

Second Policy Forum of the Seoul Initiative Network on Green Growth¹

Application of Economic Instruments for Green Growth

3-5 September 2007, Bangkok Thailand

BACKGROUND NOTE²

Background

The Asia-Pacific region is the most economically dynamic region in the world. In the last decade, growth in industrial production in regional developing countries outstripped global growth rates. The environmental implications of burgeoning regional economies are more significant in Asia than in any other region. Most developing countries in the region are now afflicted by various environmental problems ranging from land degradation to pollution.

These problems have arisen from the process of growth-oriented development that has so often exceeded environmental carrying capacity. Additionally, the phenomenon of market failure has accounted for the aggravation of environmental problems. This failure is largely grounded in the insufficient reflection of environmental resources like water and air as currency values in the decision-making process of an economic entity.

Many developing countries in the region set environmental standards and enforce them in enterprises and households through command-and-control regulation. However, most of their efforts have been limited in their impact because water, air, and other components of the environment are not priced effectively—ranging from under-priced to essentially free. In a market economy in which ecosystem goods and services are not properly valued, building eco-efficient economies and promoting synergies between environmental protection and economic growth requires targeted intervention.

The application of economic instruments is one way of promoting more eco-efficient consumption and production patterns. Economic instruments for environmental protection are policy approaches that “encourage behavior through market signals, rather than through explicit directives regarding pollution control levels or methods.”³ These include property rights, market creation, charges, fiscal instruments, liability systems, and removal of environmentally harmful subsidies. Properly designed and implemented, economic instruments can create incentives to minimize resource use, pollution, and waste, and to foster creative approaches for capitalizing on synergies between economic growth and environmental protection.

¹ The Seoul Initiative on Green Growth was adopted at the fifth Ministerial Conference on Environment and Development in Asia and the Pacific, held in 2005 in Seoul, Republic of Korea. The Seoul Initiative Network on Green Growth (SINGG) was established to promote the exchange of information on Green Growth and strengthen policy support to the Asia-Pacific countries at its first network meeting, held in 2005 in Seoul, Republic of Korea. Forty-two countries signed for the SINGG at the Ministerial conference.

² This note is a draft prepared by ESCAP in July 2007. Contents are subject to change through discussions with other agencies involved in the preparations.

³ Robert N. Stavins, 2003. “Market-based Environmental Policies: What can we learn from U.S. experience (and related research)?” for presentation at Twenty Years of Market-Based Instruments for Environmental Protection: Has the Promise Been Realized?, Donald Bren School of Environmental Science & Management, University of California, Santa Barbara, August 23-24, 2003.

According to the UNESCAP publication entitled “*State of the Environment in Asia and the Pacific 2005*”⁴, economic instruments have not been widely adopted in Asia-Pacific countries and need to be further promoted to create win-win synergies between economic growth and environmental sustainability. While many Asian market-based economies have delivered impressive economic growth, they have so far demonstrated severe inefficiencies in terms of the environmental standards of resource allocation, which economic instruments could help to correct.

Strategy

There is considerable unexplored potential for governments to build momentum towards the application of economic instruments in Asia and the Pacific. Several developing and developed countries in the region have implemented economic instruments, and their knowledge and experiences could be shared in building the capacity of other countries. There is a need to create a forum for dialogue that could tap these experiences for the greater benefit of global environmental protection.

UNESCAP and the Secretariat of the Seoul Initiative Network on Green Growth will jointly develop the agenda for the policy consultation forum. Upon completion of the forum, comments from the participants will be incorporated into the final report of the project. The outcomes of the forum will be reported to the second SINGG meeting, which will be held in 2008, and will guide the development of a capacity building program for policymakers on applying economic instruments for environmental protection. The findings may also be used as inputs to the policymaking processes for sustainable development.

The United Nations agencies, inter-governmental organizations, and non-governmental organizations and groups will be invited to share their experiences and information on the use of economic instruments for environmental protection.

Objectives

The objectives of the workshop are to:

1. **Review the types of economic instruments for environmental protection**, including environmental charges, tradable permits, deposit/refund system, financial incentives for environmental management. Issues of green tax reform will be also discussed;
2. **Exchange views and experiences on good practices** regarding the implementation of economic instruments for environmental protection in Asia;
3. **Provide practical guidance for policy makers**, especially in developing countries, on deciding which types of economic instruments are likely to work in addressing their countries’ specific environmental problems;
4. **Identify capacity building needs** that could be addressed in a capacity building program for policymakers from selected countries to improve their capacity for pursuing green growth, focusing on economic instruments for environmental protection.
5. **Identify national level activities of the Seoul Initiative** that could translate green growth approach into action.

