## Senior Officials Meeting on the 3R Initiative

## Questionnaire on 3Rs' strategies and activities

As announced earlier, the Senior Officials Meeting on the 3R Initiative will be held from 6 March to 8 March 2006 in Tokyo, Japan. During the meeting, two working groups will be held in parallel in the afternoon of Day 1 (6 March) and Day 2 (7 March) to discuss the promotion of the 3Rs (Reduce, Reuse, and Recycle).

The two working groups will respectively discuss: (1) promotion of the 3Rs at the *national level*, and (2) promotion of the 3Rs at the *international level* (e.g., international flow of recyclable resources and remanufactured goods). Both working groups will cover the following policy issues related to the promotion and implementation of the 3Rs: (a) cooperation between developed and developing countries, (b) cooperation among stakeholders, and (c) promotion of science and technology.

As stated in the letter from the Task Force for the 3R Initiative, we sent you this questionnaire to reflect your input on the issue paper for the meeting. Also, the result of the survey will be publicly reported later.

Please provide information relative to as many of the items as possible and send it prior to 23 January 2006 by e-mail to 3R@env.go.jp or by fax to +81-3-3593-8262.

### **<u>1.</u> 3Rs policy and strategy update**

At the Ministerial Conference on the 3Rs in April 2005, participating countries reported their 3Rs policy and strategies in the form of the 3Rs portfolio. Please provide us with updated information on the major developments of national and international strategies, policies and activities on the 3Rs of your country since the Ministerial Conference on the 3Rs (April 2005).

#### 1. Volume-Based Waste Fee system

Implemented since 1995 based on the Waste Control Act.

The aim of this policy is to impose waste treatment cost on the discharger according to the amount of waste generated. The municipalities provide free collection service for designated items like papers, metals and plastics so that it is easier to collect recycled products.

As a result of Volume-Based Waste Fee System, the solid waste has decreased by about  $6.0 \times 10^7$  ton and the collection of recycled products has increased by about  $1.6 \times 10^7$  ton during the ten years from 1995 to 2004, which is estimated to have the economic benefit of about 7.9 billion dollars.

	Before VBWF system (1994)	After VBWF system (1995)	10 years after VBWF system 2004
Solid waste generation (kg/day/person)	1.33kg	1.07kg	1.03kg

## 2. Extended Producer Responsibility system (2003 ~)

EPR system was implemented since 2003. Before the EPR system, waste deposit-refund system was implemented from 1992 until 2002.

There are 21 mandatory recycling items including 5 products(tires, lubricating oil, batteries, electronic products and fluorescent lamp) and 4 packaging materials(paper boxes, metal cans, glass bottles and synthetic resin packages)

Starting from 2006, 3 kinds of electronic products are added to the list of mandatory recycling items(printer, copying machine and fax machine).

After the EPR system, the recycling rate of target items have increased to 12% during 2002~2003 and to 7% during 2003~2004.

## **3.** Reducing packaging waste

Based on the Act on the Promotion of Saving and Recycling of Resources and regulations on the standard for packaging materials & packaging methods of products, this policy has been implemented since 1993.

The aim of this policy is to reduce the packaging waste generated, which takes up about 37% of urban solid waste, and to control special type of packaging materials that are difficult to recycle.

The Korean Ministry of Environment is implementing the following policy

methods : i) regulations on styrofoam since 1993 and various PVC packaging materials since 2001, ii) regulation on packaging method to prevent excessive packaging, iii) annually reduce synthetic resin packages.

In 2005, "a guideline on environmentally friendly packaging" was made and distributed to encourage cooperation among producers making and using packaging materials.

As a result of implementing this system, the packaging waste generated decreased by 20% from 62,940 tons/day in 1993 to 49,902 tons/day in 2002 despite the increase of economic size and population.

## 4. Introduction of 3R related agencies & organizations

Korea Eco-Product Institute (www.koeco.co.kr)

- To establish the standard and evaluation system for environmentally friendly products by implementing various activities that facilitate production and consumption of environmentally friendly products.

Korea Environment and Resources Corporation (www.envico.or.kr)

- To promote the recycling industry, assist in waste management policies and implement waste recycling policies & system.

Sudokwon Landfill Site Management Corporation (www.slc.or.kr)

- To operate Sudokwon(metropolitan) landfill site and generate electricity using landfill gas.

