## Asia 3R High-Level Seminar March 9th, 2009, Tokyo, Japan Chair's Conclusion

## **Introduction**

- 1. The Asia 3R High-Level Seminar was held in Tokyo, Japan on March 9th, 2009 co-organised by the Ministry of the Environment of Japan and the Institute for Global Environmental Strategies (IGES) in Japan. The seminar was attended by senior governmental officials from eleven participating countries from Asia (Bangladesh, Cambodia, China, Indonesia, Japan, Malaysia, Philippines, Republic of Korea, Singapore, Thailand, and Vietnam), and as well as international organizations and aid agencies; the Asian Development Bank (ADB), Organisation for Economic Co-Operation and Development (OECD), Secretariat of the Basel Convention (SBC), the United Nations Centre for Regional Development (UNCRD), the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organization (UNIDO), Japan International Cooperation Agency (JICA), German Technical Cooperation (GTZ) and prominent experts on the 3Rs and sustainable resource management from around the world.
- 2. The seminar was chaired by Dr. Ryutaro Yatsu, Director General of Waste Management and Recycling Department, Ministry of the Environment of Japan with the support of session chairs and facilitator: Mr. Joseph Hui (Singapore), Dr. Anna-Bella Siriban-Manalang (Philippines), and Mr. Kazunobu Onogawa (UNCRD).
- 3. The seminar helped to: (i) facilitate shared understanding on the progress of 3R promotion especially, those of national 3R strategy development in Asian countries; (ii) facilitate shared understanding of the needs and priorities with regard to capacity development in 3R areas; (iii) identify incentives and co-benefits to implement the 3Rs; (iv) identify challenges and opportunities in real implementation of the 3Rs at both national and regional level; and thus (v) foster common understanding among participating countries on the establishment of the Regional 3R Forum in Asia.

## Priorities for strategic implementation of the 3Rs

- 4. The seminar recognized that the development of National 3R Strategies has been a positive step forward from the stage of policy dialogues and dissemination of the 3R concept to the stage of strategic implementation of the 3Rs in cooperation with international organization and aid agencies.
- 5. The seminar recognized the importance of 3R policies and programmes not only limiting to the field of down-stream waste management but also linking to the upstream issues such as waste minimization and resource efficiency through institutional and technical capacity development. The seminar also recognized the importance of the climate change mitigation through appropriate programmes and activities related to 3R and waste management, including application of relevant environmentally sound technologies and measures.
- 6. Towards the strategic implementation of the 3Rs, the seminar recognized the needs for wide range of collaboration among potential stakeholders at local, national and regional level to support appropriate project development and their implementation, research networking, improved information sharing on best practices, training and capacity development, and also achieving co-benefits. Also, the participants recognized the importance of appropriate awareness raising among civil society through demonstration of clear social, economic,

environmental, and health benefits is key to effective promotion and implementation of the 3Rs.

- 7. Under the above recognition, the seminar identified the following as the priority areas and activities on the 3Rs;
  - 7-1 Mainstreaming 3R in National Environmental and Economic Policies and Programmes through further development of inter-agency and multi-stakeholder collaboration which have been initiated through National 3R Strategy development process as well as through introduction of various policy instruments on waste management by local and central government authorities. Clear demonstration of the economic benefits can be instrumental in influencing national finance and planning authorities. While linking 3R to the highest possible policy level, mutual consultation and cooperative arrangements with international organizations and aid agencies could be useful. With the support of international community and aid agencies, the countries are ready to initiate the implementation of priority activities such as those identified in the National 3R Strategy: for example, formulation and/or improvement of laws and regulations and inter-institutional policies to create a supportive and conducive framework for promoting 3R implementation as well as environmentally sound waste management; establishment an effective recycling system; addressing resource efficiency and application of clean technologies in industrial sector, with consideration of cost-benefit aspects as well as social/cultural/local conditions.
  - 7-2 <u>Mobilizing financial resources in cooperation with bi-lateral and multi-lateral aid</u> <u>agencies</u>, for the implementation of the 3R promotional activities. These financial mechanisms, which could be materialized through dialogues between high-level governmental officials and donor agencies, along with domestic financial resources available, could be utilized to identify and disseminate various good practices, including transfer of environmentally sound technologies and practices, in harmony with the local culture and socio-economic condition. The possibilities to mobilize carbon financing for the implementation of the 3R should be explored further.
  - 7-3 Development of <u>human resources</u> both at local, provincial, and national level to overcome waste management issues as well to facilitate efficient diffusion of 3R knowledge and technologies. Importance should be attached to <u>strategic alliance with private sectors</u>, through PPP, to build 3R infrastructures in harmony with public health standard and environmental conservation. There is a need to build <u>capacity of regional governments</u> to follow alternative path of development waste to energy and resource efficient economy.
  - 7-4 Understanding of both the main benefits of the 3Rs and the <u>co-benefits</u> in the forms of improvement of environmental management and competitiveness among industrial sectors, achieving resource and energy efficiency, climate change mitigation, and MDG, by integrating the 3Rs in local / national waste management policies, urban strategies, integrated water resources management, and social welfare strategies. 3R and waste to energy can be complementary activities based on the local conditions.
  - 7-5 Develop necessary <u>organizational framework/support to deal with informal sectors</u> who play an important role in the waste chain, but generally operate without proper health care and labor policies.