⁴ ESCAP, 2006. *State of the Environment in Asia and the Pacific 2005: Economic growth and sustainability*. United Nations publication, Sales No. E.06.II.F.30. Bangkok: ESCAP

Expected Outcomes

The expected outcomes of the workshop are:

1. Better understanding and increased motivation for implementing good practices regarding appropriate economic instruments for environmental protection in Asia;
2. Identification of capacity building needs that could be addressed in a capacity building program for policymakers to develop and implement economic instruments for environmental protection;
3. Understanding of how to translate green growth approaches, such as mainstreaming eco-efficiency in national development planning, into action at the national level.

Participants

Policymakers responsible for various environmental charges, environmental management, and budgets from SINGG member countries, such as Bangladesh, Cambodia, China, India, Indonesia, Islamic Republic of Iran, Japan, Malaysia, Pakistan, Philippines, Russian Federation, Singapore, Sri Lanka, Thailand, and Viet Nam will be invited to the policy consultation forum to jointly identify the policy options appropriate for the countries in the region, and to share their experiences, good practices, and challenges in this area.

Experts from the United Nations agencies, international organizations and research institutes, such as UNEP, UNDP, World Bank, ADB, OECD, and other partners, will be invited to share their experiences and good practices.

** Participants are requested to prepare background/discussion presentations related to economic instruments for environmental protection. A synthesis report will be developed that will incorporate both the background papers and discussions during the workshop.*

Funding

UNESCAP has some funding resources to support the participation of experts and government officials from some developing countries and countries with economies in transition in the region. Additional funding to support the attendance of experts from research institutes, the private sector, and other major stakeholders is being sought.

Working Language

The Forum will be conducted in English and all documentations will be written in English.

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

In collaboration with the Ministry of Environment of the Republic of Korea and the Korea Institute of Public Finance

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TENTATIVE PROGRAMME

Monday, 3 September 2007

08:30-09:00 Registration

09:00-09:20 Opening Session

Welcome

Mr. Rae Kwon Chung, Director of Environment and Sustainable Development Division, UNESCAP

Remarks

Mr. Boonam Shin, Director-General, International Cooperation Office, Ministry of Environment, Republic of Korea

09:20-10:45 Session 1: Concepts of Economic Instruments and Current Status in Asia and the Pacific

Moderator: Dr. Anselm Gorres, President of Green Budget Germany (tbc)

09:20-09:50 **Introduction to the theme of the Forum: Green growth in Asia and the Pacific**

Mr. Rae Kwon Chung, Director of Environment and Sustainable Development Division, UNESCAP

09:50-10:10 *Coffee/Tea Break*

10:10-10:40 **Addressing Market Failures: Concepts of Economic Instruments for Environmental Protection**

Prof. Jeong In Kim, Department of Industrial Economics, Chung Ang University, Republic of Korea

Overview of market failures leading to environmental degradation, definition of what qualifies as an economic instrument for environmental protection, the types of instruments (taxes, user charges, permits, subsidies, etc.), how they can be used (what change in behavior of the market is intended). How EIs compare with command-and-control measures for environmental management. This session also illustrates why the next three sessions are organized by specific market failures and presents the economic instruments that can help to correct them.

10:40-11:10 **Current Status of Economic Instruments for Environmental Protection in the Region: Focusing on the case of Sri Lanka**

Dr. Stefan Speck, environmental economist

Brief overview of history of EI in the region and importance of using them for environmental management, briefly noting some key examples, such as ones that will be presented later in the forum. Also the current status, trends, and potential applications of EI in Asia. Current status of and reform proposals for market-based instruments in Sri Lanka will be also presented.

11:10-12:00 Discussion

12:00-13:30 *Lunch Break*

13:30-17:00 Session 2: Experiences of Implementing Economic Incentives: Financial Incentives, Environmental Charges, Deposit-Refund System, and Tradable Permits

Moderator: Mr. Boonam Shin, Director-General, International Cooperation Office, Ministry of Environment, Republic of Korea

13:30-14:10 **Environmentally Related Tax, Charge, Fee System in the Region (1)**
Experiences and lessons learned from Asia-Pacific countries, such as Japan and Singapore will be introduced and discussed.
Participant from Governments

14:10-14:20 Discussion

14:20-14:50 **Environmentally Related Tax, Charge, Fee System in the Region (2)**
Experiences and lessons learned from Asia-Pacific countries, such as China, India and Thailand will be introduced and discussed.
Prof. Adis Israngkura, Director of Training Center, National Institute of Development Administration (NIDA), Thailand

14:50-15:00 Discussion

15:00-15:20 *Coffee/Tea Break*

15:20-15:50 **Waste charge system and Extended Producer Responsibility (EPR) System in**
Dr. Lee, Sang-Hun, Korea Environment and Resources Corporation, Republic of Korea
Comparative study of the effectiveness of municipal waste management systems in a particular country using different types of fees. Include lessons learned and potential for replication in the countries in the region.