Korea Institute of Environmental Science and Technology (www.kiest.org)

- To plan, manage and evaluate environmental technology development project, distribute the technologies developed, and contribute in environmental conservation and promotion of environmental industry by improving environmental technologies.

## 5. 3R promotion sites

Reduction of using disposable goods : one.me.go.kr

Educational institute of recycling promotion : doumi.envico.or.kr

Reduction of packaging waste : pack.envico.or.kr

Provision of information on environmentally friendly products : www.ecoproduct.or.kr

Cyber consultation on industrial waste : waste.me.go.kr

Environmental monitoring organization for housewives : www.eco-monitor.org

Environmental education program D/B : www.keed.net

Recycling cyber market : www.okrecycle.com

#### 2. Domestic 3R activities

#### 2.1 Good practices on 3Rs

We are going to develop a showcase of the successful activities on the 3Rs, including those of the national level, the municipality level, industry, and NGOs/NPOs. Please fill out the EXCEL sheet attached to this e-mail with your good practices on the 3Rs. (Note: If you have already provided us with substantial information on good practices on the 3Rs in the form of the 3Rs portfolio in the Ministerial Conference, please provide us more detailed information on a few of the most successful cases in your country.)

See the attached file : 3R Showcase\_ROK(060228)

#### 2.2 3Rs and governance

To promote the 3Rs, it is necessary to develop a governance system that responds to different situations and conditions of each country. Are there any specific issues relating to institutional arrangements for the implementation of the 3Rs and environmentally-sound management of waste? For example, please explain the different roles of stakeholders in the promotion of the 3Rs, such as how to position the informal sector that is engaged in recycling and recovering activities under the context of national 3Rs policies.

1. Advisory Council for Environmental Policy between Government and the Private Sector

Since the Policy Advisory Council for Private Environmental Organization started in March, 1994 and was suspended in November, 2004, the Advisory Council for Environmental Policy between Government and the Private Sector was established in February, 2006 to officially restart the dialogue channel.

Objective

- Enhance mutual understanding and facilitate mutual exchanges by holding meetings between government and the private environmental organizations.
- Efficiently implement work related to environmental conservation by consulting with private environmental organizations when establishing major environmental policies for the government to conserve the environment.

Participants

- Government's side : Minister, deputy vice minister and director-general of Korean Environmental Ministry
- Private environmental organization's side : Representative or working-level official Characteristics
- The newly launched Advisory Council for Environmental Policy between Government and the Private Sector aims at strengthening cooperation between government and the private organization such as going through substantial policy consultation with private environmental organizations when establishing major

environmental policies, which is unlike the role before of giving advices on environmental policies.

Expected effect

- Based on the partnership between government and the private sector, the Ministry of Environment and private environmental organizations can consult with each other on major environmental policies before implementation and evaluate them through the Advisory Council for Environmental Policy between Government and the Private Sector, which is expected to contribute in establishing environmental governance.

## 2.3 3Rs and environmentally-sound management of industrial waste

Since economic development tends to cause an increase in the amount of industrial waste generation, environmentally-sound management of industrial waste is essential to promote the 3Rs. To decouple economic development and industrial waste generation, what kind of role is expected for the industrial waste emitter, national and local governments, including municipalities? Also, please give us your views on how to share the responsibilities of construction and operation of landfill as final disposal sites among the stakeholders?

## 1. Waste Wise Network (Waste-WIN)

- Innovative network between government and enterprises to wisely manage waste Implemented from July, 2004

Objective

- Share the awareness of challenges in developing the waste sector between government and enterprises, and jointly seek development plan to improve policy quality and corporate competitiveness.
- Establish efficient regulation and advanced plan by setting up a direct dialogue channel with main clients of waste policy(enterprises, economic organizations and unions).

Participants : Waste discharging enterprises(such as associations) and the Ministry of Environment(including affiliated agencies)

Characteristics :

- Unlike other advisory councils participated by government and private enterprises, the Waste Wise Network is an one-on-one adhoc network system, which is established for individual enterprises that continuously ask for enactment and amendment of waste-related regulations because of massive amounts of waste generated.
- Officials of Resource Recirculation Bureau visit enterprises in person to explain related waste management policies and listen to opinions and proposals of enterprises.

Achievements & suggestions

- An opportunity to broaden mutual understanding on the need for major regulations like waste treatment charge system and difficulties on the field.
- Necessary to amend related laws and ordinances on areas where suggestions from enterprises are concentrated on such as improving the system.

