The Ministerial Conference on the 3R Initiative
April 28-30, 2005
Chair's Summary

Introduction

1. A ministerial conference was held with the participation of twenty countries (Brazil, Canada, China, France, Germany, Indonesia, Italy, Japan, Malaysia, Mexico, the Philippines, the Republic of Korea, Russia, Singapore, South Africa, Thailand, the United Kingdom, the United States, Vietnam and the European Commission) and four international organizations (UNEP, OECD, the Secretariat of the Basel Convention and the League of Arab States) from April 28 to 30, 2005 in Tokyo in order to officially launch the 3R Initiative, which was agreed at the G8 Sea Island Summit held in June 2004.

2. The Conference took up five issues: (i) national policies to implement the 3Rs, (ii) the reduction of barriers to the international flow of goods and materials, (iii) cooperation between developed and developing countries, (iv) encouragement of cooperation among various stakeholders and (v) the promotion of science and technology suitable for the 3Rs.

3. Participants reiterated their commitment to Agenda 21 and the importance of the fulfillment of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development.

Issue I: Promotion of the 3Rs

4. The view was shared that the promotion of the 3Rs, an action to share the spirit of *mottainai* all over the world, is a key to realize in the 21st century a society in which sustainable consumption and production patterns are established in both developed and developing countries.

5. Countries in the world were encouraged to promote various actions by formulating visions and strategies to promote the 3Rs as a part of a 10-year framework of programs to decouple environmental impacts from economic growth and accelerate the shift from unsustainable consumption and production patterns into sustainable ones with the participation of a wide range of stakeholders as well as by

establishing partnerships among them.

6. It was recognized that administrative bodies' systematic approach, a clear legal framework, establishment of partnership among stakeholders, expansion of a market for environmentally sound products, awareness raising, technological development, capacity building, and development of infrastructure for the promotion of the 3Rs are important.

7. It was agreed that regional and global efforts in information gathering on measures taken by countries and organizations are beneficial, recognizing that best practices of the 3Rs (e.g., the "3R Portfolio" formulated for this Conference) will help countries and organizations to promote the 3Rs.

Issue II: Reduction of barriers to the international flow of goods and materials

8. Participants identified two primary issues with regard to recycling and remanufacturing: resource efficiency and pollution prevention. Maximization of resource efficiency and minimization of pollution were noted as among the most important issues.

9. It was observed that the international flow of (i) goods and materials for recycling and remanufacturing and (ii) recycled and remanufactured products may contribute to efficient use of resources as well as prevention of environmental pollution, if proper mechanisms are in place. It may promote sustainable consumption and production, affecting not only the environment but also economic development and job creation.

10. It was noted that participants recognized barriers to the international flow of goods and materials for recycling and remanufacturing, and recycled and remanufactured products, such as higher tariff rates and non-tariff barriers for those products. It was noted that markets need to be opened for goods and materials so they do not become wastes and that this is an opportunity that can be fostered by the 3R Initiative.

11. Bearing in mind the fact that international trade of recycled and remanufactured products is increasing in various parts of the world, the reduction of such barriers can help secure conditions for a level playing field across borders for both new products and recycled and remanufactured products. Efforts to reduce international barriers against recycled and remanufactured products in bilateral and regional Free

Trade Agreements were also noted. Such efforts are expected to create trust among the countries concerned as well as facilitate best practices appropriate to various local environments and environmental conditions, based upon which more constructive discussions may arise.

12. It was also pointed out that development of the list of environmental goods and services under the WTO Doha Mandate would offer win-win opportunities in terms of both the environment and the economy.

13. Participants affirmed the importance of Parties' full compliance with their obligations under the Basel Convention and the Rotterdam Convention on PIC.

14. Participants noted various concerns regarding the cross-border transfer of wastes or near-end-of-life products to developing countries, such as in the form of donations.

15. Participants recognized a need for developing criteria and capacity, as well as sharing experiences amongst and between developed and developing countries to distinguish waste from non-waste.