- 7-6 Development and transfer of environmentally sound technologies for waste management and the 3Rs that are applicable in the context of prevailing socio-economic condition in each country through collaboration among stakeholders such as national governments, provincial, local governments, private sectors(including inter-industrial collaboration), and research and scientific community, which can also contribute to addressing regional disparities. Waste intensive industries may be given special attention in this context. Collaboration with materials industry is a key for technical capacity development for the 3Rs-related technologies and industries. The markets for recycled materials may need to be stimulated through measures such as green procurement.
- 7-7 <u>Empowering cities</u> to build them as core clients for financing and investments towards implementation of 3Rs / materializing Sustainable or Eco City
- 7-8 <u>Information sharing and technical capacity development</u> for establishment of sound material cycle society in each country and on the regional level and for <u>prevention of</u> <u>illegal import and export of wastes</u> in recognition of the obligations under Basel Convention.
- 7-9 <u>International collaborative research</u> on improving the ability to discuss advanced implementation of theory and technology into policy and disseminate policy relevant information in close cooperation with advanced research institutes, centres of excellence and international organizations.

## The Way Forward: Development of the Regional 3R Forum in Asia

- 8. The Chair of the meeting, Dr. Yatsu, introduced the proposal on establishing the Regional 3R Forum in Asia, its objectives and scopes. He further recommended that the inaugural meeting of the Regional 3R Forum in Asia be held during late 2009. A preparatory meeting in June 2009 in this regard was also proposed by the Chair. The participants appreciated the proposals made by the Chair. Detailed proposal incorporating comments made by the participants could be seen in Annex 1.
- 9. The participants requested the bilateral and multilateral development banks and agencies to consider the development of new funding mechanisms, which serves for 3R related project implementation and/or investment.

Annex 1: Towards establishment of the Regional 3R Forum in Asia

- 1. The objectives of the proposed Regional 3R Forum in Asia are to: (i) facilitate high-level policy dialogues on 3R issues & opportunities to promote countries' efforts to achieve common objectives of the 3Rs; (ii) provide a platform for the implementation of the priorities identified through National 3R Strategy, including 3R and/or waste related pilot and demonstration projects at local and national level and capacity development; (iii) provide a strategic and knowledge platform for sharing experiences & disseminating among Asian countries best practices, tools, technologies, policy instruments on various aspects of 3R; ,(iv) provide a platform to develop multilayered networks of stakeholders such as governments, academia, and private sectors; (v) generate international consensus on the beneficial aspects of 3R in the context of achieving MDG, resource and energy efficiency, and climate change mitigation; and to (vi) provide platform for proliferation of National 3R Strategies.
- 2. As an initial set of activities that will be implemented under the umbrella framework of the "Regional 3R Forum in Asia," it was proposed (a) to hold high-level policy dialogues on regular basis, (b) to facilitate replication, enlargement, and implementation of the 3R-related pilot and demonstration projects and other good practices in close collaboration with donor agencies, (c) to collaborate with the existing 3R information/research networks at national and international level, (d) to promote 3R business feasibility studies involving both public and private sector financing and participation keeping in mind the interest of developing countries, (e) to conduct international collaborative policy relevant research on sound material cycles in Asia, and (f) to provide capacity building, such as the international training program focusing on the 3Rs for human resource development.
- 3. On 2 (a), high-level policy dialogue will be organized to promote countries' efforts to achieve common objectives of the 3Rs by sharing and discussing wide range of policies and activities on 3Rs focusing on material and solid waste flow as well as on regional cooperation. National Government representatives being the most important constituent of the high-level policy dialogue, will actively participate and play central role.
- 4. On 2 (b), the Forum is expected to identify pilot interventions and provide support in collaboration with the existing and newly mobilized financial mechanisms, to facilitate and replicate 3R-related promotional activities and demonstration projects. The forum will provide a structure for consultations among governments and bilateral and multilateral development banks and agencies and enlist their support for implementation of 3R projects.
- 5. On 2 (c), to be a strategic and knowledge platform for sharing experiences & disseminating among Asian countries best practices, tools, technologies, policy instruments on various aspects of 3R, the Forum is expected to collaborate with the existing information/research networks related to the 3Rs including 3R Knowledge Hub, the Thematic Working Group on Solid and Hazardous Waste (Waste TWG) of the Regional Forum on Environment and Health in Southeast and East Asian countries, Society of Solid Waste Management Experts in Asia and Pacific Islands (SWAPI), and ERIA working group on the 3R Policy.
- 6. On 2 (d), facilitate mutual and bi-lateral consultation among countries to follow-up and realize the outcome of the 3R business feasibility studies.
- 7. On 2 (e), international collaborative and advanced policy relevant scientific research on a continuous basis for better data gathering, evaluating economic and environmental impact

