

Summary of Discussions
Inaugural Meeting of Regional 3R
Forum in Asia

November 11-12, 2009

Tokyo, Japan

Session 2-1. Challenges and opportunities in the 3Rs and sound management of municipal, industrial, construction, and medical wastes

The session mainly summarizes and discusses challenges associated with the 3Rs and sound management of municipal, industrial, construction, and medical wastes.

•<**Needs for sound municipal waste management**> Mainstreaming the 3Rs in municipal waste management is a big challenge. Many technologies for sound treatment exist, but are not much utilized. Since volumes of municipal wastes are increasing in Asia, conventional approaches for waste management taken are not sustainable ones. Improvements in municipal waste management have large benefits: both in health and environment.

•<**3Rs in industrial wastes**> Currently, there are weak incentives for industry to improve efficiency because of low standards and cheap utilities. There is a challenges in tax enforcement. To improve industrial processes, it requires strong regulatory pressure. Both incentives and penalties based in regulation is needed.

•<**Construction and demolition waste/medical waste**> These waste stream are often ignored or undermined despite of the significance for needs in improvement. There are many benefits for improved management of these waste streams.

•<**Technologies for sound waste management**> For the successful application of the technologies and infrastructure for sound waste management, it is necessary to have a careful consideration of cost and benefits including co-benefits such as energy recovery/financial sustainability/ level of economic development.

Session 2-2 A) Challenges and opportunities in agro-waste and e-waste. B) Lessons from eco-town policies in Japan , C) lessons from China's circular economy policy

The session overviewed the challenges and opportunities associated with agro-waste and e-waste. Also, it discussed the lessons from eco-towns policy in Japan as well as China's circular economy policy.

•<Agro-waste> 3Rs approaches and biomass utilization of agricultural waste can contribute not only in waste management but also in GHGs reduction and climate change mitigation in Asia. There are many ways for utilizing agricultural waste such as source of energy, bio-plastics, compost, bio-fuel, and animal feed. The concept for shifting waste turn into wealth is a key to promote use of agricultural wastes.

•<E-waste> E-waste is rapidly increasing waste stream and there are increasing concerns from toxicity from chemicals such, as brominated flame retardants, and heavy metals in e-products. There are several on-going initiatives to manage e-waste such as EPR-based legislation, green design and purchasing, ban in landfill of e-waste private take-back schemes etc. There are needs for more research on lessons for Asia from on-going e-waste management experience.

<Eco-towns Policy> Eco-towns policy in Japan has succeeded in developing national recycling capacities as well as calling for private investment in green technologies and 3R-businesses. Key for the success is linkages with other 3R-related legislations/regulations/and policies. It can be a good cases for international cooperation.

<China's Circular Economy Policy> One of the most comprehensive application of the 3Rs principle in national policies in developing Asia is the recent development of circular economy policy in China. Legislations are linked with pilot projects in local level.

Session 2-2 Contd.

<Involvement of producers> For the efficient 3R promotion, the involvement of industrial sector/producers to the forum is expected and encouraged.

<Public awareness> Public awareness is a key for the successful 3R promotion/implementation. For example, Korea introduced volume based waste discharge. For the successful implementation of such economic instruments for municipal solid waste management, there needs public awareness for effective separation and collection at waste generation side.

<Enforcement is a key for creation of fair business opportunities for the 3Rs> Even with a comprehensive set of legislation and policies, lack of enforcement will not make incentive for business and market creation for the 3Rs. Thus, proper regulation or appropriate linkages between 3R policies/legislation and infrastructure development is needed for 3R business to be worked under fair market.

