

**Lessons learnt from Japanese policies and experiences
towards promotion of 3R in Asia and the Pacific**

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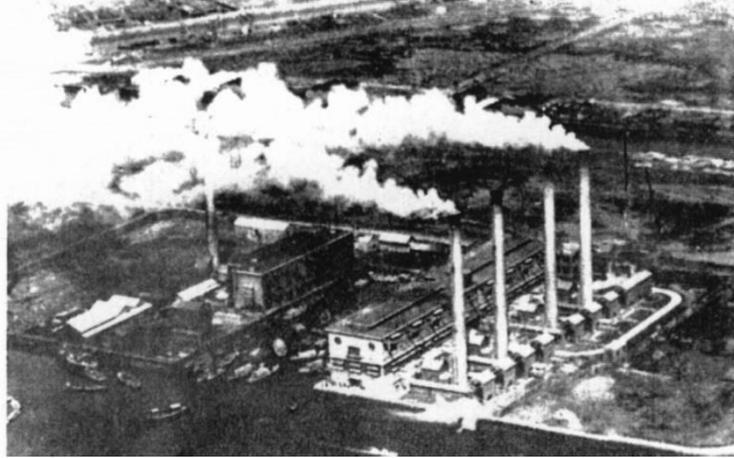
**Vice Minister for Global Environmental Affairs
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Content

1. The Era of 3R
2. Promotion of 3R in Asia and the Pacific
3. Climate and Clean Air Coalition
4. What is “Joint Crediting Mechanism”

