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MEETING SUMMARY

Inaugural Meeting on the Regional 3R Forum in Asia

Tokyo, Japan, 11-12 November 2009

Background Paper
CSD18/2010/BP7

I. Introduction

1. The Inaugural Meeting on the Regional 3R Forum in Asia was held in Tokyo, Japan on 11-12 November 2009 and organized by the Ministry of the Environment of Japan (MOEJ) and United Nations Centre for Regional Development (UNCRD), with support from the Institute for Global Environmental Strategies (IGES), and participation of representatives of Asian countries (Bangladesh, Brunei Darussalam, Cambodia, People's Republic of China, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Mongolia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam), international organizations and aid agencies such as the Asian Development Bank (ADB), Asian Institute of Technology (AIT), Asia-Pacific Forum for Environment and Development (APFED), Asian Productivity Organization (APO), Basel Convention Regional Coordinating Centre for Asia and the Pacific (BCRC China), Global Environment Facility (GEF), German Agency for Technical Cooperation (GTZ), Institute for Global Environmental Strategies (IGES), International Labour Organization (ILO), Organization for Economic Co-operation and Development (OECD), Japan International Cooperation Agency (JICA), Secretariat of the Basel Convention (SBC), United Nations Centre for Regional Development (UNCRD), United Nations Department of Economic and Social Affairs (UN DESA), United Nations Environment Programme (UNEP), United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP), and United Nations Industrial Development Organization (UNIDO), and experts in the area of 3R/waste management from around the world.

2. The main objective of the **Regional 3R Forum in Asia** is to facilitate high-level policy dialogues on 3R issues, challenges, and opportunities as well as to provide a strategic and knowledge platform for sharing experiences and disseminating among Asian countries best practices, tools, technologies, and policy instruments on various aspects of the 3Rs.

3. Delivering the opening remarks at the Inaugural Meeting, Mr. Sakihito Ozawa, Minister of the Environment of Japan, emphasized the elimination of waste – *mottainai* – through the 3R approach. Introducing Prime Minister Hatoyama's Initiative which seeks to reduce CO_2 emissions by 25% below 1990 levels by 2020, Mr. Ozawa expressed his hope that the Regional 3R Forum would produce important results to help achieve low-carbon and sound material cycle society in the region. From the perspective of addressing global warming, Japan is also promoting a number of policies for 3Rs and effective use of resources. As part of the Hatoyama Initiative, which aims to support global warming countermeasures, Japan would further promote the co-benefit approach in the developing

countries in Asia and thus achieve both 3Rs of waste and climate change mitigation.

4. Expressing concerns over the rapid urbanization in Asia that has resulted in inadequate urban services such as water supply, sanitation, waste water treatment, sewerage system, drainage, and solid waste management, Mr. Kazunobu Onogawa, Director of UNCRD, noted the region's significant increase in waste generation in recent years as well as the diversification of type of wastes with the growing presence of hazardous and e-wastes in the waste stream. Underscoring the importance of the need to build a climate-resilient society and economy given the fact that the hardest hit from climate change would be the poorer sections of society, he urged the developing countries in Asia to identify an alternative path of more resource-efficient economic development that would prevent economic decline and environmental degradation.

5. Recognizing the important linkage between the Millennium Development Goals (MDGs) and 3Rs, Mr. Muhammad Aslam Chaudhry, Chief of the Global Policy Branch, Division for Sustainable Development (DSD), UN DESA, mentioned that the concept of 3Rs was beyond just better waste management and called for the building of an economy based on the life-cycle approach, covering both sustainable production and consumption. The success of the 3Rs approach would largely depend on the right mix of policies and programmes implemented at the local level. At the same time, partnerships with business, trade, and industry could advance the implementation of 3R concept by: (a) facilitating economic development and creating markets around 3R policies; (b) providing resources (technology, finance, and market); (c) developing and disseminating leading-edge technologies and products; and (d) supporting corporate 'green' trends. Expressing hope that the Forum and follow-up actions would pave the way for scaling up the implementation of the 3R approach towards sustainable development, he urged that the outcome of the Forum should provide meaningful inputs to the discussions that would take place in the current cycle of the Commission on Sustainable Development (CSD) in May 2010.

