

*Discussion paper issued without formal editing*

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**UNITED NATIONS  
CENTRE FOR REGIONAL DEVELOPMENT**

**In collaboration with**

**Ministry of Natural Resources and Environment of Viet Nam  
Ministry of the Environment, Government of Japan**

**FOURTH REGIONAL 3R FORUM IN ASIA  
18-20 MARCH 2013, HA NOI, VIET NAM**

**JAPAN'S EFFORTS OF COUNTRY – COUNTRY COOPERATION  
AND  
CCAC AS A NEW FRAMEWORK OF INTERNATIONAL COOPERATION**

**(Background Paper for Plenary Session 5 of the Provisional Programme)**

**Final Draft**

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This background paper has been prepared by Dr. Ryutaro Yatsu for the Fourth Regional 3R Forum in Asia. The views expressed herein are those of the author only and do not necessarily reflect the views of the United Nations.

Japan's efforts of country –  
country cooperation  
and  
CCAC as a new framework of  
international cooperation

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The 4<sup>th</sup> Regional 3R Forum in Asia  
18<sup>th</sup>-20<sup>th</sup> March Hanoi

# CCAC

(Climate and Clean Air Coalition)

as a new framework of international  
cooperation on waste management



# Outline of CCAC

- Launched on 16<sup>th</sup> Feb 2012
- This coalition is a voluntary, non-binding, collaborative global partnership uniting governments, inter-governmental organizations, representatives of civil society and the private sector committed to taking action on Short-lived Climate Pollutants (SLCPs) such as black carbon, methane and HFCs
- Hosted by the United Nations Environment Programme (**UNEP**)
- 27 States, EC and 28 Non-State Partners
- 7 initiatives are led by partners. One of initiatives of this coalition is “**Mitigating SLCPs from Municipal Solid Waste**”.



# CCAC Framework

High Level Assembly

Steering Committee[SC]

6 States and 2 Non-State Partners

U.S., Nigeria, Canada, Sweden, Mexico, Bangladesh, IGSD(Institute for Governance and Sustainable Development), UNEP

Working Group[WG]

all parties: 27 States, EC and 28 Non-State Partners

New Funding Proposal submitted by Lead Partner(s) of Initiatives  
reviewed by SC      approved by WG or High Level Assembly

9 Initiatives  
Municipal Solid Waste/ Oil and Gas/ HFCs/ Diesel/  
Bricks/ Financing/ NAP(National Action Planning)/  
Science and Knowledge for Action/ Household  
Cooking and Domestic Heating

CCAC  
Trust Fund

Secretariat:  
UNEP/DTIE

# The Regional Intergovernmental Consultation on Near-Term Climate Protection and Clean Air Benefits in Asia and the Pacific