of the 3Rs, effectiveness of 3R policies, and examination of available policy options and their combination for strategic implementation of the 3Rs will be initiated this year. There will be a core group of experts who will support the policy dialogue by providing substantive technical input to the policy consultations as well as by reporting the outcomes of such research at the Forum to effectively disseminate the findings. Also, they will provide relevant policy and technical advices and practical suggestions to the developing countries during the implementation of various 3R activities. The Institute for Global Environmental Strategies (IGES) is expected to develop such collaborative research activities.

- 8. On 2 (f), international training programmes on 3R issues targeting the government officials will be initiated, as part of the international cooperation activities of relevant donor agencies such as JICA and others.
- 9. In line with the findings, priorities, and recommendations made in the National 3R Strategies, it is expected that the participating countries, with the support of United Nations Centre for Regional Development (UNCRD) and United Nations Environmental Programme (UNEP), would continue reporting the follow-ups and progresses towards implementation of the 3Rs at the Regional 3R Forum.
- 10. Under the Regional 3R Forum in Asia, UNCRD, as the lead agency, is expected to (i) facilitate intergovernmental coordination for the implementation of the Forum, (ii) facilitate an interface or platform between the Governments and the expert group for active policy consultations and dialogues.
- 11. A common understanding will be reached at the 1<sup>st</sup> Regional 3R Forum, outlining the long term and short term priorities and the Forum's initial core activities to address them considering the real situation (socio-economic condition and culture, etc.) in Asia.

Annex 2: Examples of 3Rs-related projects on international cooperation conducted by international organizations and aid agencies (for information sharing)