6. As the overall Chair of the Inaugural Forum, Mr. Nobumori Otani, Parliamentary Secretary of the Environment of Japan, delivered a keynote address explaining Japan's policies for establishing a sustainable society by integrating approaches towards

low-carbon, natural symbiosis and a sound material cycle society as well as promotion of the 3Rs in Asia. He urged the Asian countries to decouple economic development and environmental impact and shift towards a sound material cycle society by the integration of environment, economy, and society through the promotion of 3Rs. The ultimate goal of the Forum is to achieve low-carbon and sound material cycle societies in Asia. This will be realized through facilitating bilateral and multilateral cooperation aiming to increase resource and energy efficiency through 3Rs, promote environmentally sound management of wastes, and for capacity building and institutional development in the countries.

7. The chairs/co-chairs of the different sessions were appointed by the Chair of the Inaugural Meeting as follows: Mr. Kazunobu Onogawa, Director of UNCRD for Session 1; H.E. Dr. Mohammed Hasan Mahmud, Honourable State Minister, Ministry of Environment and Forest, Bangladesh and Dr. Takehiro Nakamura, Director, UNEP/IETC, Japan for Session 2-1; Dr. Saksit Tridech, Permanent Secretary, Ministry of Natural Resources and Environment, Thailand and Mr. Joseph Kim Sung Hui, Director General, Environmental Protection Division, National Environment Agency, Singapore for Session 2-2; H.E. Dato' Seri Kong Cho Ha, Honourable Minister, Ministry of Housing and Local Government, Malaysia for Session 3; Dr. Ryutaro Yatsu, Director General, Waste Management and Recycling Department, Ministry of the Environment of Japan for Session 4; Dr. Supat Wangwongwatana, Director General, Pollution Control Department, Ministry of Natural Resources and Environment, Thailand for Session 5-1; and Mr. Melchor Purugganan Rosales, Undersecretary, Department of the Interior and Local Government, Philippines, for Session 5-2.

II. Challenges and Opportunities in the 3Rs/Waste Management in Asia

8. Fundamental Issues and Challenges in Mainstreaming 3Rs: While production and consumption in Asia has outpaced the renewal capacity of natural resources and the capacity of local governments and municipality authorities to handle waste, open dumping is widespread in the region, losing significant opportunities for potential utilization of 3Rs to harness resources, energy, and thereby economic benefits, from waste. The root cause is that waste is traditionally thought of having no value. Waste is widely assumed to be unavoidable, which has led to economic and management practices that tend to promote generation of more waste. While over-reliance on conventional-type waste management such as landfills and incineration is not a sustainable option, waste

management has mostly relied on regulatory measures that set up management techniques to control wastes at the end-of-pipe, as opposed to attaching first and foremost importance to waste prevention through source reduction measures. Inadequate consideration on the resource-saving measures and their economic return in the overall policy, planning, and management practices, has led the local governments to spend a significant amount of money on waste collection and disposal. Asian countries need to be clear in their strategy as to whether they can afford to continue business-as-usual with policies promoting "more waste, more recycling" or with policies and management activities that effectively integrate resource efficiency and waste prevention as the top priority within the overall planning and development.

9. Environmentally-Sound Municipal Waste Management: Increasing generation of municipal waste in Asia continues to be a big challenge for environmentally-sound waste management and the 3Rs. In 2050, Asia is expected to contribute 58% of the total waste generation in the world. Although the ratio of organic contents in municipal waste is still high in Asia, the types of wastes have been rapidly changing parallel to urbanization and changes in life style. There are many technologies for sound waste management not widely utilized in developing Asia. Continuation of conventional approaches for waste management such as open dumping will cause serious environmental, financial, and social challenges for local governments and communities. The countries therefore need to develop a sound and effective national solid waste management (including 3Rs) strategy. An effective 3R strategy can contribute to a paradigm shift in waste management vis-à-vis urban environmental management.

