

3.8. Environmental Industries in Developing Countries Project

Ryokichi Hirono

Professor Emeritus at Seikei University

Professor at Teikyo University Graduate School

Promotion of Environmental Industry in Developing Countries and Supporting Measures By
Industrialized Nations and International Organizations (Draft)

1. Background

1. Deterioration of environment in developing countries and growing concern for the promotion of environmental industries
2. Proposal of “promotion of environmental industry by introducing private funding and transfer of technologies in developing countries”: an important item in “measures concerning international environmental protection” in the “New Basic Environment Plan” (Draft) of the Government of Japan. (Item (2) -(iii), Section 4-1, Chapter 2, Part III)

2. Content and Targets

2.1 Introduction

Deterioration of the global environment and the domestic environment in developing nations, and the increasing need for promoting environmental industries

2.2 Current conditions of environmental deterioration in developing countries and future perspectives

- a. current conditions of environmental deterioration in developing countries**
- b. major causes of environmental deterioration in developing countries**
- c. future perspectives for environmental deterioration in developing countries**

2.3 Current conditions and future perspectives of environmental measures in developing countries (1)

a. measures in industries

- 1) environmental measures in the farming, forestry, stock-farming and fishery industries
- 2) environmental measures in the mining industry
- 3) environmental measures in the manufacturing industry
- 4) environmental measures in the electric power generation and transport industries
- 5) environmental measures in the service industry

- b. environmental measures for improving the environment in cities and housing environment**
- c. environmental measures for preventing natural disasters and conserving the natural environment**
- d. global environmental measures**

2.4 Current conditions and future perspectives of environmental measures in developing countries (2)

a. introduction and enhancing measures for “greening”

- 1) direct regulations
- 2) economic instruments
- 3) voluntary approach
- 4) information disclosure and provision

- b. increase of environmental investments and promotion of environmental industries**
- c. reinforcement measures for environmental education and environmental learning**
- d. measures for promoting environmental science and technology**

2.5 Current situation and future perspectives for environmental industries

current situation of environmental industries

a. major causes for the development of environmental industries

- 1) change in public sense of values due to economical development and increase of income
 - 1. improvement of health and hygienic awareness
 - 2. increasing demand for improvement of environment in cities and housing
 - 3. increasing awareness of natural disasters
 - 4. increasing awareness of deterioration of global environment
- 2) change of international environment
 - 1. reinforcement of international measures against deterioration of global environment
 - 2. extension of environment-related international NGO activities
- 3) reinforcement of governmental environment measures
 - 1. environmental regulations/measures for “greening”
 - 2. environmental consideration in public investments
 - 3. establishment of resource recycling economic societies
 - 4. reinforcement of environmental research/transfer/development of environmental technology
 - 5. promotion of environmental education

b. priority fields for promotion of environmental industries

- 1) specialized service industry for collection and analysis of environmental information, formulation of environmental policies, establishment of environmental law systems and of environmental conservation systems

- 2) specialized service providers for environmental education, learning, publication, newspaper, broadcasting, and publishing
- 3) service providers for planning, implementing, and evaluating research development of environmental technologies and methods
- 4) specialized service providers for conservation and management of natural environment and bio-diversity
- 5) specialized service providers for environmental management and environmental auditing
- 6) service providers for administration of environmental conservation, and training of research specialists
- 7) developing/producing/repairing industries of instruments for environmental conservation and analysis
- 8) environment related industries

2.6 Major limitations in promoting environmental industry in developing countries

- a. lack of experts to provide specialized and technological services**
- b. insufficient policies, forms, and systems for promotion of environmental industry**
- c. lack of awareness and efforts for improving environment amongst private companies and local governments**
- d. shortage of funding for promotion of environmental industry**

2.7 Current situation and future perspectives for supporting systems of major industrialized nations and international organizations for promoting environmental industries

- a. current situation and problems of support systems of major industrialized nations**
 - i) Japan
 - ii) US
 - iii) EU
- b. current situation and problems of support systems of major international organizations**
 - i) United Nations Development Programme
 - ii) United Nations Industrial Development Organization
 - iii) United Nations Environment Programme
 - iv) World Bank
 - v) Asia Development Bank
- c. future perspectives and proposals of major industrialized countries**

3. Research period, target countries and the schedule for this project

3.1 Research period: January or April 2002 to March 2004

3.2 Target countries:

- 1) industrialized countries: Japan, US, EU
- 2) international organizations: as in II. 7. b.
- 3) Dynamic Asian Economies: Korea, Singapore, Malaysia
- 4) developing countries: China, the Philippines, Thailand, Vietnam, India

3.3 Schedule:

- | | |
|-------------------------------|---------------|
| 1) January 2002—December 2002 | 1,2,3,4 of II |
| 2) January 2003—March 2004 | 5,6,7 of II |

4. Researchers /Collaborators (provisional)

Project Leader: Ryokichi Hirono (Prof. Emeritus, Seikei University)

- | | |
|--------------------------|---|
| 1) Japanese members: | 4 (1 researcher and 3 research associates) |
| 2) Non-Japanese members: | 1 researcher from each country |
| Total: | 14 (11 researchers and 3 research associates) |

5. Research Budget

Project Leader	24-27 man-months
Japanese Researchers	¥400,000 (paper) x 1 = ¥400,000
Japanese Research Associates	12-13 man-months=36-39 man-months
Non-Japanese Researchers (industrialized countries)	¥400,000 / paper x 3 = ¥1,200,000
(developing countries)	¥200,000 / paper x 8 = ¥1,600,000
Workshop for interim review	¥400,000 (travel & hotel expenses, honorarium) x 11 =¥4,400,000
	¥100,000 (travel & hotel expenses, honorarium) x 5 =¥500,000
Workshop for final review	¥400,000 (travel & hotel expenses, honorarium) x 11 =¥4,400,000
	¥150,000 (travel & hotel expenses, honorarium) x 5 =¥750,000

6. Applications for supplementary research budget to:

Japan Fund for Global Environment
AEON Group Environment Foundation