ADB	$\triangleright$	Integration of 3R principles in development projects: ADB is providing
	ĺ	financial and technical support to developing countries' investments for
		economic development and poverty reduction through both physical
		infrastructure & management systems. ADB has been adopting 3R
		principles through such interventions where resources (energy, water)
		and waste management is a key to improve social welfare and the
		economy. This direction was enhanced under its new Strategy 2020,
		and through the Clean Energy Initiative, Updated Urban Strategies, and
		Integrated Water Resource Management. Many lending projects and
		grant projects include 3R-related components. Examples of waste
		management include promoting recycling business, waste separation at
		source in urban areas, and agricultural waste utilization.
	$\triangleright$	Regional and Subregional Activities under the 3R Initiative: ADB
		organized two subregional dialogues in collaboration with partner
		agencies in 2006 and 2007. ADB prepared 'Toward Resource
		Efficient-Economies in Asia and the Pacific' Report to provide an
		overview of the resource efficiency status and on-going efforts in the
		region together with policy implications. ADB supports the 3R
		Knowledge Hub hosted jointly by Asian Institute of Technology and
		UNEP to manage and disseminate 3R knowledge focusing on
		municipal waste, healthcare waste and e-waste. It also provides
		financial support to Viet Nam in developing 3R National Strategies.
	$\triangleright$	The Cities Development Initiative for Asia helps local governments
	ŕ	formulate environmental infrastructure projects in general, and the 3Rs
		project specifically, and link them to finance for implementation.
	$\triangleright$	Managing Hazardous Waste for South Asian Countries: A regional
		technical assistance is provided to the South Asian countries to address
		hazardous waste issues.
GTZ		The German Technical Cooperation (GTZ) supports partners in
		Developing Countries on behalf of the German Federal Ministry for
		Economic Cooperation and Development (BMZ). Solid Waste
		Management is one of the sectors within this cooperation. It is seen as
		part of the environmental sector. Different projects have been or are
		currently being implemented within the region of South Asia.
	$\triangleright$	The 3R concept is an integrated part of the sector policy of SWM and
		resource management of the German government and therefore also
		for its implementation agencies in developmental cooperation such as
		GTZ and KfW since 1996.
	$\triangleright$	The current operations in China, India, Philippines, Thailand and Viet
		Nam include components in capacity development in solid waste
		management, e-waste management, energetically use of waste,
		integration of informal sector and so on.
IGES	$\triangleright$	APFED Showcase Programme: IGES serves as a secretariat of Asia
		Pacific Forum on Environment and Development (APFED). Under the
		showcase programme, a grant of up to US\$30,000 will be provided to
		support the showcasing of innovative policies, approaches, measures
		and actions for promoting sustainable development, including the 3Rs,
		in the region.
	$\triangleright$	Kitakyushu Initiative for a Clean Environment: Under the direction of
		UNESCAP, with major financial support from Japanese government, by
		organizing workshops and dissemination projects, IGES serves as a
		secretariat to this mechanism that seeks to promote urban

	<ul> <li>environmental actions at the local level targeting the control of air and water pollution, minimization of all kinds of wastes, taking selected technical, institutional, regulatory and participatory measures. In FY 2008, IGES organized several workshops in collaboration with local governments and communities in Southeast Asia to replicate good practices on solid waste management.</li> <li>&gt; 3R Initiative,: In collaboration with Ministry of the Environment of Japan, UNCRD, UNEP/ROAP and ADB, IGES contributes to the promotion of the 3R Initiative by conducting policy research, examining regional strategies, and promoting networking. IGES has been a key organization for international cooperation on National 3R Strategy Development supported by UNCRD and UNEP.</li> </ul>
JICA	<ul> <li><u>Vietnam</u>: The Project for Implementation Support for 3R Initiative in Hanoi City has been implemented with Hanoi URENCO and Hanoi Women's Union. Project purpose is to prepare a harmonized 3R system based on source separation programs of organic waste in the entire area of Hanoi City.</li> <li><u>The Philippines</u>: The project for establishment of ecological solid waste management system in three cities has been implemented in collaboration with the central government of the Philippines.</li> <li><u>China</u>: The project for promotion of circular economy has been implemented for promoting recycling economic measures from the perspective of environmental protection and strengthen the capacity of major players in each step of the material cycle.</li> <li><u>Indonesia</u>: JICA is preparing a technical cooperation project for capacity development of 3R promotion and domestic solid waste management system with Ministry of Environment and Ministry of Public Works in Indonesia in 2009.</li> <li><u>Fiji</u>: Waste reduction/recycling Promotion Project has been implemented with Department of Environment in Fiji.</li> </ul>
	Toward Sound Material Cycle Society: JICA is preparing training course for establishment of Sound Material Cycle Society for ASEAN Countries.
SBC	<ul> <li>The Basel Convention regime encompasses waste minimization as an important goal of the Convention. In this connection, SBC programmes and activities provide technical advice and tools for the development of appropriate policies, strategies and measures for waste minimization globally, in particular hazardous wastes. SBC and its network of regional centres also provide legal, institutional and technical support to governments and other stakeholders to control and manage such wastes in an environmentally sound manner.</li> <li>Asia Pacific E-waste Programme: in collaboration with 11 Asia and Pacific countries and with funding mainly from the Japanese Government, this programme was implemented since November 2005. The objectives of the programme are to raise awareness, enhance the capacity of countries in the region in ensuring e-waste are managed in ESM and to prevent illegal trafficking of such wastes. Pilot projects were carried out on 3R-related activities or being implemented in various countries in the region.</li> <li><u>E-waste Africa Project</u>: with funding from the European Commission and other donors, this project aims at studying and monitoring the flows of e-wastes into West Africa, and monitors illegal trafficking and promoting environmentally sound management of e-waste including their 3Rs.</li> </ul>