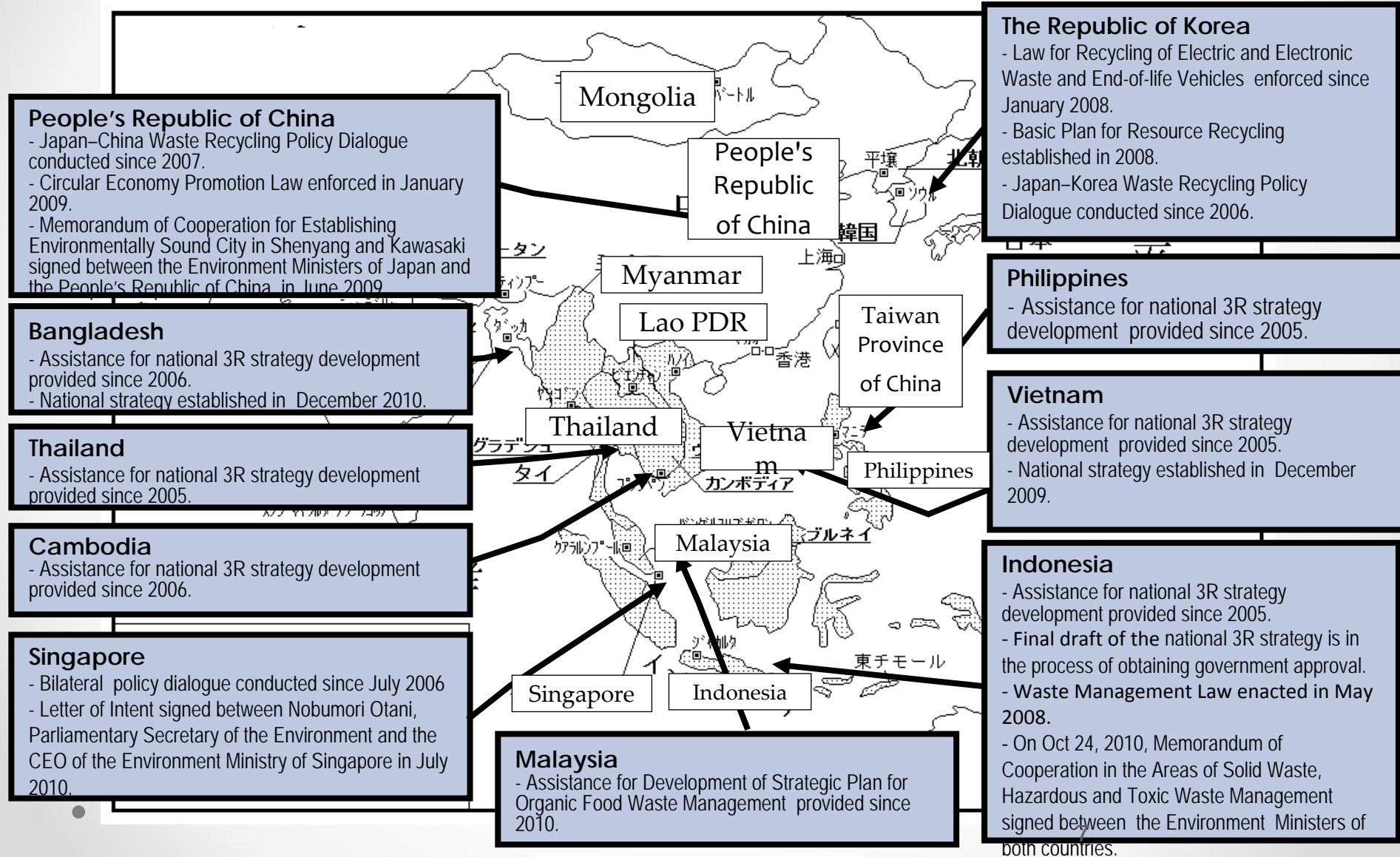
- 4-5 Feb 2013 in Bangkok, Thailand Co-hosted by Japan and Bangladesh
- 112 participants from 19 countries across the Asia and Pacific region
- **Meeting Statement** on Short-Lived Climate Pollutants in Asia
  - Highlighted the potential of current best practices and effective initiatives underway under various national air quality and low- carbon development strategies for calling up and accelerating the reduction of SLCPs
  - Recommended countries and other relevant authorities of the Asia-Pacific region to join the CCAC

# Country – Country Cooperation

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1. Cooperation of the development of National 3R strategy
2. Cooperation between Vietnam and Japan
3. Cooperation between Malaysia and Japan

# International Framework to Support Waste Management and Recycling Industry in its Overseas Development





# 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 EIV Mix Metals in Republic of Turkey

## Thailand:

### 23-1 E&E Solutions Inc. (carried on fm 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

## Malaysia:

### 24-4 Shinryo Corporation

- Total Recycling System of Wastes from Photovoltaic Cells in Malaysia and other ASEAN Area

## People's Republic of China:

### 23-3 NTT Data Institute of Management Consulting, Inc. (carried on fm FY2011)

- Development Project of an Industrial Complex for Plastic Recycling in Tianjin, the People's Republic of China

### 24-5 Toa Oil Kogyosho Co., Ltd.

- Comprehensive Recycling Project of Oily Waste in Shenyang, the People's Republic of China

## India:

### 23-4 Japan Environment Planning Co., Ltd. (carried on fm 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

## Myanmar:

### 24-1 JFE Engineering Corporation

- Feasibility Study of Installation, Operation and Maintenance of Waste to Energy (WTE) Plant in Greater Yangon

