Launch of CCAC MSWI Asian Component

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Waste management policy

• Establishing a Sound Material-Cycle Society
• 3R Initiatives in Asia

• CCAC MSWI as a new framework of international cooperation to promote 3R
"Sound Material-Cycle Society" means a society in which the consumption of natural resources will be conserved and the environmental load will be reduced to the greatest extent possible, by preventing or reducing the generation of wastes, etc. from products, etc., by promoting proper cyclical use of products, etc. and proper disposal of waste. [Basic Act on Establishing a Sound Material-Cycle Society] (Promulgated in June 2000, and put completely into effect in January 2001)
Legal system for building a sound material-cycle society

**Basic Environmental Act**
Put completely into effect in August 1994

- **Basic environmental plan**
  Revised completely and published in April 2012
  - Maintain proper material cycle of the society
  - Reduce the consumption of natural resources
  - Reduce environmental load

- **Basic Act on Establishing a Sound Material-Cycle Society (Basic framework law)**
  Put completely into effect in January 2001
  - Reduce the consumption of natural resources
  - Reduce environmental load

- **Basic promotion plan for the Sound Material-Cycle Society**: Fundamentals of other national plans

**Proper disposal of waste**

- **Waste Disposal and Public Cleansing Act**
  Partially amended in May 2010
  - Control waste generation
  - Proper treatment of waste (incl. recycling)
  - Regulation on establishment of waste treatment plants
  - Control for waste treatment service companies
  - Setting of criteria for waste disposal, etc.

**Promotion of material recycling**

- **Act on the Promotion of Effective Utilization of Resources**
  Revised completely and published in April 2001
  - Recycling of recyclable resources
  - Design and review the structure and materials to be easy to be recycled
  - Indicate how to separate waste
  - Promote the effective use of secondary products
  - Reduce 
    Recycle → Reuse
  
- **Regulations depend upon characteristics of articles and materials**

**Act for Promotion of Sorted Collection and Recycling of Containers and Packaging**
Put completely into effect in April 2000
Partially amended in June 2006

- **Home Appliance Recycling Act**
  Put completely into effect in April 2001
  Partially amended in June 2006

- **Food Recycling Law**
  Put completely into effect in May 2001
  Partially amended in June 2007

- **Construction Waste Recycling Law**
  Put completely into effect in May 2002
  Partially amended in June 2007

- **End-of-Life Vehicle Recycling Law**
  Put completely into effect in January 2005

- **Small Electrical and Electronic Equipment Recycling Act**
  Put completely into effect in April 2001
  Partially amended in June 2006

**Act on Promoting Green Purchasing** (Promoted by the government taking initiative for purchasing of recycled products)

- **Food residue**
- **Wooden/concrete/asphalt materials**
- **Automobile**
- **Small electrical and electronic equipment**

**Put into effect in April 2013**
Material flow in Japan

- "Total material input" reduced by 25%
- "Final disposal" reduced up to 1/3
- "Recycled amount" increased

(Note) Water content: water contents of wastes (sludge, livestock’s waste, night soil, waste acid, waste alkali) and sludge contingently dumped in the process of economic activities (sludge in mining, construction and in waterworks as well as slag)
3R initiatives in Asia

- Regional 3R Forum in Asia
- Policy dialogue, support for National 3R strategies, capacity building
- Technology transfer
- Knowledge contribution to the international initiatives (e.g. UNEP)
Critical Waste Problems in Asia

◆ In line with the economic growth and population increase, mainly in Asia, the amount of waste generation has been increasing worldwide, the quality of waste diversifying as well. The global waste generation is expected to more than double in 2050, compared to the 2010 level.

[Estimated Total Waste Generation Worldwide (2010 - 2050)]

Environmental pollution caused by inappropriate recycling in developing countries

A process of open burning of covered cables to recover copper wires for recycling

A person collecting valuables from open dumping site

Source: Studies on Estimated Amounts of Waste Generated in the World and Future Prospects, by Masaru Tanaka
Close Collaboration on 3R and Waste Management Policies
with Asian Countries

China

Bangladesh
- Assistance for national 3R strategy development provided since 2006.
- National strategy established in December 2010.

Thailand
- Assistance for national 3R strategy development provided since 2005.

Cambodia
- Assistance for national 3R strategy development provided since 2005.

Singapore
- Bilateral policy dialogue conducted since July 2006
- Letter of Intent signed between Nobumori Otani, Parliamentary Secretary of the Environment and the CEO of the Environment Ministry of Singapore in July 2010.

Malaysia
- Assistance for Development of Strategic Plan for Organic Food Waste Management provided since 2010.