	$\triangleright$	Basel Convention Partnership Initiatives on Mobile Phones and
	ŕ	<u>Computing Equipment</u> : these 2 partnership programmes, involving
		governments, industry and NGOs, are aimed at the proper
		management and ensuring environmentally sound reuse, recovery,
		repair and recycling of mobile phones and computing equipment.
	$\triangleright$	Other initiatives: Used lead acid batteries (ULAB) Partnership in Latin
		America and Caribbean, used oil in West Africa, mercury waste
		partnership in cooperation with UNEP chemicals and other
	~	stakeholders
UNCRD		National 3R Strategy formulation: UNCRD is facilitating the National
		3R Strategy formulation in Bangladesh, Indonesia and Vietnam with the
		financial support from MoE-J and in collaboration with IGES. The
		Strategies are being formulated by the National Collaborating Centre
		(NCC), which takes the lead role in drafting the Strategy in collaboration
		with the respective governments, and through a series of consultation
		workshops ensuring input from a wide range of stakeholders. The
		Strategies of Indonesia and Vietnam is expected to be completed within
		2009, while the process in Bangladesh has recently started.
	$\succ$	Dissemination of successful example of National 3R Strategy
		formulation into GMS countries: The scope of National 3R Strategy
		formulation in Vietnam has been expanded to become a pilot case for
		the GMS countries. Upon finalizing the Strategy, there will be a series
		of activities to share the Vietnam experience with the GMS countries by
		means of regional seminar/workshop (This activity is being supported
		by ADB).
	$\triangleright$	Community level projects for 3R Promotion: Small scale community
	ĺ ĺ	level projects are being supported, e.g., community composting plant,
		provision of barrel type composting bins to slum areas together with a
		training package, awareness raising in schools, etc. These activities
		are being financed by various sources, including the funds raised by
	~	UNCRD from the local communities in Chubu area of Japan.
	$\succ$	Awareness raising materials: UNCRD is assisting Bangladesh to
		prepare the 3R Modules focusing on five key sectors. The Modules
		would be used to sensitize and provide guidance to the practitioners
		involved in 3R/waste management, such as municipal authorities,
		business sector (including small and medium enterprises), hospital and
		medical sector, agriculture and farming communities, and hotel and
		tourism industries. The 3R Modules will also be effectively used as
		training materials for capacity building of the respective stakeholders
		and agencies. This activity is being conducted with Waste Concern
		(local NGO in Bangladesh). Similar activity is being planned in Vietnam.
UNEP	$\triangleright$	The Marrakech Process, a global effort to promote Sustainable
		Consumption and Production (SCP), responds to the call of the WSSD
		to develop a 10-Year Framework of Programme to support regional and
		national initiatives to promote the shift towards sustainable
		consumption and production patterns.
	$\triangleright$	International Panel for Sustainable Resource Management was setup
	Ĺ	to provide independent scientific assessment on the environmental
		impacts due to the use of resources (both renewable and
		non-renewable) over the full life cycle, and provide scientific advice on
	~	how to reduce these impacts by 'doing more with less'.
		The Life Cycle Initiative is operated in partnership with the Society of
		Environmental Toxicology and Chemistry (SETAC), and promotes
		dialogue among different stakeholders in order to put lifecycle