16. It was noted that for many countries the first priority should be placed on minimization of wastes within the country in which the wastes are generated. Participants expressed the view that transboundary movement of wastes may take place only when safe and appropriate use and environmentally sound management are possible in the receiving country.

17. It was noted that the importing of recyclable goods or materials can cause environmental impacts when the receiving country lacks sufficient waste management capabilities. In this regard, support was voiced for the development of technical capacity as well as suitable recycling or disposal facilities in developing countries, promoting a regional approach and cooperation, as appropriate.

18. Participants pointed out a need for enhancing the capacity of developing countries to promote the 3Rs and sound waste management, including the formulation of stronger domestic regulations.

19. Participants emphasized the need to strengthen international cooperation for improved monitoring of transboundary movements of recyclables and wastes and their environmentally-sound management. Also important is the exchange of information and sharing best practices on a regional and global basis.

20. It was agreed that close collaboration is necessary among enforcement agencies,

such as port authorities, customs and government environmental authorities to deter any illegal trafficking of wastes. In this regard, participants welcomed the development of a network in Asia to prevent illegal trade of wastes.

Issue III: Cooperation between developed and developing countries

21. The participants highlighted the fact that countries are facing common global issues, namely, increasing volumes of waste and unsustainable waste management. Countries should, therefore, make efforts to improve resource efficiency and prevent environmental pollution from wastes.

22. International cooperation among developed and developing countries may start with (i) the sharing of experiences, including both success and failure stories, (ii) joint research, for instance regarding the global and/or regional cycle of wastes and used resources, and (iii) capacity building activities. Developed countries and international organizations should support the promotion of the 3Rs in developing countries, taking due account of the challenges that the developing countries face. In this connection, the accumulation and dissemination of best practices through various existing and new initiatives were welcomed. In relation to research, the proposal for a 3R research network in East Asia, as well as the OECD initiatives such as material flow accounting, were welcomed.

23. Regarding capacity building, issue-specific and country-driven approaches were especially recommended, taking into account that there is no unified approach that is applicable globally. Priority areas for capacity building may include (i) the establishment/improvement of legal frameworks, (ii) the development of national strategies, and (iii) the sharing of best practices undertaken in developing countries as well as developed countries. It was suggested that the transfer of technologies could be efficiently promoted through a regional center approach.

24. The Millennium Development Goals (MDGs) should provide a basis to promote 3R-related activities. In particular, 3R initiatives should have clear linkage with poverty eradication and development as well as health issues, such as by creating new job opportunities and facilitating more efficient use of resources, including energy.

25. Promotion of the 3Rs could also contribute to addressing climate change issues. The outputs from this 3R Conference should be fed into the preparations for the G8 Heads of State and Government Summit at Gleneagles in the UK in July 2005 as

well as into the UN Marrakech process on Sustainable Consumption and Production.

26. Major instruments to promote 3R initiatives include multilateral environmental agreements (MEAs) such as the Basel Convention and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) and other existing initiatives such as the Global Environmental Facility (GEF) and the Clean Development Mechanism (CDM).

27. The importance of regional cooperation should be emphasized. South-south cooperation is considered especially effective. Considering the important role of local governments, city-to-city cooperation should also be promoted. Regional cooperation should include the monitoring of transboundary movements of wastes among developing countries.

28. The importance of economic instruments and other incentives should be made more prominent in order to promote 3R activities in a more economically-efficient manner. Product eco-design is important in developing the 3Rs, and like-minded countries are called on to cooperate internationally to share information and build understanding on common priorities and opportunities for more innovation in product eco-design.

29. The meeting welcomed and endorsed a meeting at the senior official level as a follow-up to the 3R Initiative proposed by Japan.

Issue IV: Encouragement of cooperation among various stakeholders

30. The participants agreed that it is important to create partnerships utilizing the strengths of all stakeholders, namely central and local governments, the private sector, academia, NGOs, and consumers, to promote the 3Rs and waste management. There is a need in this regard for information sharing among stakeholders and for environmental education and awareness raising. It is necessary to promote partnership-based actions to advance environmentally-sound recycling and treatment at all levels.