## 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

## Viet Nam:

### 23-2 Ichikawa Kankyo Engineering Co., Ltd. (carried on fm 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

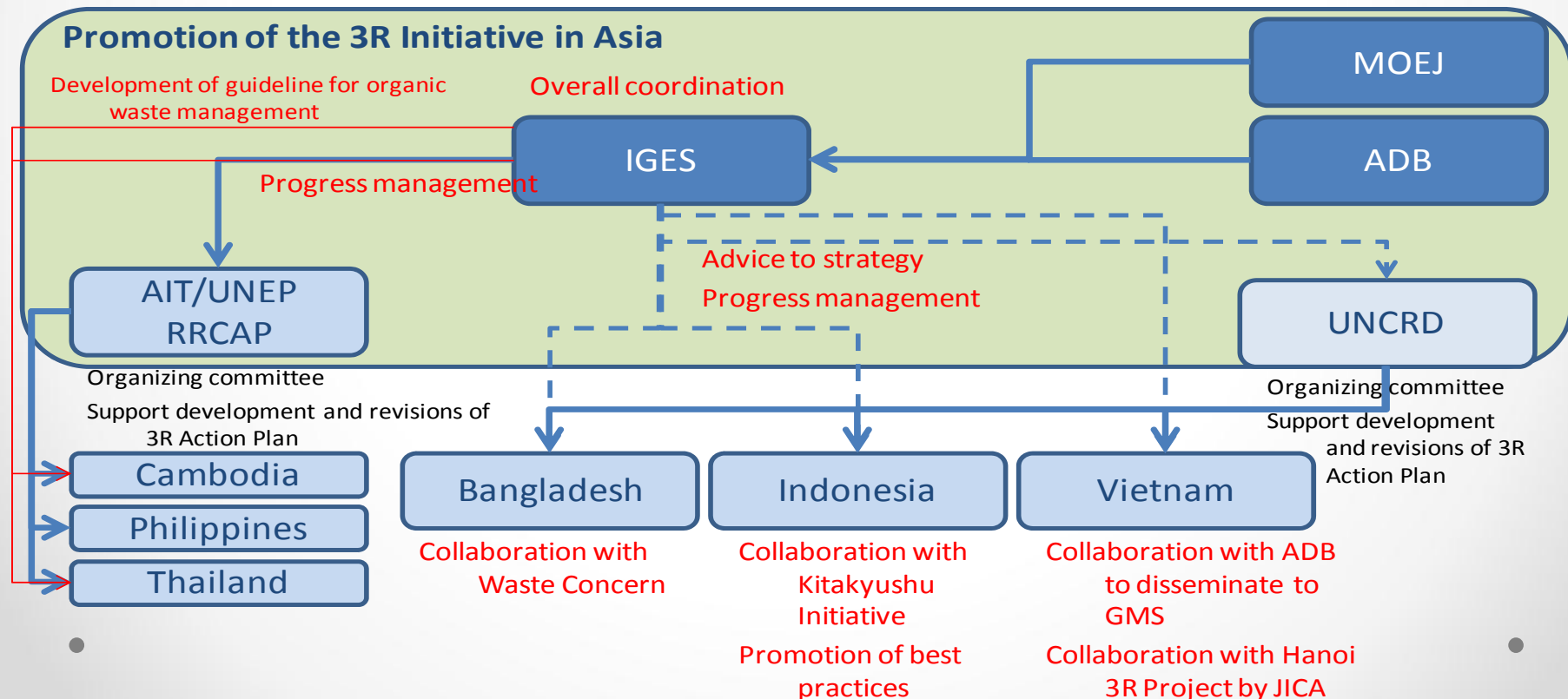
# Feasibility Studies by MOEJ

- ✓ Commenced since 2011
- ✓ Purpose: Investigate the feasibility of business relating to waste collection, sound transport, proper treatment, recycling
- ✓ Study period: 1 or 2 years
- ✓ Amount of the grant: less than 30 million yen.  
(about 400,000 US\$)
- ✓ Study of legal system, practice, condition of targeted wastes, cost of waste collection, cost of other business matters, etc.
- ✓ Test operation of pilot plant permitted
- ✓ We expect outcomes of these studies lead to establish new waste-related business in Asian region.



# National 3R Strategy Development Program

- A major project in Asia under G8's 3R Initiative since 2005
- Identification of needs, conducting surveys, organizing committees, and providing of technical advices towards national 3R strategy development.
- UNCRD , UNEP and IGES published a progress report "National 3R Strategy Development: A progress report on seven countries in Asia from 2005 to 2009"



# Needs for Phase-In Approach

**Ecological modernization (harmonization of environmental and economic concerns) of recycling economy**

**Industrialized economies (Japan, Korea, Taiwan and others)**

- Recycling industries functioning as a basis for resource circulation policies
- Integrating upstream policy and downstream policy for DfE