$\blacktriangleright$	approaches into practice. <u>Eco-towns</u> : UNEP is working with local governments and business in
	cities in the Asia-Pacific region to develop Eco-towns in order to
	facilitate environmentally sound industrial development, focused on the 3R concept. Pilot projects are ongoing in in Penang, Malaysia;
	Bandung, Indonesia; and Shenyang, PR China.
$\triangleright$	Integrated Solid Waste Management (ISWM): UNEP is pioneering this
	approach with focus on 3R in four pilot demonstration projects (Wuxi PR China, Pune India, Matale Sri Lanka, and Maseru Lesotho). A
	comprehensive training package has also been prepared to build
	capacity. Further projects are on-going in Nairobi, Kenya and Novo
	Hamburgo, Brazil.
	E-Waste: UNEP has prepared manuals on E-Waste Inventorization and
	E-waste Management. These manuals are being used in an on-going E-waste Management project in Phnom Penh, Cambodia and Mumbai,
	India
$\triangleright$	Waste Agricultural Bio-mass: Pursuing co-benefits between GHG
	reduction and 3R in the agriculture sector, UNEP has prepared a
	compendium of technologies for converting waste agricultural bio-mass into useful materials/energy based on which a demonstration project is
	ongoing in the Philippines.
$\triangleright$	Waste Exchange: Demonstration projects on waste exchange in the
	private sector have been implemented in Penang, Malaysia; and
	Bandung, Indonesia.
	<u>Construction and Demolition Debris:</u> UNEP is implementing project on demonstrating technologies for reuse/recycle of C&D debris in Banda
	Aceh, Indonesia. The project first aims to take care of the debris
	resulted from the Indian Ocean Tsunami, but will subsequently also be
~	applied to day-to-day debris.
$\checkmark$	<u>Plastic Waste</u> : UNEP has implemented a plastic waste management programme for the city of Nairobi based on 3R principles. The project
	has established a comprehensive reuse/recycle programme by key
	policy and economic instruments. With support from Government of
	Japan UNEP is implementing another project on converting waste
Ν	plastic into fuel and thus contributing to reduction in GHG emissions. <u>Youthxchange</u> : This project aims to promote sustainable consumption
A	patterns among young consumers all around the world, including the
	3R concept
$\blacktriangleright$	<u>3R Policy studies</u> : Studies have been carried out in three countries of
	South East Asia (Malaysia, Philippines, and Thailand) to assist the
	governments with the analysis of 3R status and the development of national 3R strategies.
$\triangleright$	Capacity Building and Training: UNEP has prepared a number of
	packages on 3Rs and related topics, including for example: Integrated
	Waste Management, agricultural biomass waste, E-waste Assessment
	& Management, environmental management for industrial estates, hazardous waste management, CP-MEA Integration, CP-Energy
	Efficiency integration, Cleaner Production, Design for Sustainability
	(D4S), Life Cycle Management,
	<u>3R Knowledge Hub</u> (3RKH): 3RKH was established in August 2006
	with the support from ADB in collaboration with AIT, UNEP ROAP/RRC.AP and UNESCAP. 3RKH network and gather 3R
	resources and expertise from all the sectors in Asia and Pacific region
	on 3R related activities and waste management.

	<ul> <li><u>Thematic Working Group on Solid and Hazardous Waste (Waste TWG)</u> of Environment and Health: is an intergovernmental network with the participation of 14 Southeast and East Asian countries. The goal of this TWG is to ensure environmentally sound management of solid and hazardous waste, in particular municipal waste and medical waste, and promote the 3Rs. With financial support from MOEJ.</li> <li><u>Advanced Waste Management in Asia and the Pacific (AWMAP) project</u> is a joint effort between MOEJ, UNEP and the Institute for Global Environmental Strategies (IGES). UNEP ROAP/RRC.AP assists governments to devise the national strategy on solid waste management in selected Southeast Asian countries (e.g. Cambodia, Malaysia, Philippines and Thailand).</li> </ul>
UNESCAP	<ul> <li>The fifth Ministerial Conference on Environment and Development in Asia and the Pacific (MCEDS) was held in Seoul in March 2005 and adopted an approach for the integration of the three pillars of sustainable development by promoting environmentally sustainable economic growth or Green Growth and as an instrument for achieving the MDG 1 on Poverty Reduction and MDG 7 on Environmental Sustainability. As a follow up to the recommendations of the Ministerial Conference and based on the Resolution of the 61st Session of the Economic and Social Commission for Asia and the Pacific, the secretariat initiated analytical and normative work to operationalize the Green Growth. Green Growth and 3R are intricately interlinked and mutually enforcing concepts since both focus on improving the eco-efficiency of economic development and growth pattern (consumption &amp; production) of our society as a whole.</li> <li><u>Promoting eco-efficient economic growth patterns</u></li> <li>Eco-efficient economic growth is a key theme of ESCAP's work on green growth, and has been consistently promoted since 2005.</li> <li>Several policy forums have been held to promote green, eco-efficient growth, with the First Regional Policy Dialogue held in November 2005 in Seoul, Republic of Korea focusing on application on Green Tax and Budget Reform. Several other forums on other themes, including the greening of business, have been held.</li> <li>National green growth capacity building workshops have introduced eco-efficiency concepts and indicators to policymakers and planners in Bhutan, Kazakhstan and Viet Nam. Other countries have requested similar support.</li> <li>Publications - eco-efficiency has been addressed by ESCAP publications, with one major publication covering North-East Asia.</li> <li>Intergovernmental cooperation — A North-East Asia Eco-efficiency partnership has been established by the North East Asia Programme on Environmental Cooperation, with partnership initiatives currently being defined.</li></ul>