31. The participants agreed that, (i) the roles of central governments include setting broad policy goals and targets for 3R initiatives, promotion of 3R-related policy measures, development of infrastructure and promotion of various initiatives, such as green procurement, (ii) the roles of local governments include ensuring

compliance with 3R-related laws and regulations, coordination among stakeholders, and promotion of efforts suitable for the local area, (iii) the roles of the private sector include execution of 3R activities on the basis of Extended Producer Responsibility, development of innovative technologies to promote the 3Rs, increased investment in 3R-related capacity, and providing relevant product information, (iv) the roles of individuals include participation in 3R activities, including the reviewing of their consumption patterns, and participation in the decision-making process of government, (v) the roles of NGOs include implementation of 3R activities, awareness raising and monitoring actions taken by the private and public sectors.

32. The participants emphasized the value of "industrial symbiosis" or "by-product synergy," in which the waste products of one industry become the resources of another. Various countries have been making such efforts using different terminology, for example, the "sound material-cycle society," "zero-waste society," and "circular economy." In this respect national waste exchange programs being conducted in some developing countries in Asia were noted.

33. The participants recognized the need for information sharing on the extent to which products are environmentally-friendly. With the help of governments, the private sector should provide this information for products and services for the benefit of the consumer, such as through eco-labeling schemes, declarations, information campaigns and conferences.

34. It was agreed upon that local initiatives to promote the 3Rs are of vital importance. Support from central as well as local governments is essential, which includes not only financial support but also public consultations where appropriate. Collaboration with private companies in making local initiatives more effective is also important.

35. The participants identified the need to share information about waste management systems and innovative technologies to be used for recycling and sound waste management by working through international partnerships between exporting and importing countries. It was noted that development of international criteria and standards may help promote the 3Rs. The government needs to act as a facilitator for the penetration of 3R-based goods and services into the market.

36. Participants highlighted the fact that international cooperation is also important for the private sector, noting that experiences and best practices should be shared as widely as possible, even across borders. In this respect, participants noted that a number of multinational companies already utilize a global network by which they

take back, remanufacture and/or reuse their products.

37. Likewise, participants emphasized the importance of international networking by civil society groups, which can lead to the sharing and adoption of best practices. The strength of such networking lies in the ability to monitor cross boundary movements of wastes, advocacy and policy recommendations.

Issue V: Promotion of science and technology suitable for the 3Rs

38. Participants agreed that the role played by science and technology in attaining sustainable production and consumption patterns through the promotion of the 3Rs is tremendous, and that the further development of technologies suitable for promotion of the 3Rs is an urgent issue. Science and technology suitable for the 3Rs not only contribute to environmental conservation but also create new added value to bring out latent demand in the society and promote efficiency in the industrial sector.

39. Participants agreed that research and technological innovations need to be promoted particularly for (i) cleaner technologies such as those for remanufacturing, waste minimization, recycling, recovery and treatment, and (ii) eco-designing technologies for resource efficiency and reducing product-related environmental impacts. Governments need to develop partnerships with producers. Eco-design provision needs to stipulate product design outcomes rather than technology specifications mandated by the government. Sharing eco-design information of products with consumers and recyclers can promote markets for those products and further enhance efficiency of recycling. There is also a need for exploring possibilities of the potential contribution of new technologies such as nano-technology and biotechnology for the promotion of the 3Rs.

40. Participants pointed out the fact that understanding the lifecycle of products is required for taking a systematic approach for improving the environment. Also required is joint international research on material flow analysis by relevant bodies such as the OECD. The LCA approach and material flow analysis can be used for benchmarking the performance review of industries thereby improving the product quality and encouraging and promoting the 3Rs in the process.

41. Establishment of regional 3R research networks, clean technology centers, technology exhibitions, and best practices database development were considered important for the promotion of cleaner technologies. Such efforts should be further

strengthened for market creation.

42. Participants agreed that the role of the government in direction-setting, notably in the field of R&D, to promote the 3Rs should be a priority. Financial incentives, such as subsidies and tax exemptions, are of vital importance for supporting R&D. Issues related to IPRs also need to be addressed.