**Phase 3: Design for the environment in products**

- Greening of Supply chain
- Green purchasing
- Ban of throw-away products
- EPR to IPR
- Reduction policy

**Emerging economies (China, Thailand, Malaysia and others)**

- Start to develop waste management and recycling legislation and policy
- Environmentally-unsound treatment and recycling
- Start to have sound recycling industries but competition with informal sector

**Phase 2: Integration of externalities into consumption and production**

- Involvement of stakeholders to policy making
- Extended Producer Responsibility or other market instruments
- Good practices
- Zero Waste Factory
- Eco-Industrial Parks
- Quality Standards for Recyclables

**Phase 1: Improved Waste Management and Development of Capacity of Actors**

- Improvement of organic waste management through climate co-benefit
- Nurturing interface organization to engage the informal sectors
- Nurturing formal industries for resource recovery
- Subsidies for recyclers

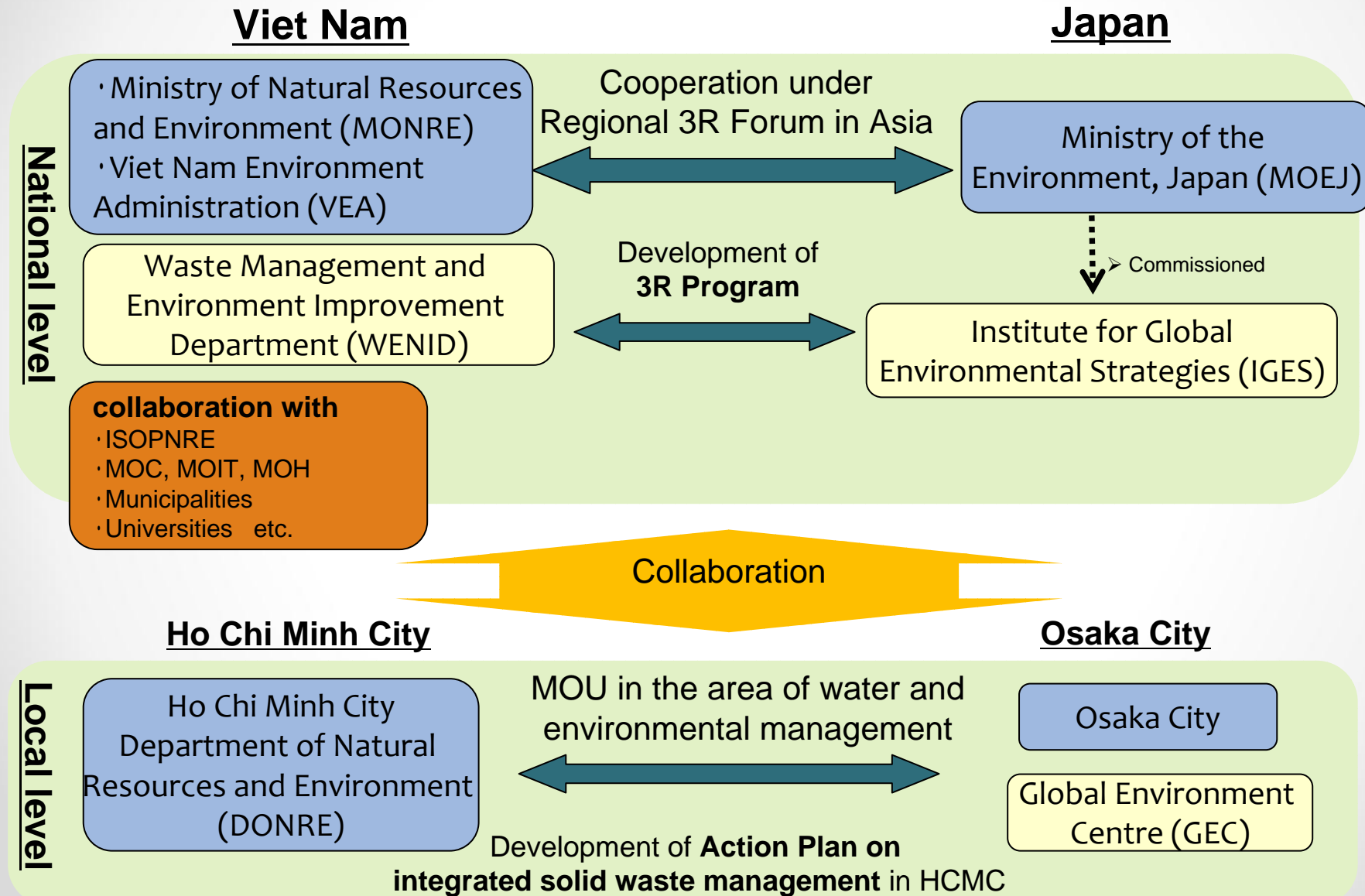
**Least developed countries (Cambodia, Lao PDR and others)**