	which targets on the managers at local and national government levels, highlighting the advantages in seeking synergy in simultaneously addressing a local environmental challenge (solid waste management) and global climate change mitigation.
>	<ul> <li><u>Development and testing of eco-efficiency indicators</u></li> <li>Eco-efficiency indicators are being promoted and developed as a means of tracking changes in the eco-efficiency of economic growth. A multi-year project has engaged regional experts in discussing and developing eco-efficiency indicators for testing at the national level. ESCAP is currently supporting agencies in Viet Nam and Cambodia in developing their own eco-efficiency indicators. The preliminary results of these efforts will be discussed at the national level with experts, and then with policymakers, and will be the basis for an ESCAP publication, as well as case studies for the 2010 regional report to the Ministerial Conference on Environment and Development. In Cambodia, this effort will support the Government of Cambodia's work on developing a Green Growth Road Map.</li> </ul>
~	<ul> <li>Promotion of sustainable consumption and production</li> <li>The Second Regional Policy Dialogue in May 2006 in Beijing, China focused on role of the public sector in providing sustainable consumption policies.</li> </ul>
	- As a concrete mechanism to further assist the governments in the region, a Regional Help Desk on Sustainable Consumption and Production has being established by ESCAP and UNEP, and is hosted by the China Certification Centre for Energy Conservation Products in Beijing.
	- ESCAP is partnering with UNIDO and UNEP to host a regional conference on the Greening of Industry in the third quarter of 2009, and to align this effort with the development and implementation of a regional strategy on sustainable consumption and production.
~	<ul> <li>Sustainable infrastructure development</li> <li>An interregional project with the UN Economic Commission for Latin America and the Caribbean will examine how eco-efficiency considerations and criteria can be applied to infrastructure development in the urban context.</li> </ul>
•	<ul> <li><u>Assessment of resource efficiency and identification of policy options to support a sustainability transition</u></li> <li>Resource efficiency will be a major theme of the 2010 regional report on sustainable development for the next Ministerial Conference on Environment and Development. This report will cover the entire Asia-Pacific region, and will be co-published with ADB and UNEP. The Commonwealth Scientific and Industrial Research Organisation (CSIRO) of Australia will lead research efforts for this report, in collaboration with the Korea Environment Institute, and IGES. Key funding being provided through UNEP.</li> </ul>
>	<ul> <li>Improving environmental performance and quality</li> <li>the Kitakyushu Initiative for a Clean Environment, which was adopted at the Fourth MCED in 2000 with the mandate to achieve measurable progress in improvement of the environmental quality in</li> </ul>

	urban areas in Asia and the Pacific in a given timeframe, i.e. 2000 - 2005. Progress was reported in areas of solid waste management, water pollution control and maintenance of drinking water quality and air pollution control in participating cities. Feedback from those cities indicated that they benefited from the Kitakyushu Initiatives, particularly in improvements in local environmental governance, bettering of awareness and understanding of the effective policy framework, as well as of a variety of options for policy, financial and technological instruments, and enhancement of public awareness and participation. On the basis of such assessment, MCED2005 supported the practical and focused activities and measures that have been undertaken for the implementation of the Kitakyushu Initiative for a Clean Environment and endorsed the Action Plan for Future Activities with a view to guiding its activities between 2005 and 2010, thus the Kitakyushu Initiative is in its current cycle.
UNIDO	<ul> <li><u>National Cleaner Production Centers (NCPCs) and Programme</u>: in cooperation with UNEP established 42 NCPCs worldwide; upscaling the NCPCs and strengthening network of cleaner production related centers and institutions;</li> <li><u>Green Industry Conference/Initiative</u>: in cooperation with ESCAP and UNEP and Government of the Philippines to organize the international conference of Green Industry in Asia to promote the resource-efficient and low-carbon development of Asian Countries</li> </ul>

Compiled by Ministry of the Environment of Japan and Institute for Global Environmental Strategies, Japan.

Information was provided by the respective international organizations and aid agencies through a survey conducted in March 2009.

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