43. Participants agreed that, for promoting and implementing the concept of the 3Rs globally, high priority needs to be given to the issue of technology transfer from developed to developing countries to improve the manufacturing process and also to promote recycling, reuse, treatment and disposal of wastes. Regarding this point, a need to reduce barriers to facilitate the international flow of 3R-related technologies was mentioned. There is also a need for building human capacity to promote the 3Rs. In this respect assistance from developed countries and international organizations is called for, as is south-south cooperation.

Annex

BRAZIL

The Federal Government is promoting cleaner production, in partnership with other levels of government, industry, and society as a whole. The National Solid Waste Policy Law, which should be enacted shortly, incorporates the principles of 3R. The government is stimulating separated garbage collection in municipalities. Successful private sector initiatives include aluminium can recycling, with a success rate above 95%. Local garbage pickers perform an essential and increasing role, and have formed organizations with aid from NGOs.

CANADA

Canada has developed a Competitiveness and Environmental Sustainability Framework to realize economic and environmental integration. The framework will address, among other items, 3Rs issues. To oversee this policy framework, the Prime Minister has established a cabinet subcommittee for environment and sustainable development. Work is on-going strengthening the links between 3Rs and climate change from the life cycle perspective. Most implementation of the 3Rs has been at the sub-national level in Canada. In Halifax, Nova Scotia, organic waste generated within the community is composted on a large scale. The province of Alberta introduced the first comprehensive take-back program for electronics, with other provinces following suit. Virtually every Canadian has access to recycling programs.

CHINA

The government is seeking to establish a circular economy, through a legislative framework and trials at local levels. The circular economy policy is incorporated in China's eleventh 5-year national development plan. The introduction of state-of-the-art technology contributes to the development of a circular economy. Eco-industrial parks and energy-saving buildings are being built, and certification for cleaner production has been introduced.

FRANCE

Local initiatives include selective collection for packaging waste, used tire mechanisms and new regulative frameworks on end-of-life vehicles and e-waste. A national plan for the prevention of the production of waste, and its stabilization by 2008, has been drawn up with two symbolic incentives for it: "no junk mail in letter box" stickers, and reducing carrier bags at supermarkets. Beyond the direct impacts these measures have, they also have awareness-raising effects among consumers.

GERMANY

German 3Rs policy has stabilized waste volumes over the last 15 years, and has increased recycling rates, aiming towards the development of a closed-substance circle economy. One example of this is the compulsory deposits on drinks packaging, which has promoted their reuse. Since 2005, landfilling is only permitted after pre-treatment. This reduces CO2 emissions. Germany aims to end landfilling by 2020.

INDONESIA

Indonesia promotes a "5Rs policy" – re-think, reduce, reuse, recycle and recover. This was introduced as part of the National Policy on Cleaner Production, which has been in force since 2003. A National Centre for Cleaner Production has also been established. "5R" initiatives include a Clean and Green Cities National Program, an Eco-Office Program, early age environmental education programs, eco-label promotion, and the Green Campus Program. 3Rs should protect countries from becoming hazardous waste dumping sites.

ITALY

The participation of the private sector in reducing and recycling waste is a key factor in achieving good environmental and economic performances. The private sector is involved in the management of the packaging consortium, with six different types of packaging materials collected and recycled. It is very successful in the consortia for used oils and lead batteries. A landfill tax is also promoting 3R waste policies, making economically convenient a reduction in biodegradable waste sent to landfills. Eco-prizes are awarded for environmentally friendly packaging and for using recycled raw materials. Over 30% of products used by state-owned firms and government agencies must be made from recycled materials.

JAPAN

The government aims to realize a zero-waste society in Japan based on the quantitative targets and further 3R actions, and to disseminate its experience to the international community. Japan also supports developing countries' capacity development, and collaboration with international organizations, the G8 and other countries, such as the Asian network against illegal traffic in hazardous waste, research network on 3R research in East Asia, joint work with the International Green Purchase Network, and database development of 3R good practices.

