets of climate change. Topics including forestry and biodiversity, global and national-level emissions, and climate change trends over India have been discussed in this section. The publication provides a review of government policies that have implications for these energy and environment sectors. The Green Focus at the end of each chapter highlights sustainable initiatives and successful practices that are of current interest within each sector. This publication also features a section with a discussion around sustainable development goals and sustainable energy.

At TERI, we attempt to bring constant refinement to *TEDDY*, and I am hopeful that like all the previous issues, *TEDDY 2014/15* would also be of immense value to policy makers, business organizations, academic institutions, and research scholars. Comments and suggestions from readers shall be welcomed and appreciated highly as these would help us in improving subsequent issues of this publication.



R K Pachauri, PhD
Director-General, TERI