Session 3. Innovative approaches for promoting 3Rs, resource efficiency

- The session introduced challenges and needs for innovative approach for promoting the 3Rs, resource efficiency, and sound waste management.
- **<Challenges from resource inefficiency>** Challenges associated resource inefficiency have been intensified along increasing resource demands due to rapid industrialization and economic development in Asia.
- **<Active roles of national government>** To tackle these challenges, active roles of national governments as well as partnership among stakeholders are required for promoting resource efficiency, sound waste management and prevention of illegal waste trade.
- **<Comprehensive policy packages for sustainable resource management>**The realization of resource efficient/energy efficient society is becoming very important for Asia. This requires not only sound waste management but more upstream approaches. To curve the increasing resource demands, the serious consideration of comprehensive policy packages for sustainable resource management including right price signals is needed.
- **<Partnership with private sectors/NGOs>** Partnership with private sectors/NGOs is a key for upgrading 3R-related activities in Asia. A case from Bangladesh shows such partnership is an essential element in innovative approaches to generate multiple-benefits of the 3Rs including GHGs reduction and job creation.
- **<Easier process in financial mechanism>** For creating more incentives for applying multi-stakeholder/ partnership approach for the 3Rs ,it shall be noted that easier process in financial mechanism is needed.

Session 3. Innovative approaches for promoting 3Rs, resource efficiency (continued)

- **<Public-private partnership>** To upgrade recycling market, **public-private partnership**, including those with informal sector, shall be considered seriously. Public-private partnership will **help governments to develop and secure necessary human resources and organizational infrastructures for promoting the 3Rs**. To make the collaboration with informal sectors successful one, development of **professionalism** in private actors as well as **open/transparent attitudes** from governments are expected.
- **<basic health and labour rights>** However, **basic health and labour rights** for people engaging in informal 3R activities **should be protected**. Especially, the needs for **child protection** was emphasized.
- **<Technological/industrial infrastructure>** Technological/industrial **infrastructure** for formal recycling is needed for upgrading the 3R activities. Again, **networking/partnership approach is a key**. 3R technology/infrastructure shall be integrated better into urban system.
- **<Illegal waste trade and international issues>** 3R-related challenges include not **only domestic ones but also international ones** such as illegal waste trade. However, it is **often not a clear cut legal/illegal matters**. Trade in general is often driven by demands in importing countries. Thus, it is **necessary to promote regional/ international cooperation between exporting and importing countries** to solve such challenges of “gray zone”.

Session 4 National 3R Strategy Development

- **<National 3R Strategies of 6 countries>** The session shared experience and progress of National 3R Strategy Development from Viet Nam, Cambodia, Thailand, Bangladesh, Indonesia, and the Philippines and also good practices associated with National 3R Strategies.
- **<Challenges>** Identified challenges of solid waste management including lack of infrastructure, low public awareness, an increasing amount of toxic waste, and insufficient legislation schemes.
- **<Priority programs>** Introduced a number of planned priority programs in reflecting the suggested solutions such as the establishment of waste economy and the completion of adequate legislation and institutions.
- **<3R awareness>** Raised recommendations to increase 3R perception among decision makers, and called for technical assistance in 3R application.
- **<Roles of informal sectors>** Stressed the importance of strengthening informal sectors on waste business and capacity building on the 3R concepts.
- **<Priority sectors>** Recognised the need to define the roles of various actors and create enabling conditions for them for priority sectors including municipal, industrial, biomedical and agricultural waste.
- **<Key factors for success>** Confirmed the strong political will, proper policy guidelines and enforcement, and incentive provision are the key factors for successful implementation.

Session 5-1 Strengthening the networking and international cooperation for the 3Rs

- The session introduced 3R-related initiatives/concepts/strategies from UNESCAP, UNEP, UNIDO, SBC, and ADB.
- **<UNESCAP and Green Growth>** The concept of “green growth” for sustainable waste management was introduced with the case study of poverty reduction through composting activities.
- **<UNEP and the 3Rs>** UNEP has an extensive list of programs related to the 3Rs, especially related to knowledge creation and sharing/ capacity building. Several projects directly operated in Asia such as pilot projects of integrated solid waste management, activities in relation to e-waste management, and projects supporting activities related to the 3R Initiative such as 3RKH, Waste TWG, and National 3R Strategy Development, are high-lighted.
- **<UNIDO and Cleaner Production>** UNIDO’s National Cleaner Production Centre Programme aims for improved production efficiency, enhancement of environmental conservation, human development, and stimulating public-private partnerships. National Cleaner Production Centre Programme is to provide technical assistance, training, capacity building, information dissemination, and policy advices.
- **<SBC and Control of Transboundary Movement of Waste>** Overview of the Basel convention was introduced. There are several lessons : focus on waste minimization, source segregation and proper disposal, promote waste conversion to resource, improving standards, awareness raising and capacity building, and strengthen cooperation, synergies and partnerships as well as resource mobilization. Also, the needs to solve issues related to the Ban Amendment was expressed.