10. For the application of various technologies such as incineration for environmentally-sound waste management, the cost and benefits should be evaluated carefully with consideration to various national conditions as well as raising public awareness. At the same time, development of baseline information is very useful for policymakers to decide on appropriate 3R technologies. For example, whether to go for incineration or not very much depends on the waste composition (organics, recyclables, etc.). Sometimes, the problem is not so technical, but the challenge of changing people's behavior (related to the need to address waste separation at source), should be addressed through community empowerment and education and law enforcement.

11. E-waste: E-waste is a rapidly increasing waste stream in Asia. There are increasing concerns of toxicity from chemicals such as brominated flame retardants and heavy metals in electronic products. Although e-waste is a valuable source of precious metals,

there are several concerns such as inappropriate recycling as well as non-valuable residues after recovery of valuables. Some participating countries noted that the burden of waste management is borne by importing countries of electronic products. There are several ongoing initiatives in Asian countries to manage e-waste such as EPR-based legislation, green design and purchasing, ban of e-waste landfills, and private take-back schemes. There is also a need for more research on critical lessons for Asian countries from the ongoing e-waste management practices and experiences. The intellectual and research community and experts are therefore encouraged to continue to take the lead in assessing and evaluating waste management and risks being faced in making scientific and technical inputs to policy-making.

12. Construction and Demolition Waste/Medical Waste: Construction and demolition waste and medical waste are often ignored or underestimated despite the significant need for improvement. There are many benefits for improved management of these waste streams.

13. Gaps between Legislation and Actual Implementation/Enforcement of Policies: Most Asian countries have legislation and policies in environmental protection, especially in waste management and the 3Rs. However, more attention should be given to actual implementation and enforcement of policies and standards. Even with a comprehensive set of legislation and policies, lack of enforcement and incentives will not encourage business and market creation for the 3Rs. Low environmental standards and lack of enforcement of environmental policies do not provide any incentives for the stakeholders to improve resource efficiency and sound waste management. To improve the efficiency and environmental performance of Asian economies, a strong regulatory mechanism as well as good understanding (of the public sector, private sector, and among consumers) of the financial incentives need to be considered. 3R policies/legislation should be in harmony with the required infrastructure development for creation of 3R business opportunities under a fair market environment.

14. Public Awareness: Public awareness is a key for successful 3R promotion/implementation. In this respect, public awareness of health and environmental benefits associated with improved waste management and resource recovery from source separation should be raised. For the successful implementation of economic instruments, such as volume-based waste charges for municipal solid waste management, there needs to be public awareness for effective separation and collection at source of waste generation. Through enhanced public awareness, the region needs to take the necessary efforts to achieve sustainable

life styles with minimum ecological footprints.

15. Basic Health and Labour Rights in the Informal Sector: The informal sector makes a significant contribution to 3R promotion, national economy, and employment generation. However, basic health and labour rights of people engaged in informal 3R activities should be protected. In this regard, harmonization of work conditions, and health and labour standards in Asia needs to be addressed. The region also needs to address how serious the risk of waste picking is with regard to the following aspects: hospital waste (HIV), jagged metal (tetanus), smoke (PCBs), lead (neural damage), which lead to stress and skin, gastric, and respiratory problems. Special attention should be given to child protection and prevention of child labour, with due attention given to the MDGs, in particular achieving universal primary education, and the Declaration on Fundamental Principles and Rights at Work (ILO, 1998). Scavenging at the dump site should be prohibited and preventive measures need to be taken. In-depth study and research on the role played by the informal sector and its weaknesses would be useful. At the same time, the most fundamental issue that the informal waste sector operates without any formal recognition by any government accreditation, licensing or regulating agency needs to be addressed.

16. Illegal Trade and Transboundary Movement of Wastes: Illegal trade of wastes is a rising issue in the region. Some developing countries expressed their expectation of more active involvement and dialogues for the prevention of illegal trade of waste from developed countries as sources of export. Countries with advanced technologies are encouraged to do more to prevent the illegal export of wastes. Prevention of illegal trade can help promote the sound development of the formal sector. Good enforcement, information exchange, and technological cooperation at both the entry and exit points are needed. Importing countries need necessary capacity-building support in distinguishing between secondhand goods and waste (e.g., defunct electronics), and on prior quality assurance of the exported secondhand goods. The meeting recognized that there were a number of grey areas (with regard to smuggling or fake items) in terms of trade that needs to be addressed through active dialogue between the exporting and importing countries.