1. The Era of 3R

The Past in Japan



The Present in Japan

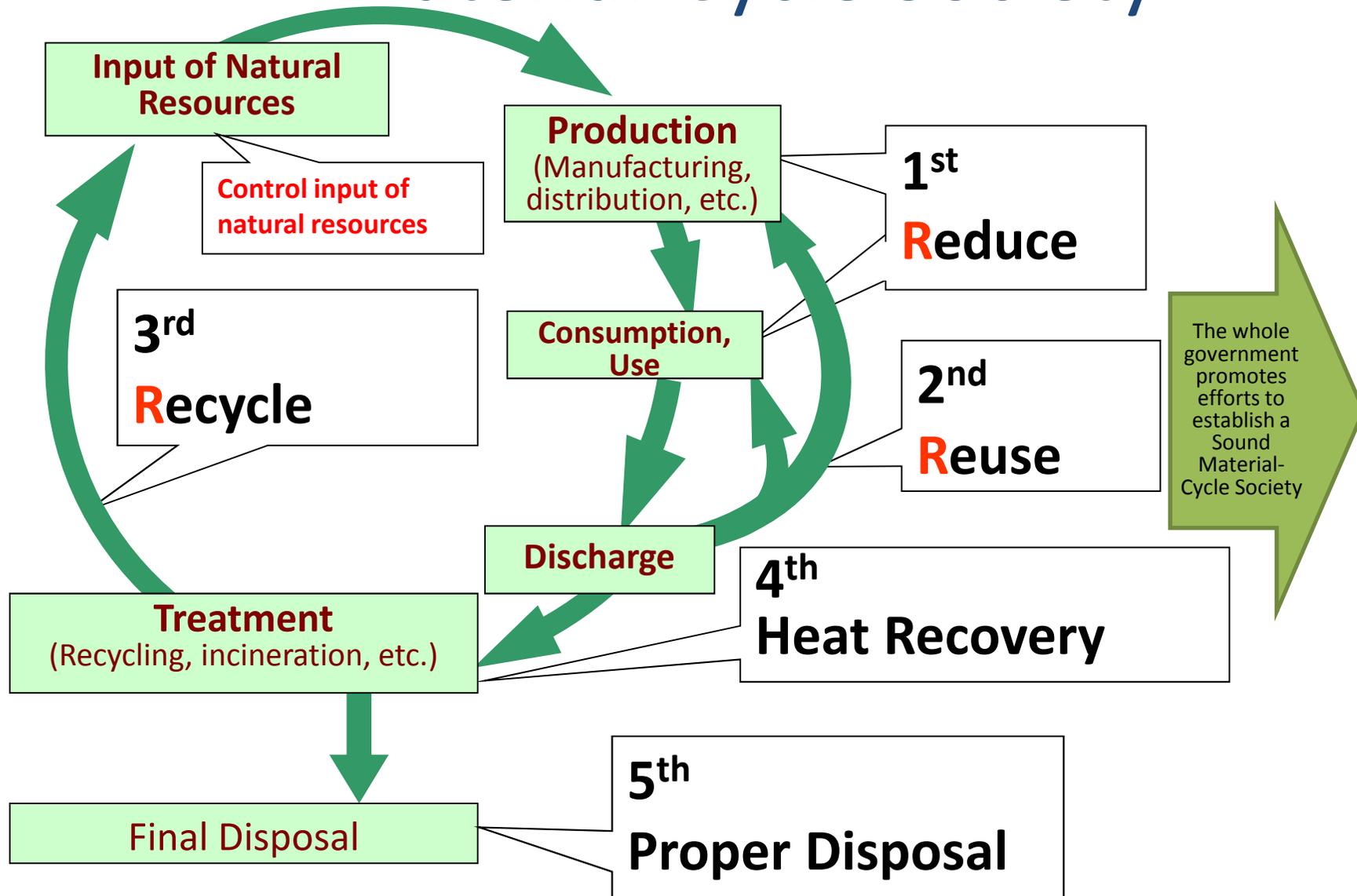


写真：水俣市



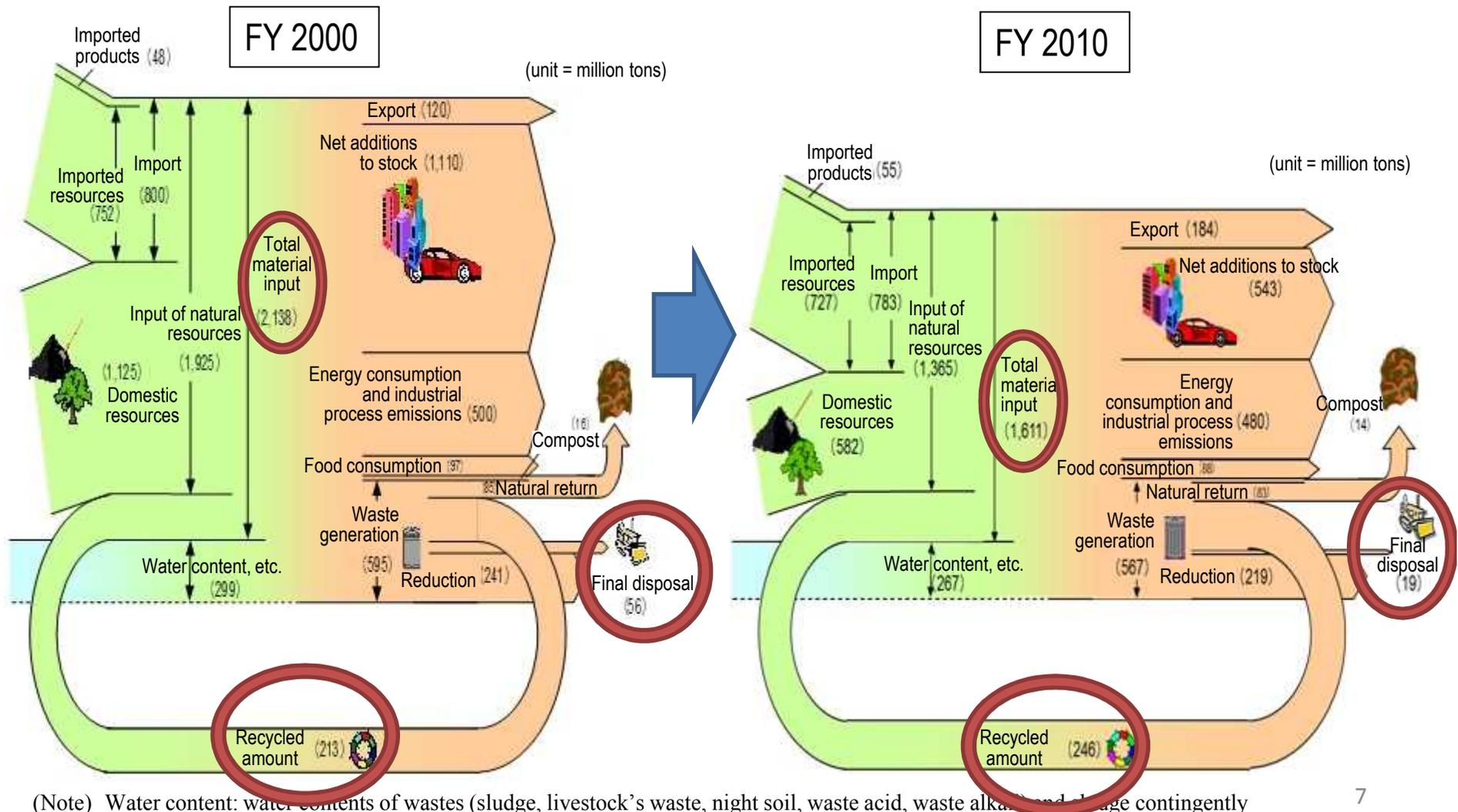
写真：東京二十三区清掃一部事務組合

The Concept of a Sound Material-Cycle Society



Formulation of the Basic Plan for Establishing a Sound Material-Cycle Society

Material flow in Japan



(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)