Session 5-1 Strengthening the networking and international cooperation for the 3Rs

- **<ADB , Sustainable Cities and the 3Rs>** Proper taxation to the city population can be a key to finance some of the 3R-related and waste management operations. Integrated approaches to enhance resource use efficiency in cities are necessary including energy efficiency , infrastructure efficiency such as retro-fitting, industrial ecology etc.
- **<OECD>** OECD has a long experience in contributing to policy analysis and tools development in the field of waste management, the 3Rs and resource efficiency. OECD has several commitments to follow-up activities on 3R Initiative, resource productivity, MFA etc. OECD has an extensive work on resource price signals for sustainable resource management.
- **<Role of IGOs>** Each international organization has different roles and functions.
- **<Support in capacity countries for establishing domestic recycling systems/ awareness raising>** Need a capacity building and awareness raising both at governmental level and community level thus needs for support in domestic recycling systems from international organizations as well as from this forum.
- **<Secondhand goods>** Needs some supports on distinguishing of secondhand goods and waste/ and quality assurance of the exported secondhand goods.
- **<Transboundary movement/ Illegal trade>** More activities from developed countries as a source of export such as advanced tracking are expected. However, illegal trafficking is not only issue of exporting countries but also of importing countries. Prevention of illegal trade can help sound development of formal sectors. Good enforcement , information exchange and technological cooperation in both entry and exit point is needed. Needs a separate WG/workshop/or meeting to discuss this issue under the forum

Session 5-2 Strengthening the networking and international cooperation for the 3Rs

- The session introduced 3R-related initiatives/activities from GTZ, JICA, Japan Business Federation, APFED, IGES, JESC, and the Asia 3R Citizen's Collaborative Initiative.
- **<Capacity building by GTZ>** Activities on capacity building and assisting implementation of the 3Rs and efficient waste-resource management in Asia was presented.
- **<Good practice in Hanoi, Viet Nam by JICA>** A good practice and lessons learnt from a 3Rs project in Hanoi, Viet Nam was presented by JICA. Successful factors such as participatory approach, empowerment of 3Rs Stars (partners, supporters and volunteers), school education and training workshop were highlighted. Key factors to enhance expansion of the 3Rs implementation, such as cost-benefit analysis, linking with climate change mitigation, and collaboration between the government and other stakeholders were suggested.
- **<Creating Recycling Society by the Japan Business Federation>** The Japan Business Federation presented its intention to create the recycling society by promoting 3Rs concept through setting voluntary targets by each industrial sector. A successful story from cement industry in associating with utilization of waste from various sectors was highlighted.

Session 5-2 Strengthening the networking and international cooperation for the 3Rs

- **<3R Projects by APFED>** Successful 3Rs-related projects and activities under the APFED framework was introduced. The presentation highlighted several showcase projects including efficient biomass use project in China, enhancing eco-efficiency in primary industry project in Thailand, and landfill gas collection project with CDM application in Indonesia.
- **<Resource Circulation Policy Research by IGES>** IGES presented an ongoing international collaborative research framework to support the Regional 3Rs Forum which has particular focuses on multiple benefits of the 3Rs policies, improved governance for 3Rs implementation, and provision of policy advices for realizing sustainable resource circulation in Asia.
- **<3Rs Conference for Asian Local Governments by JESC>** JESC introduced the outcome of the 1st and 2nd 3R Conference for Asian Local Governments and the Saitama and Fukuoka Declarations adopted by the representatives of participating cities, which focused on application of 3R principles and reduction of disposable plastic bags in each city.