III. Possible Approaches for the Effective Promotion of 3Rs

17. Active Roles of National and Local Governments and Partnership Approach: To tackle the challenges and maximize opportunities in the 3Rs/waste management, the active role of national and local governments as well as partnerships among them and the relevant

stakeholders are required for promoting resource efficiency, sound waste management, and prevention of the illegal waste trade. Interagency coordination at the local and national levels (such as cooperation and collaboration among the Ministry of Environment, Ministry of Industry, Ministry of Urban Development, Ministry of Local Government, Ministry of Agriculture, Ministry of Trade and Commerce, and municipalities, etc.) is also very critical for the successful implementation of 3Rs programmes and activities.

18. Sustainable Resource Management and Needs for Comprehensive Policy Packages, including Economic Instruments: Challenges associated with resource inefficiency have been intensified along with increasing resource demands due to rapid industrialization and economic development in Asia. The realization of a resource- and energy-efficient economy and society is becoming very important for Asia. For example, one of the most comprehensive applications of the 3R principle in national policies in developing Asia is the recent development of the Circular Economy policy in China. The Circular Economy approach to resource-use efficiency integrates cleaner production and industrial ecology in a broader system encompassing industrial firms, networks or chains of firms, eco-industrial parks, and regional infrastructure to support resource optimization. To address the increasing resource demands, serious consideration of comprehensive policy packages for sustainable resource management, including right price signals, is indispensable for the region. There is an urgent need to devise a policy framework to internalize the environmental externalities through various economic instruments such as recycle fees, green taxes, and polluter pays principles (PPP), etc. as well as a regulatory framework for stability/sustainability of the market for the region. 3Rs is not just for waste management, but for the whole life cycle, starting from raw material extraction, processing, manufacturing, distribution, consumption, and final disposal. In this regard, there is a need to shift from the end-of-pipe approach to a life-cycle approach and add the cost of 3Rs from the very beginning and at every stage of the whole life-cycle, which would not only ensure gradual shifting of the cost and increasing the burden of managing waste from the municipalities to manufacturers, distributors, and consumers, but would also encourage the producers/manufacturers to go for more environmentally friendly or eco-products.

19. Partnership Approach for Scaling up 3Rs-related Activities: Partnership with the private sector/NGOs is the key for scaling up 3R-related activities in Asia. Also, 3Rs may be beyond the expertise and capacities of local government authorities or municipalities, and public-private partnership (PPP) could be a win-win approach. Public-private partnership

could help governments to develop and secure the necessary human resources and organizational infrastructures for 3Rs implementation. The case from Bangladesh on community-based composting shows that such partnership is an essential element in innovative approaches to generate multiple benefits of the 3Rs, including GHG reduction and job creation. To upgrade the recycling market, public-private partnership (PPP), including those with the informal sector, is considered effective. To make the collaboration with the informal sector a successful one, support for professionalization of the informal sector as well as open/transparent attitudes from the government towards them are necessary.

20. Technological/Industrial Infrastructure for the 3Rs: Technological/industrial infrastructure for formal recycling is needed for upgrading the 3Rs activities. The networking/partnership approach is the key in this regard. 3Rs technology/infrastructure should be integrated better into urban systems. In this regard, Japan's experience on eco-towns promotion serves as a good example which has succeeded in developing national recycling capacities as well as encouraging private sector investment in green technologies and 3R businesses. The key for this success is linked to the comprehensive 3R-related legislations/regulations and policies in Japan, which can provide a good case or model for international cooperation.

21. Climate Co-benefits and the 3Rs: 3Rs can provide several co-benefits, including GHG reduction through energy efficiency and resource efficiency, adaptation, employment and job creation, attracting foreign direct investment (FDI) through emission reduction credits (CER), complying with the MDGs, and pollution reduction and other environmental benefits. Bangladesh's experience on community-based composting vis-à-vis carbon credits (CER) serves as one of the good examples in the region. 3Rs approaches and biomass utilization of agricultural waste can also contribute to waste management and GHGs reduction. There are many possible ways for utilizing agricultural waste such as source of energy, bio-plastics, compost, bio-fuel, and animal feed. Asian countries should utilize these potential opportunities of turning various wastes into wealth and resources to achieve a number of co-benefits of 3Rs.

