

Introduction

At the Third Conference of Parties to the United Nations Framework Convention on Climate Change (COP3) held in Kyoto in December 1997, Japan publicly committed itself to a very strict target of reducing average CO₂ emissions by 6% of the 1990 level over the period of 2008 to 2012. At the Buenos Aires Conference (COP-4) in November 1998, discussions were held on such matters as the practical details of promoting the environmental protection internationally, and gaining the cooperation of the developing nations. The conference served to develop a common recognition that the global environmental protection presents major tasks for mankind as a whole. It is necessary to make practical reductions in CO₂ emissions, and much is expected of the developing countries in the Asian region for their efforts, and of the industrialized nations in terms of support to them.

As is well known, with the advent of the first oil crisis in 1973, the Japanese government and businesses exerted combined efforts toward energy conservation which resulted in a reduction of energy consumption per GNP of more than 30%. The benefits of the development and implementation of the energy conservation technology in Japan over the past 20 years have been verified in numerous cases in a variety of industries. To promote the energy conservation shall be the major contributing factor to the solution of the world's environmental problems. A number of measures were introduced in Japan this year: the Energy Conservation Law was revised and strengthened; submission of energy conservation plans is now required; designation of energy management plants is going to be expanded; and it was decided to strengthen the energy conservation criteria by introducing the Top Runner System. More strong measures will be continued to be implemented in future to promote the development and promulgation of energy conservation technology. The New Energy and Industrial Technology Development Organization (NEDO) has been involved in the collation and dissemination of energy-related information in Japan and overseas countries, primarily those in Asia-Pacific region, since 1993. It is now engaged in building an integrated database of statistical data on effective use of energy, related institutional framework, and technical information.

As part of the development of this database, it was decided to implement a project to update and revise the Directory of Energy Conservation Technology in Japan (Energy Conservation Directory for short, first edition published in 1995), in order to facilitate the introduction in Asia of energy conservation technology developed for use in energy-intensive Japanese industry. We are confident that this project will have significant benefits as a fundamental activity to promote the Japanese international cooperation relating to global environmental problems.

This directory collects the results of the second survey of the energy conservation technology introduced in a variety of Japanese industries, and presents it as a database in an easily understandable format. We hope that the technical information contained in this directory will prove useful in promoting energy conservation in the developing countries in Asia and other part of the world.

In conclusion, I thank the committee members representing the various industrial sectors in Japan, primarily those related to the energy-intensive industries, the experts having a specialist knowledge of the implementation of energy conservation technology, and the staff members of the Energy Conservation Center, Japan, who have long been involved in the promotion and promulgation of energy conservation technology.

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