#### 3. International 3R policy and strategy

At the Ministerial Conference on the 3R Initiative, it was observed that the international flow of (i) goods and materials for recycling and manufacturing, and (ii) recycled and remanufactured products (hereinafter "recyclable resources and remanufactured goods") may contribute to the efficient use of resources and the 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. At the same time, it was noted that for many countries the first priority should be placed on minimising the wastes within the country in which the wastes are generated. Participants at the Ministerial Conference expressed the view that transboundary movement of wastes should take place only when safe and appropriate use and environmentally-sound management are possible in the receiving country.

## **3.1** Situation of transboundary movement of recyclable resources and remanufactured goods

Regarding the transboundary movement of recyclable resources and remanufactured goods, what are the major recyclable resources observed in exports from and imports to your country?

In order to strengthen the management of transferring the waste among the

countries, regulate importing and exporting waste regarding hazardous waste treatment except for those countries who have concluded an agreement at the Basel convention, biliteral or multilateral convention.

• Enact 'the act for international transfer and treatment of waste'(1992)

Variety of waste for limited countries with waste transfer

- Designated waste from the basel convention annex 1 or 8 which are characterized as hazardous in the annex 3
- The waste which our country has been reported from or reported to the secretariat convention in accordance with the Basel convention article 3, clause 1 or clause 3 and article 11
- The waste marked as Red or Amber which are designated or regulated according to the Basel convention annex 2 or OECD

Other than the restricted waste in terms of transferring them among countries, the

waste are exported and imported under the same procedures as other products

Are there any specific problems in relation to exports and imports of these recyclable resources and remanufactured goods?

- It is difficult to certify whether the imported and exported waste as products are hazardous waste or treated waste.

- It is difficult to estimate the status of recycling and technical level regarding waste from other countries that whether it is appropriate enough to import and export the waste.
- There are difficulties in keeping the balance with imported waste for the purpose of recycling and domestic waste that needs to be treated.
- The range of groups other than waste treatment traders or recycling traders, who import and export waste by recognizing it as goods, is indefinite.

What are the major reasons for the problems?

- HS code for international trade without considering the variety of waste.
- Maximizing profit by exporting the waste to those countries with cheap environmental expense even though it is possible to recycle the waste in the exported countries.
- Generated domestic waste can be treated only by waste treatment centers or recycling centers but imported waste can be managed as goods.
- Enforcing the importing and exporting the waste by general traders due to various definitions of waste in different countries or recognized recyclable resource as goods.

# **3.2** Environmentally-sound management in transboundary movement of recyclable resources and remanufactured goods

To prevent environmental pollution caused by transboundary movement of recyclable resources, what kind of policies and measures (e.g., cooperation among national governments and other stakeholders) are expected?

- Preparatory confirmation process regarding all the imported and exported waste
- Minimizing the importing and exporting waste by implementing a law on treating the generated domestic waste within the country
- Managing the imported waste for the purpose of recycle equally as the generated domestic waste
- Clarify the definition of waste as well as the range of feasible importing and exporting traders

If your country has already launched such activities, please provide us with detailed information.

- In order to minimize the imported and exported waste and derive to properly treat them, accomplished the research project on inducing the measurement to improve legislation regarding the current waste transferring among countries and the waste treatment

- Planning to implement a system that encourages reporting to the administrative organization which governing the composition of importing and exporting waste (it is presumed to have the same effect of polluter reporting system on the waste generated at a domestic premises)
- Planning to further manage the importing and exporting waste affiliated with HS Code by applying obligation reporting requirements on the preferential basis when the HS Code is indicated as waste

# **3.3** Harmonisation of economic and environmental benefits through the transboundary movements of recyclable resources and remanufactured goods

Please provide information on the positive and negative socio-economic impacts of the increase in import and export of recyclable resources and remanufactured goods in your country.

- 1. Positive effect
- Substitution effect on the scarcity of natural resource in the country
- Improvement of technology regarding recycling resource and made-over goods; and development of the related industries
- 2. Negative effect
  - Concerns on Environmental pollution from inappropriate waste management and the occurrence of transferring the waste to those countries with low recycling and treatment expense
  - Concerns on the occurrence of importing and exporting waste which are disguised as recyclable waste

What kinds of policies and measures have been implemented to support the positive effects and mitigate negative effects of trade of recyclable resources and remanufactured goods?