22. Proliferation of National 3R Strategies: The Inaugural Meeting of the Forum shared the experiences of, and progress in, national 3R strategy development in Viet Nam, Cambodia, Thailand, Bangladesh, Indonesia, and the Philippines. The national 3R strategies are expected to complement the national action plans and sustainable development agendas. Keys for the successful development and implementation of a national 3R strategy are

the strong political will of the governments. The need to draw the attention of international organizations and donor communities was raised due to the need for international support and collaboration for the implementation of the national 3R strategies.

IV. Strengthening the Networking/International Cooperation for the 3Rs

23. International Organizations and Donor Communities: The Regional 3R Forum in Asia aims to facilitate improved dialogue and cooperation with international organizations and donor communities for materializing and implementing 3R projects, including 3R and waste management-related projects and programmes at the local and national levels. It is significant to seek synergy between the activities of international organizations and donor communities in the area of the 3Rs and to help implement national 3R priorities in collaboration with different stakeholders. Various international organizations are engaged in 3R-related projects and activities. Since each international organization has different roles and functions as shown below, the key for successful international cooperation in capacity development for the 3Rs is how to establish synergies among these initiatives through strengthened networking and interagency coordination and collaboration.

24. UN ESCAP has been implementing the idea of green growth into waste management to reduce poverty and environmental degradation. UN ESCAP's green growth approach is based on environmentally sustainable economic progress to foster low-carbon, inclusive development, greening businesses, and sustainable infrastructure development. UNEP has an extensive list of programmes related to the 3Rs in Asia, especially in knowledge creation and sharing/capacity building, including 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 3R Knowledge Hub (3rKH), Waste Thematic Working Group (TWG), and national 3R strategy development. UNIDO has been promoting cleaner production in the industrial sector in developing Asia through technical assistance from the National Cleaner Production Centre Programme and other activities. The Secretariat of the Basel Convention (SBC) showed several lessons for improving sound waste management and control of transboundary movement of waste, including more emphasis on waste minimization, source segregation and proper disposal, promotion of waste conversion to resources, improving standards, awareness raising and capacity building, and strengthening cooperation, synergies, and partnerships. OECD has the long experience of contributing to policy analysis and tools development in the

field of sustainable materials management, waste management, the 3Rs, resource efficiency, and international flow of materials and resource productivity.

25. Aid Agencies: Bilateral and multilateral aid agencies could play an important role in the implementation of 3R programmes and activities at both the local and national levels. The experience of ADB showed that investment to improve the efficiency of urban systems and infrastructures were key to achieving sustainable development in Asia. Another key is public awareness-raising on the importance of 3R activities to improve resource efficiency and to achieve sustainable production and consumption at all levels. In this context, JICA has promoted 3R activities in Hanoi at the local level focusing on source separation, composting, environmental education, and preparation of a national action plan. GTZ is promoting activities on capacity building and assistance in the implementation of the 3Rs and efficient waste-resource management in Asia.

26. Strategic Networking and International Collaborative Research Activities: A strategic alliance with the industrial sector, lessons from local best-practices, knowledge created by research communities as well as dialogues with NGOs can contribute to the materialization of long- and short-term priorities of Asian countries in 3R areas. For example, the Asia-Pacific Forum on Environment and Development (APFED) has been showcasing best practices on 3Rs through its Showcase Projects. With funding from the Ministry of the Environment of Japan, IGES launched an international collaborative research framework on 9 November 2009 to support and provide technical input to the Regional 3R Forum in terms of addressing multiple benefits of the 3R policies, improved governance for 3R implementation, and providing policy advice for realizing sustainable resource circulation in Asia. With the objective of providing input to the Regional 3R Forum, the Asia 3R Citizen's Forum, a network of NGOs, organized back-to-back a meeting on 10 November 2009 and the NGO representatives expressed the needs for more involvement of producers/industrial sector in the Regional 3R Forum.