- Lack of waste management and recycling legislations
- Poor infrastructure for waste collection and treatment
- Informal collection and recycling
- Difficulty of identifying producers

**Phase 4: Regional/international collaboration towards better governance for resource circulation (departure from bilateral aids)**

- Multi-lateral financial mechanism for sustainable resource management and resource circulation
- Policy collaboration on resource reduction
- International collaborative scheme for contributing part of national recycling funds
- Product information sharing in life cycle

# Cooperation between Viet Nam and Japan on the Development of 3R Program - Cooperative structure -





# Cooperation between Viet Nam and Japan on the Development of 3R Program - National Workshops -

Two national workshops were held to collect comments on the draft 3R Program

Date: November, 16<sup>th</sup>, 2012

Place: Ho Chi Minh City

- Draft 3R Program (*version1*) was presented and received the comments from participants from other ministries (Ministry of Construction, Ministry of Health, Ministry of Industry and Trade, Government Office), local provincial governments, and Japanese expert group.

Date: December 5<sup>th</sup>, 2012

Place: Hai Phong City

- Draft 3R Program (*version2*) was presented and received the comments from participants from local provincial governments, experts from universities, and Japanese expert group.



Opening remarks by Deputy Minister of MONRE



A scene of workshop



Presentation by Japanese expert



A scene of workshop

# Cooperation between Viet Nam and Japan on the Development of 3R Program - Outcome -

## DECISION Approving “Reduce, Reuse, Recycle Program on Solid Waste, the period from 2013 to 2020” (draft version2)

Version 1

PRIME MINISTER SOCIALIST REPUBLIC OF VIETNAM  
Independence - Freedom - Happiness  
No: /2012/QĐ-TTg Hà Nội, date month 2012.

DECISION  
Approving “Reduce, Reuse, Recycle Program on Solid Waste,  
the period from 2013 to 2020”

THE PRIME MINISTER

Pursuant to the December 25, 2001 Law on Organization of the Government;

Pursuant to the November 29, 2005 Law on Environmental Protection;;

Pursuant to the Decision No.2149/QĐ-TTg dated December 17, 2009 on approving the national strategy for integrated management of solid waste up to 2025, with a vision to 2050;

At the proposal of Minister of Natural Resources and Environment,

DECIDES:

Article 1. To approve “Reduce, Reuse, Recycle Program on Solid Waste, the period from 2013 to 2020” with the following main contents:

### I. VIEWPOINT, GUIDELINES AND SCOPE OF THE PROGRAM

#### 1. Viewpoint

- Reduction, reuse, and recycle of solid waste are the responsibilities of the whole society, with the Government playing the leading role, promoting the socialization of solid waste management.

- Reduction, reuse, and recycle of solid waste are amongst the priorities in environmental protection, contributing to pollution reduction, environmental improvement, economical and efficient use of natural resources with a vision towards sustainable development.