MALAYSIA

The long term strategy of solid waste management in Malaysia is to inculcate the habit of recycling among the population. Ultimately the program aims at achieving, in reducing operation costs of solid waste management, the minimization waste disposed in landfill, and reductions in the use of raw materials. Formulation of the Solid Waste

Management Bill will eventually enable the Ministry of Housing and Local Government to enforce recycling programs. Malaysia is fully committed to the basic principles of the Basel Convention and the Ban Agreement, and national legislation to control and monitor importation and exportation of hazardous waste have been implemented and enforced within the various enforcement agencies.

MEXICO

In 2004, the General Law for Integral Management of Waste was passed, promoting 3R policies. Voluntary programs are being carried out to promote clean industry policies in the tourism sector and the beer industry, among others. 30,000 firms in the private sector have also registered on a voluntary census on hazardous waste. Currently, 95% of glass and 75% of paper is being recycled. Methane gas emitted from landfills is also being used as a low-cost energy source.

PHILIPPINES

The Ecological Solid Waste Management Act, and the Toxic Substances and Hazardous and Nuclear Waste Control Act have institutionalized waste recycling and composting, and prescribed the management, treatment and disposal of toxic and hazardous waste. There are efforts to promote segregation at source through capacity building in municipalities and financing 3R education programs, and to move towards sanitary landfills. Existing dump sites are also being rehabilitated. The EcoWatch program (a public-private partnership) monitors compliance with environmental regulations. The Philippines attaches importance to the concepts of EPR and residual waste management.

REPUBLIC OF KOREA

A volume based waste fee system was introduced in 1995. Proper sorting and collection of waste is administered by collection services for recyclable products at no cost. This has resulted in a 23% reduction of per capita waste generation over the last 10 years. EPR is applied to 18 product categories, enforcing mandatory targets for product recovery and recycling. The government has enacted legislation promoting the recycling of construction waste and the purchasing eco-friendly products.

RUSSIA

90% of waste in Russia is produced in the extraction of minerals. Military waste, including waste containing rare metals, is also a serious consideration. The government is also trying to improve the efficiency of natural resource use and energy use, by setting standards. Private business involvement in waste management is encouraged. International cooperation is important, particularly for high-level reprocessing facilities, the methane market, and agricultural waste.

SINGAPORE

Singapore's small size discourages the use of landfills, although the 10% of waste not incinerated is landfilled. The National Recycling Program launched in 2001 provides door-to-door collection of recyclables, and public education to encourage recycling. Non-incinerable waste is also reused or recycled. The recycling rate has increased to 48%, with a goal of 60% by 2012. Through these measures and through waste minimization, Singapore is aiming to become a "Zero Waste" society.

SOUTH AFRICA

The government adopted a national waste management strategy in 1999 and introduced regulations restricting the use of plastic bags, banning the use of asbestos where possible, and eliminating mercury dumping. The government also hosted a National Waste Summit in 2001, bringing together different stakeholders, and included waste management activities in its poverty-relief programs. A policy of EPR is also being negotiated with the glass and tyre industries. South Africa calls for action at a global level and implementation of the JPOI commitments on sustainable consumption and production.

THAILAND

The government has developed a national integrated waste management plan. It has also taken measures to prevent the export of waste to Thailand. Many 3R projects are being implemented, including government green procurement, a waste exchange program with over 400 industries currently registered, and tax incentives to encourage the recycling of lead-acid batteries at a rate of 84%. Through the green manufacturing program and e-waste management, technology and knowledge transfer relating to 3Rs and Eco-Design has been initiated in cooperation with other countries.

UNITED KINGDOM

The Government strategy on sustainable consumption and production forms the basis of UK efforts on the 3Rs. There is an increasing focus on "reduction", which makes economic and environmental sense. Recycling rates have been increasing, and there is a growing reuse industry. Revenue from a landfill tax is helping businesses with 3R activities. "Environment Direct", an information service for consumers and procurers, is under development. International cooperation is needed on product eco-design and procurement. These issues, and the 3Rs in general, should be fed into the UN Marrakech Process and preparations for the G8 summit in July 2005.