V. Agreement on the Tokyo 3R Statement – Towards the Establishment of the Regional 3R (Reduce, Reuse and Recycle) Forum in Asia

27. On 12 November 2009, the participants of the Inaugural Regional 3R Forum in Asia, agreed on the "Tokyo 3R Statement"[1] (see Annex 1) to officially launch the Regional 3R Forum in Asia.

[1] The Tokyo 3R Statement is goodwill and non-legally binding Statement.

28. The participants requested the Government of Japan and UNCRD to brief the 18th Session of the Commission on Sustainable Development (CSD) about the outcomes of the Inaugural Meeting of the Regional 3R Forum in Asia, including benefits of implementing 3R approach in achieving sustainable development.

29. The participants welcomed the agreement of H.E. Dato Seri Kong Cho Ha, Minister of Housing and Local Government of Malaysia to host the next Regional 3R Forum in Kuala Lumpur, Malaysia in 2010.

ANNEX 1

THE TOKYO 3R STATEMENT

Towards the Establishment of the *Regional 3R (Reduce, Reuse and Recycle) Forum in Asia*

The participants, who are representatives of Asian countries (Bangladesh, Brunei Darussalam, Cambodia, People's Republic of China, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Mongolia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam), international organizations and aid agencies (Asian Development Bank (ADB), Asian Institute of Technology (AIT), Asia-Pacific Forum for Environment and Development (APFED), Asian Productivity Organization (APO), Basel Convention Regional Coordinating Centre for Asia and the Pacific (BCRC China), Global Environment Facility (GEF), German Agency for Technical Cooperation (GTZ), Institute for Global Environmental Strategies (IGES), International Labour Organization (ILO), Organisation for Economic Co-operation and Development (OECD), Japan International Cooperation Agency (JICA), Secretariat of the Basel Convention (SBC), United Nations Centre for Regional Development (UNCRD), United Nations Department of Economic and Social Affairs (UN DESA), United Nations Environment Programme (UNEP), United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP), and United Nations Industrial Development Organization (UNIDO)), and experts in the area of 3R/waste management, having met in Tokyo, Japan on 11-12 November 2009, for the Inaugural Meeting of the Regional 3R Forum in Asia, to agree on a statement on the establishment of the Forum, for the promotion of the 3Rs in the Asia region,

Reaffirming and building upon the international agendas and processes such as the Agenda 21, the Johannesburg Declaration on Sustainable Development, and the Johannesburg Plan of Implementation (JPOI), in which the need for reorienting production and consumption patterns at all levels towards sustainability have been highlighted, with emphasis on waste management and giving the highest priority to waste prevention and minimization by encouraging the production of reusable consumer goods and biodegradable products and developing the infrastructure required to reduce, reuse, recycle, and dispose in an environmentally sound manner, in line with the goals and objectives of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, in particular capacity building on prevention of illegal transboundary movement of hazardous wastes,

Reconfirming the important linkages between the beneficial aspects of the 3Rs and the Millennium Development Goals (MDGs) and the significant contributions that could be made in achieving the MDGs by promoting the 3Rs and sound waste management, while being mindful of, and striving to eliminate, the negative consequences of improper waste management and recycling practices,

Recognizing the 3R Initiative launched at the G8 Sea Island Summit in June 2004, and the subsequent processes including the Ministerial Conference on the 3R Initiative held in April 2005, the senior officials meetings held in March 2006 and October 2007, the 1st and 2nd Asia 3R Conferences held in November 2006 and March 2008, and the Kobe 3R Action Plan agreed at the G8 Environment Ministers Meeting in Kobe, Japan in May 2008,

Acknowledging themes of sustainable consumption and production and waste management, among others, that will be addressed at the 18th and 19th sessions of the UN Commission on Sustainable Development (CSD) in 2010-2011, and ***noting*** that the 3Rs can make significant contribution to shifting Asia towards patterns of sustainable consumption and production by improving resource productivity and efficiency as well as by decoupling economic growth from resource consumption and environmental degradation,