- Promote enacting a law regarding the recirculate resource of vehicles and electronic goods in order to expedite recycling electronic goods and parts of vehicles ; enacting a relevant law that could meet the international standard such RoHS, WEEE and ELV which are being promoted by EU
- As enacting the Act on promoting recycling resource-circulating society, by implementing a new concept of 'Reuse' and further produce goods as requiring producers of the product to consider the recycling potential from the producing stage, Planning to encourage reporting voluntarily on those matters.

#### 4. Others

If there are any other issues related to promotion of the 3Rs which should be discussed in the Senior Officials Meeting, please provide us with your input below.

#### 5. Information of respondent

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Country/Organisation: Republic of Korea

No.	Name of the practice	Summary of the practice •level of implementation(national, local, industry, NGOs/NPOs) •duration •stakeholders involved	Impact: •Improvements after the introduction of the practice	Key For Success What are the major reasons for the success of the activity?
1	d Waste Fee	<ul> <li>national</li> <li>1995~</li> <li>nation, municipalities, local residents</li> <li>Volume-Based Waste Fee System makes people purchase standard plastic garbage bags to dispose of waste and recycled products are collected for free by the municipalities.</li> <li>By imposing waste treatment cost on waste discharger, the system not only follows polluters pay principle to reduce waste generation, but also encourages recycling.</li> </ul>	<ul> <li>Changes in waste treatment method: As of 2004, decrease of landfill compared to 1994 (-61.4%) and increase of incineration (+256.7%)</li> <li>The price of average plastic garbage bag(20L standard) has continued to increase from 221 Korean was in 1005 to 284 Korean was in 2004, and the price</li> </ul>	<ul> <li>Overcame the difficulty during the early stages with strong governmental will and the system was well implemented with cooperation from the public by raising their awareness.</li> <li>Continuous improvement of the system, supervision of illegal waste incineration and illegal waste dumping, and introduction of a report system by which those who inform on any breach of regulations receive monetary rewards.</li> <li>Active participation by the public through continuous PR activities on recycling policies carried out by the central and local governments</li> </ul>
2	Producer	<ul> <li>national</li> <li>2003~</li> <li>nation, industry, local residents</li> <li>EPR system encourages producers to implement environmentally friendly economic activities throughout the lifecycle of the product including design, production, distribution, consumption and disposal so that a sound material-cycle society is achieved.</li> <li>The system goes through the process of setting mandatory recycling rate for different products and packaging by the government, and the individual producers have to receive certification for the implementation plan by calculating their recycling rate and also submit a report on the results.</li> </ul>	<ul> <li>Increase of recycling rate for EPR target items 2002-2003 : 12% 2003-2004 : 7%</li> <li>Starting from 2006, 3 kinds of electronic products such as printer, copying machine and fax machine were added to the list of mandatory recycling items</li> </ul>	<ul> <li>For the success of EPR system, it is important to expand the basis such as improving separate collection system and expanding recycling facilities.</li> <li>Also it is important to carry out promotion activities on EPR system and recycling by raising the awareness of civil society on recycling policies and encouraging voluntary participation from enterprises(gain a competitive advantage through environmental management like recycling)</li> </ul>
3	Empty Bowl Campaign (for reducing food waste)	<ul> <li>NGO (EcoBuddha)</li> <li>Sep. 2004~</li> <li>NGOs, Local Governments, Schools, Military Base, etc.</li> <li>Based on the core principle of Buddhism, which emphasizes respect for life, EcoBuddha implements various activities such as zero waste campaign and an Empty Bowl Campaign to not leave any food behind.</li> <li>Empty Bowl Campaign is to conserve the environment and save resources by only making enough food to eat at once so that what is saved can be shared with the people in need.</li> <li>In this regard, people take the pledge to not leave any food behind and donate 1,000 Korean won to be used for the people in need.</li> </ul>	<ul> <li>Not only schools, but other collective facilities for providing meals such as military bases and institutions also participated, and the food waste</li> </ul>	<ul> <li>Able to attract the attention of the media as there were many people who took the pledge in the early stages from schools and religious organizations.</li> <li>Created a consensus among the public as a campaign that promotes traditional Buddhism and eating habit of Buddhist priest.</li> <li>Convincing message of conserving nature and helping the people in need by carrying out the simple duty of not leaving any food behind.</li> </ul>