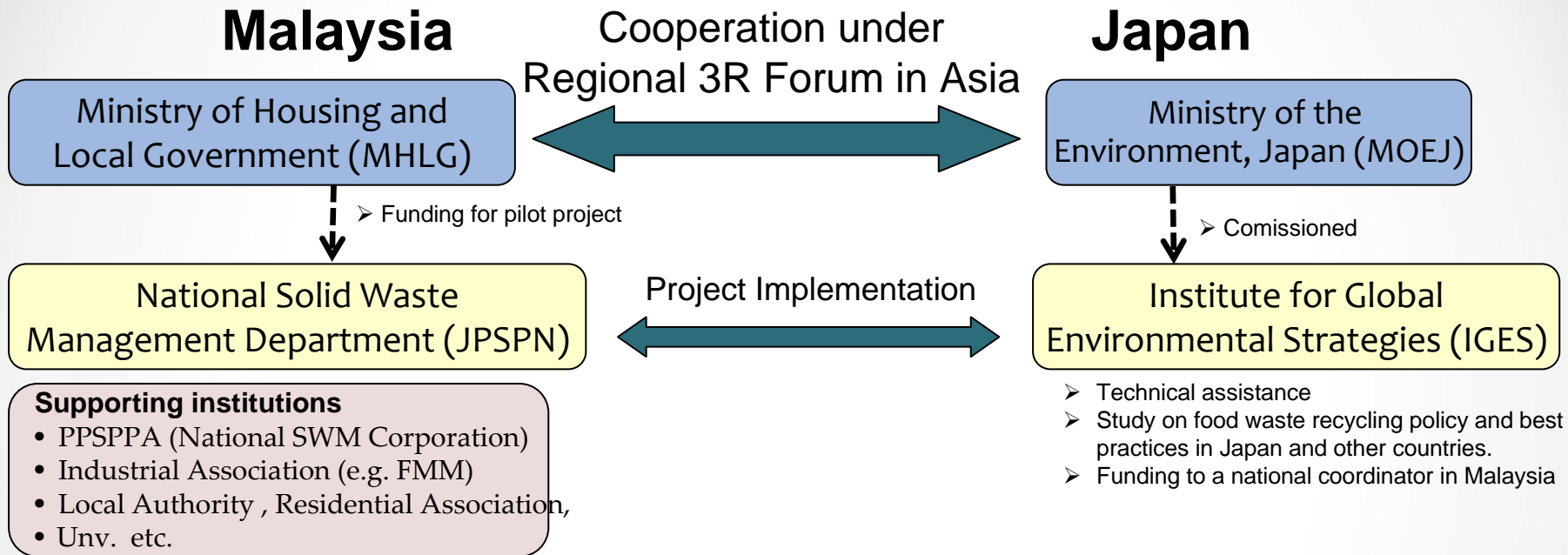
#### 2. Guidelines

- The Government shall plan and direct activities regarding solid waste reduction, reuse and recycle of solid waste; Ministry of Natural Resources and Environment shall be the standing agency for coordinating relevant agencies and assisting the Government in directing this Program.

## Outline of the recommendation report from Japanese group

1. Legal framework of solid waste management in Viet Nam
  - Roles and responsibilities of each ministry and local authority
2. Current practices and issues of solid waste management
  - Waste amount, composition and flow
  - Tipping fee and waste collection fee
3. Waste reduction activities in Viet Nam
  - Current recycling activities
  - Waste reduction services
  - Lessons learnt from past 3R-related projects
4. Waste reduction activities in other countries
  - Case studies in the Philippines, Indonesia and Japan
5. Waste reduction action plan in Ho Chi Minh City
  - A project assisted by Osaka City and Global Environmental Centre
6. Recommendable regulations and technical guidelines to promote waste reduction efforts in Viet Nam
  - Identification of possible programs

# Cooperation between Malaysia and Japan on the Development of Food Waste Management Strategy in Malaysia - Cooperative structure -



## National Strategic Plan for Food Waste Management

1) Baseline research

2) Pilot projects

3) Policy Development

A model case for facilitating regional cooperation to promote 3Rs in other Asian countries



# Cooperation between Malaysia and Japan on the Development of Food Waste Management Strategy - Discussion between MHLG and MOEJ

## Discussion Session between MHLG and MOEJ:

- Mr. Yong Bun Fou (Deputy Secretary General of MHLG), Dato Dr. Nadzri bin Yahaya (Director General of JPSPN, MHLG) and one JPSPN officer visited Japan from 28 October – 3 November 2012.
- The Ministry of the Environment, Japan organized a discussion session for possible policy development of food waste recycling in Malaysia and shared Japanese experiences on the policy development process of food waste recycling law.



Courtesy visit to MOEJ



Discussion Session between MHLG and MOEJ

# Development of Food Waste Management Strategy in Malaysia - National Strategic Plan for Food Waste Management in Malaysia-

## Target sectors:

- **Commerce** (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

- |            |   |
|------------|---|
| Strategy 1 | Collection of Baseline Data about Food Waste Generation             |
| Strategy 2 | Establishment of a “Food Waste Recycling Regulation”                |
| Strategy 3 | Food Waste Minimization / Reduction at Source                       |
| Strategy 4 | Food Waste Treatment at Source                                      |
| Strategy 5 | Establishment of Proper Centralized System for Food Waste Treatment |
| Strategy 6 | Effective Methane Gas Recovery from the Landfill Sites              |



National Strategic Plan for  
Food Waste Management in  
Malaysia (Draft)

**Draft  
version**

JANUARY 2013

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