Reaffirming and building upon the Decision GC 25/8 of UNEP's Governing Council, which in paragraph 7, specifically recognizes the need for more intensive awareness-raising designed to change the attitude of waste generators, particularly industries, consumers, and the informal sector with regard to the "3Rs" concept, environmentally sound waste management and, where appropriate, the need for final disposal of wastes in the countries in which they are generated,

Understanding both the main benefits of the 3Rs and the co-benefits in the forms of improvement of environmental management and competitiveness in the industrial sector, achieving resource and energy efficiency, and climate change mitigation,

Recognizing the importance of comprehensive and integrated national 3R strategies and also noting that the development of such strategies can be a positive step towards mainstreaming the 3Rs in overall policy, planning, and development at the local, sub-national, and national levels,

Underscoring the importance of cooperation and partnership with international organizations, and bilateral and multilateral donor communities towards training and capacity development,

research networking, development and implementation of 3R-related projects, including CDM, and transfer of environmentally sound technologies on various aspects of the 3Rs,

Recognizing that improved awareness in civil society on the social, economic, and environmental benefits of the 3Rs is critical to realizing its effective promotion and implementation towards establishing a sound material-cycle society,

hereby announce the following as their common intention:

1. Unanimously endorse and welcome the inauguration of the *Regional 3R Forum in Asia*, with the overriding objectives to:
    (a) Facilitate high-level policy dialogues on 3R issues, challenges, and opportunities;
    (b) Facilitate improved dialogue and cooperation with international organizations and donor communities for materializing and implementing 3R projects, including 3R and waste management-related projects and programmes at the local and national levels identified through national 3R strategies;
    (c) Provide a strategic and knowledge platform for sharing experiences and disseminating among Asian countries best practices, tools, technologies, and policy instruments on various aspects of the 3Rs;
    (d) Provide a platform to develop multilayered networks of stakeholders such as national and local governments, academia, scientific and research community, the private sector, media community, NGOs, and the informal sector;
    (e) Generate regional consensus and understanding on the beneficial aspects of the 3Rs in the context of achieving the MDGs, resource and energy efficiency, resource-efficient economy, and climate change mitigation;
    (f) Provide a platform for the proliferation of national 3R strategies; and
    (g) Promote awareness among the general public, including schoolchildren, on the beneficial aspects of the 3Rs.

2. Agree on the following long- and short-term priorities of the Regional 3R Forum in Asia in consideration of the current situation in Asia (socioeconomic conditions and culture, etc.).
    (a) ***Mainstreaming the 3Rs*** in the national development agenda, including environmental and economic policies and programmes;
    (b) ***Mobilizing financial resources in cooperation with bilateral and multilateral aid agencies*** for the ***implementation of 3R measures and activities*** at both the

national and local levels, involving key stakeholders including the ***private sector***, in particular, exploring how to promote 3Rs through pilot projects towards achieving more sustainable production and consumption patterns, resource conservation and environmentally friendly society**,**

(c) Developing ***human resources*** to overcome waste management issues, including technical barriers and technological gaps, to achieve ***waste prevention***, ***minimization, and reduction*** at the source of waste;

(d) Promoting better understanding on the overall benefits of the 3Rs, including the ***co-benefits***, which will lead to better implementation of the 3Rs with the broader scope of ***achieving resource efficiency, energy efficiency, and climate change mitigation***;

(e) ***Developing and implementing effective policy mechanisms*** such as EPR, which will help provide the incentive to minimize waste and redesign products for easier recycling. ***Experience and knowledge accumulated*** in the countries implementing such mechanisms ***shall be transferred and shared among participating countries***;

(f) Building adequate ***capacity for collection and safe treatment of hazardous waste,*** including those from household waste and ***e-waste***;

(g) Developing, where appropriate, ***industrial capacity for sound recycling***, including the formation of ***eco-industrial zones*** and clusters, with support from source segregation activities, efficient collection systems, and upgrading of existing facilities;

(h) Developing the necessary organizational framework and support to deal with the ***informal sector,*** which plays an important role in the waste chain, but generally operates without proper health care and labour policies;

(i) Developing and ***transferring environmentally sound technologies***, including cost- effective and feasible technologies that meet the needs of the developing countries, for waste management and the 3Rs;

(j) ***Empowering cities*** to build themselves into becoming core clients for financing and investment towards implementation of the 3Rs as well as to enable them to ***cope with critical and emerging issues*** such as open dumping and burning, hazardous wastes, diversification of waste streams, and climate change; and

(k) ***Information sharing and research networking*** focusing on generation of data, technical capacity development, and policy analysis towards achieving ***sustainable resource management***.