15:50-16:00 Discussion

16:00-16:30 **Environmentally Related Tax, Charge, Fee System in the Region (3)**
Participant from Governments

16:30-16:40 Discussion

16:40-17:00 Summary of Day 1

In these few minutes, someone can present any interesting thoughts or questions for participants to keep in mind for the next day.

Tuesday, 4 September 2007

09:00-12:00 Session 3: Opportunities and Perspectives for Green Tax and Budget Reform in Asia

Moderator: Vice-president of KIPF

- 9:00-09:30 **Green tax and budget reform as a public policy promoting Green Growth**
Dr. Seung-Rae Kim, Korea Institute of Public Finance
Overview of the numerous possibilities green tax reforms, including important social and environmental implications, such as the double dividend effect - increased employment, improved environmental protection and decreased CO2 emissions. Experience and lessons learned from the European countries.
- 09:30-10:00 **Environmental tax reform – Experience and lessons learned from Europe**
Dr. Stefan Speck, environmental economist
- 10:00-10:15 Discussion
- 10:15-10:30 *Coffee/Tea Break*
- 10:30-10:50 **Green budget reform in Germany and Europe: Some of the lessons**
Dr. Anselm Gorres, President of Green Budget Germany
- 10:50-11:10 **Review on the green tax and fiscal reform in China**
Prof. SONG Guojun, Remin University of China
- 11:10-11:30 **Green tax reform in Thailand**
Prof. Adis Israngkura, Director of Training Center, National Institute of Development Administration (NIDA), Thailand
- 11:30-12:00 Discussion
- 12:00-13:30 *Lunch Break*

13:30-16:45 Session 4: Incentivising Climate Actions

Moderator: Mr. Masakazu Ichimura, Chief of Environment Section, UNESCAP (tbc)

- 13:30-14:00 **Economic Instruments for Reduction in Energy-based Carbon Emissions**
(open)
Economic instruments can be used as a key tool to promote long-term reductions in carbon emissions. Fiscal policy that consistently and systematically reduces energy-based carbon emissions will be discussed.
- 14:00-14:30 **Removing barriers to expanding investments in renewable energy**
Mr. Conrado S Heruela – Renewable Energy Specialist
- Many renewable energy technologies (RETs) are now cost competitive with fossil-based energy systems, such as for off-grid and mini-grid electrification, heating and engine fuel applications. These include biomass, small-hydro, wind and solar energy systems. Investments in these RETs have shown significant growth in recent years.

Still their share in the total energy supply mix remains relatively small, a miniscule portion of the projected total demand for such technologies. Policy and other barriers are restraining further expansion of investments in this sector. Many countries have embarked on programs to remove these barriers but those programs need to be strengthened. Particularly for developing countries, capacity-building is needed to make these programs effective in expanding investments and achieve higher use of renewable energy technologies.

14:30-15:00 Discussion

15:00-15:15 *Coffee/Tea Break*

15:15-15:45 **Energy Tax Reform in the Republic of Korea**
Dr. Manok Kang, Korea Environment Institute

15:45-16:15 **The carbon tax/ environmental tax reform: Cases of Japan and other industrial countries**
Prof. Park Seung-Joon, Kyoto Sangyo University, Japan (tbc)

16:15-16:45 Discussion

16:45-17:00 Summary of Day 2

Wednesday, 5 September 2007

09:00-10:40 Session 5: Towards Successful Application of Economic Instruments for Green Growth in Asia and the Pacific

Moderator: Mr. Rae Kwon Chung, Director of Environment and Sustainable Development Division, UNESCAP

09:00-09:30 **Effective Policy Design and Implementation for the Application of Economic Instruments**

Prof. A.T.M. Nurul Amin, Asian Institute of Technology

Designing an effective economic instrument involves understanding the market failures regarding environmental resources or pollution. How to make sure you're not targeting the wrong thing? Given the various circumstances in Asian developing countries, EIs can be part of a basket of policy measures used to achieve environmental and economic efficiency. Finally, how to monitor and assess the effectiveness of instruments without creating unnecessary burdens? The session should give practical guidance to policymakers and motivate them to look for opportunities in their countries to implement EIs for the environment.

09:30-09:40 Discussion

09:40-10:10 **Governance and Politics of Environmental Fiscal Reform**

M. Paul Steele, Environment Advisor, UNDP

Lack of political will and pressure from various groups. Need to increase public awareness and institutional capacity to administer an EI. Need to remove perverse economic incentives like subsidies. How governments, international organizations, and civil society can help to create a context where economic instruments can be used

for the environment. For example, how to ensure continuity in unpredictable governance structures.

10:10-10:20 Discussion

10:20-10:40 *Coffee/Tea Break*

10:40-12:00 The Way Forward

Summary of the meeting, concluding discussion, outcomes and next steps

12:00 Closure of the Meeting