UNITED STATES OF AMERICA

Markets need to be opened for goods and material that would otherwise enter the waste stream. If a product can be used, reused, recycled or remanufactured so as to benefit the economy and protect the environment, those approaches should be encouraged.

The United States will seek partnership with domestic industries, non-governmental organizations, local and state governments, and consumers. Reliance will be on markets rather than over-regulation. Regulations should permit and support innovation. Internationally, countries must commit to work together in the WTO to pursue barriers to trade in recycled and remanufactured goods as part of the WTO Doha Development Agenda (DDA).

VIETNAM

Parliament has recently revised the Law for Environmental Protection for approval. This aims to encourage 3R practices in Vietnam. The government is also investing in infrastructure to promote sustainable production and consumption. Transfer of technologies to developing countries is needed, and developed countries can play a significant role in that regard. Cooperation between different countries on establishing 3R policies must also be promoted.

EUROPEAN COMMISSION

The environmental goods and services industry is one of the fastest-growing sectors in the EU. Recycling rates and resource efficiency have been steadily increasing in Europe, while landfill use and negative environmental impacts of natural resources are being reduced. This can be achieved by looking at the whole life cycle of resource materials. Further responses will include innovative technologies, improved Eco-Design, and reinforced recycling and consumption policies. The EU is preparing to launch an international initiative on sustainable use of resources in partnership with UNEP, consisting of a scientific panel that will provide advice to developing countries.

LEAGUE OF ARAB STATES

Cleaner production is being promoted, with the establishment of national centres for cleaner production. Solid municipal waste management is a major problem in most Arab countries, but it is important to share information on success stories. Agricultural waste can sometimes be used productively, but often causes environmental problems if left untreated. Although Arab countries pay great care to hazardous waste management, dangerous chemicals are often dumped on coasts, a problem exacerbated by the December 26th tsunami disaster. Another regional problem is the management of waste from wars and conflicts, including mines and unexploded ordnance.

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD)

Many OECD countries have addressed the reuse and recycling of waste, with control procedures for transboundary movements of hazardous waste. Higher prices of materials can encourage greater efficiency in use, substitution by alternative materials, and higher recycling rates. OECD countries have proposed strengthening the

efficiency of the waste management sector through, for instance, taxes and subsidies, and improving the knowledge base on material flows. Strengthening the efficiency of the waste management sector requires improved economic analysis to establish proper "framework conditions" for the development of waste-related markets. Cost effective waste-related service delivery is also a key for success. OECD would like to propose hosting seminar or conference on 3R initiatives in a few years time. Promotion of the 3Rs may also increase job opportunities as demonstrated in Sao Paulo, Brazil.

SECRETARIAT OF THE BASEL CONVENTION

A central policy instrument of the Basel Convention is Environmentally Sound Management (ESM). The 3Rs are part of ESM, and are principles that are put into operation worldwide in the implementation of the Basel Convention. Within its Partnership Program, the ESM of e-waste is a high priority area, with focus on end-of-life mobile phones, and personal computers at the initial stage. The Secretariat of the Basel Convention launched in December 2002 the Mobile Phone Partnership Initiative together with the world's largest manufacturers of mobile phones, and commenced work on a global partnership on personal computing equipment. The Secretariat has also developed a regional project on ESM of e-waste. The Convention promotes regional actions through the 14 Basel Convention Regional Centers (BCRCs). Decoupling hazardous and other waste generation from economic growth is a critical challenge.

UNITED NATIONS ENVIRONMENT PROGRAM (UNEP)

UNEP places high priority on 3R issues as a means of achieving the Millennium Development Goals as well as the goals set out in the WSSD for its 10-year framework on sustainable consumption and production. With a recently adopted and expanded mandate to include implementation of projects, UNEP is seeking to establish a multi-stakeholder mechanism that will enable different stakeholders to undertake different actions, in order to achieve common goals. This will involve national and local governments, private sector entities, and civil society working together for sustainable development.