3. Accept the following as an initial possible set of activities that will be implemented

under the umbrella framework of the Regional 3R Forum in Asia, in order to address the priorities agreed to above.

(a) *Hold high-level policy dialogue on a regular basis,* to promote participating countries' efforts to achieve the common objectives of the 3Rs by sharing and discussing a wide range of policies and activities on the 3Rs, with a focus 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 a central role;

(b) *Facilitate implementation, replication, and scaling up of 3R-related pilot and demonstration projects and other good practices* in close collaboration with donor agencies. Pilot interventions will be identified and will be supported in collaboration with the existing and newly mobilized financial mechanisms. The forum will provide a platform for consultations among governments and bilateral and multilateral development banks and agencies and enlist their support for the implementation of 3R projects;

(c) *Collaborate with the existing 3R information/research networks at both the national and international levels,* so that they will serve as strategic and knowledge platforms for sharing experiences and for disseminating among Asian countries best practices, tools, technologies, and policy instruments on various aspects of the 3Rs. Collaboration will be extended to a wide range of existing information/research networks related to the 3Rs such as, but not limited to, the 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 and similar forums in other parts of Asia, the Basel Convention Regional Coordinating Centres (BCRCs), Society of Solid Waste Management Experts in Asia and Pacific Islands (SWAPI), and Economic Research Institute for ASEAN and East Asia (ERIA) working group on the 3R Policy. Dissemination of scientific knowledge will be regionally promoted through international academic journals and conferences in particular;

(d) *Promote 3R business feasibility studies* involving both public and private sector financing and participation, keeping in mind the needs of developing countries, by facilitating mutual and bilateral consultation among countries;

(e) *Conduct international collaborative, advanced policy-relevant scientific research on sound material cycles in Asia* on a continuous basis, for better data gathering, which evaluates the economic and environmental impacts of the 3Rs and the effectiveness of 3R policies, and examines available policy options and their combination for strategic implementation of the 3Rs; and

(f) *Capacity building* through means such as international training programmes focusing on the 3Rs for human resource development, which targets government officials. Such programmes may be initiated as part of the international cooperation activities of relevant donor agencies such as JICA and others.

4. Welcome other countries and organizations to join the Regional 3R Forum in Asia for greater proliferation of the 3Rs as well as stronger networking in the region.

5. Welcome the establishment of the Subsidiary Expert Group (SEG) under the Regional 3R Forum in Asia. The SEG members will support the high-level policy dialogue by providing substantive technical input, and by sharing opinions, ideas, and information on best practices and effective policy instruments among the participating countries in the area of the 3Rs. The SEG members will provide policy and technical advice to international collaborative research undertaken, as mentioned in 3 (e) above. They will also provide relevant policy and technical advice and practical suggestions to the developing countries during the implementation of various 3R activities.

6. Request UNCRD, in cooperation with other relevant organizations and initiatives, to take the lead role in: (a) facilitating intergovernmental and interagency coordination for the implementation of the Forum; and (b) facilitating an interface or platform between the Governments and the expert group for active policy consultations and dialogues.

7. Welcome Japan's initiative to launch the international collaborative research activity, coordinated by IGES, in line with 3 (e) stated above.

8. Recognize the progress in various 3R-related projects and programmes being undertaken by international organizations and aid agencies participating in this Forum, and request bilateral and multilateral development banks and donor agencies to facilitate the use of their financial and technical assistance programmes, and to consider, as appropriate, the development of new funding mechanisms for 3R-related project implementation and/or investment.

9. Request UNCRD, in consultation with other relevant organizations, to explore and identify suitable modalities for facilitating multilayered networks of stakeholders such as governments, academia, scientific and research community, private sector, and NGOs, under the umbrella framework of the Regional 3R Forum in Asia (as mentioned in 1 (d)).