Korea

Philippines
- Assistance for national 3R strategy development provided since 2005.
- National strategy established in December 2009.

Vietnam
- Assistance for national 3R strategy development provided since 2005.
- National strategy established in December 2009.
- Final draft of the national 3R strategy is in the process of obtaining government approval.

Indonesia
- Assistance for national 3R strategy development provided since 2005.
- Final draft of the national 3R strategy is in the process of obtaining government approval.
Target sectors:

- **Commercials** (restaurants, hotels, malls, food outlets etc.)
- **Industries** (food and beverage industries; central kitchen for chain shops etc.)
- **Institutions** (Schools, colleges, universities, government offices etc.)

### 6 MAIN STRATEGIES

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Japanese Technologies for Waste Management and Recycling

**Project for Supporting the Incubation of Firms in the Field of Venous Industry and Promoting the Spread of Japanese Waste Management and Recycling Technologies Overseas**

The Ministry of the Environment has been implementing the project for supporting the incubation of firms in the field of venous industry and promoting the spread of Japanese waste management and recycling technologies overseas in order to enhance circulatory use of resources and reduce the environmental loads on a global scale, as well as to revitalize Japan's economy.

Outlines of the Feasibility Studies Adopted for the Grant of MOEJ in FY2012

**Turkey:**
- **24-3** Kobelco Eco-Solutions Co., Ltd.
  - A Study on Waste Treatment Business in Marmara Sea Coast City in Republic of Turkey
- **24-7** Toyota Tsusho Corporation
  - Development Project of Integrated Recycling System of E-waste and ELV Mix Metals in Republic of Turkey

**India:**
- **23-4** Japan Environment Planning Co., Ltd. (carried on from FY2011)
  - Recycling of Small Home Appliance Centered around Mobile Phone in Gujarat, India
- **24-8** Nippon Magnetic Dressing Co., Ltd.
  - Project for Effective Utilization of Steelmaking Slag in India

**Viet Nam:**
- **23-2** Ichikawa Kankyo Engineering Co., Ltd. (carried on from FY2011)
  - RPF Production and Manufacturing System Business in Socialist Republic of Viet Nam
- **24-6** Kawasaki Heavy Industries, Ltd.
  - Feasibility Studies for Municipal Waste Treatment System by Using Cement Kiln in Hanoi City, Socialist Republic of Viet Nam
- **24-9** Hitachi Zosen Corporation
  - Study on the Integrated Solid Waste Management System including Energy Recovery in Ho Chi Minh City, Socialist Republic of Viet Nam

**Philippines:**
- **24-2** Eight-Japan Engineering Consultants Inc.
  - Wide-area Collection, Energy Recovery and Sanitary Landfilling Project of Solid Waste in Province of Isabela, Republic of the Philippines

**Malaysia:**
- **24-4** Shinryo Corporation
  - Total Recycling System of Wastes from Photovoltaic Cells in Malaysia and other ASEAN Area

**China:**
- **23-3** NTT Data Institute of Management Consulting, Inc. (carried on from FY2011)
  - Development Project of an Industrial Complex for Plastic Recycling in Tianjin, China
- **24-5** Toa Oil Kogyosho Co., Ltd.
  - Comprehensive Recycling Project of Oily Waste in Shenyang, China

**Thailand:**
- **23-1** E&E Solutions Inc. (carried on from FY2011)
  - Concentrated Intermediate Treatment of Waste in around Bangkok, Thailand
- **24-10** REMATEC Corporation
  - Developing 3R System of Industrial and Non-industrial Waste Based on a Cement Plant Located in Northern Thailand
Japan’s efforts in CCAC

• Contribution of 2.5 million U.S. dollars per year to CCAC
• Lead Partner in MSWI since 2013
• Hosting regional meetings in Asia
• Contribution to scientific knowledge of SLCPs

• City – City Cooperation: Japanese local governments as mentor city
• Technology transfer
The Regional Intergovernmental Consultation on Near–Term Climate Protection and Clean Air Benefits in Asia and the Pacific

- 4-5 Feb 2013 in Bangkok, Thailand Co-hosted by Japan and Bangladesh
- 112 participants from 19 countries across the Asia and Pacific region
- Meeting Statement on Short-Lived Climate Pollutants in Asia
  - Highlighted the potential of current best practices and effective initiatives
  - Identified priority measures to reduce SLCPs across the Asia-Pacific region including reducing emissions from waste disposal and open burning as part of environmentally sound management of municipal solid waste and waste water
  - Recommended countries and other relevant authorities of the Asia-Pacific region to join the CCAC