Key points of the Third Fundamental Plan for a Sound Material-Cycle Society (formulated by the cabinet in May 31, 2013)

Formation of a Sound Material-Cycle Society, focusing on its quality

- 2R (Reduce, Reuse) promotion
- Recovery of useful metals from consumed products and promotion of a high grade recycle
- Conversion of recycle and biomass resources into energy
- Development of the efforts integrating the elements for a low carbon society and a nature-harmonized society, and grade-up of the local recycling network

Promotion of global efforts

- A global sound material-cycle society through Regional 3R Forum in Asia and the Pacific
- Technology transfer

Response to the Great East Japan Earthquake

- Effective treatment and reuse of disaster waste
- Safe treatment of waste contaminated by radioactive substance

Details of the Third Fundamental Plan for a Sound Material-Cycle Society (formulated by the cabinet in May 31, 2013)

Formation of a sound material-cycle society, focusing on the quality

- (1) Building of a social economic society which is designed to **advance 2Rs (reduce, reuse) prior to the recycle.**
- (2) **Recovery of useful metals from consumed products** and **promotion of a high grade recycle** (horizontal recycle, etc.), based upon the effective implementation of the Small Electrical and Electronic Equipment Recycling Act.
- (3) Appropriate treatment of hazardous substance such as asbestos, PCB, etc.
- (4) Formation of a new guideline for disaster wastes treatment measures, taking into consideration the lessons from the Great East Japan Earthquake
- (5) **Conversion of recycle and biomass resources into energy**, considering the environmental aspects of energy.
- (6) Development of the efforts **integrating the elements for a low carbon society and a nature-harmonized society, and grade-up of the local recycling network.**

Promotion of global efforts

- (1) We aim at building a **global sound material-cycle society through Asia 3Rs Promotion Forum**, and supports for overseas development of waste recycle Industries.
- (2) Enhancement of the waterfront measures for harmful wastes, import of environment resources of high value, albeit difficult to treat adequately in developing countries, export of environment resources which can be hardly treated at home, under a requirement for such resources not to induce environmental pollution.

Response to the Great East Japan Earthquake

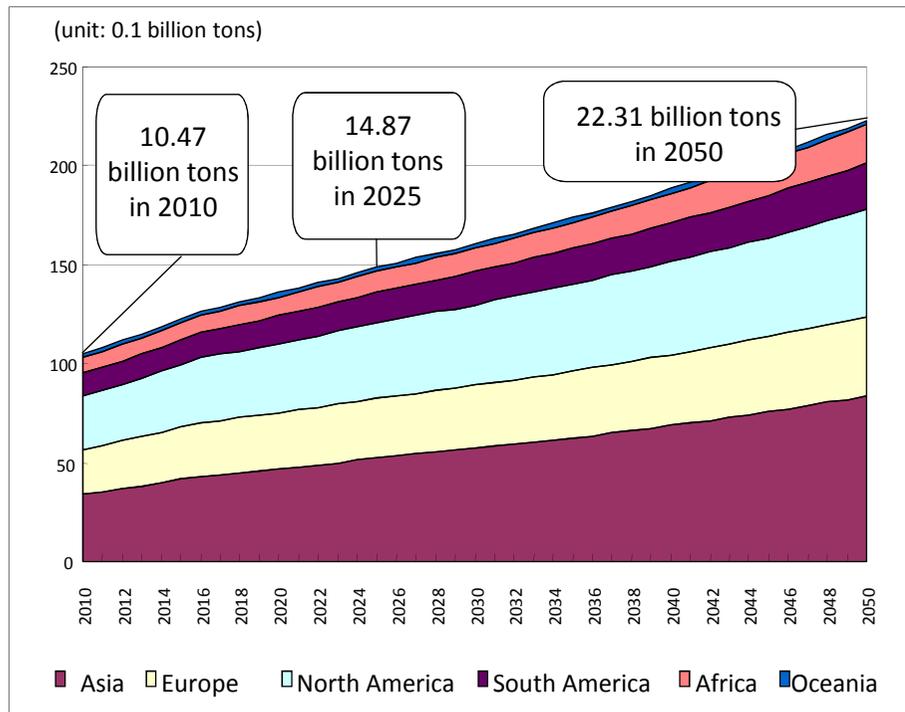
- (1) Effective treatment and reuse of disaster wastes
- (2) Relevant and safe treatment of radioactive substance-polluted wastes

2. Promotion of 3R in Asia and the Pacific

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.
- ◆ In developing countries, cases of environmentally inappropriate disposal/recycling have been reported.

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



Source: *Studies on Estimated Amounts of Waste Generated in the World and Future Prospects*, by Masaru Tanaka

Environmental pollution caused by inappropriate recycling in developing countries

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

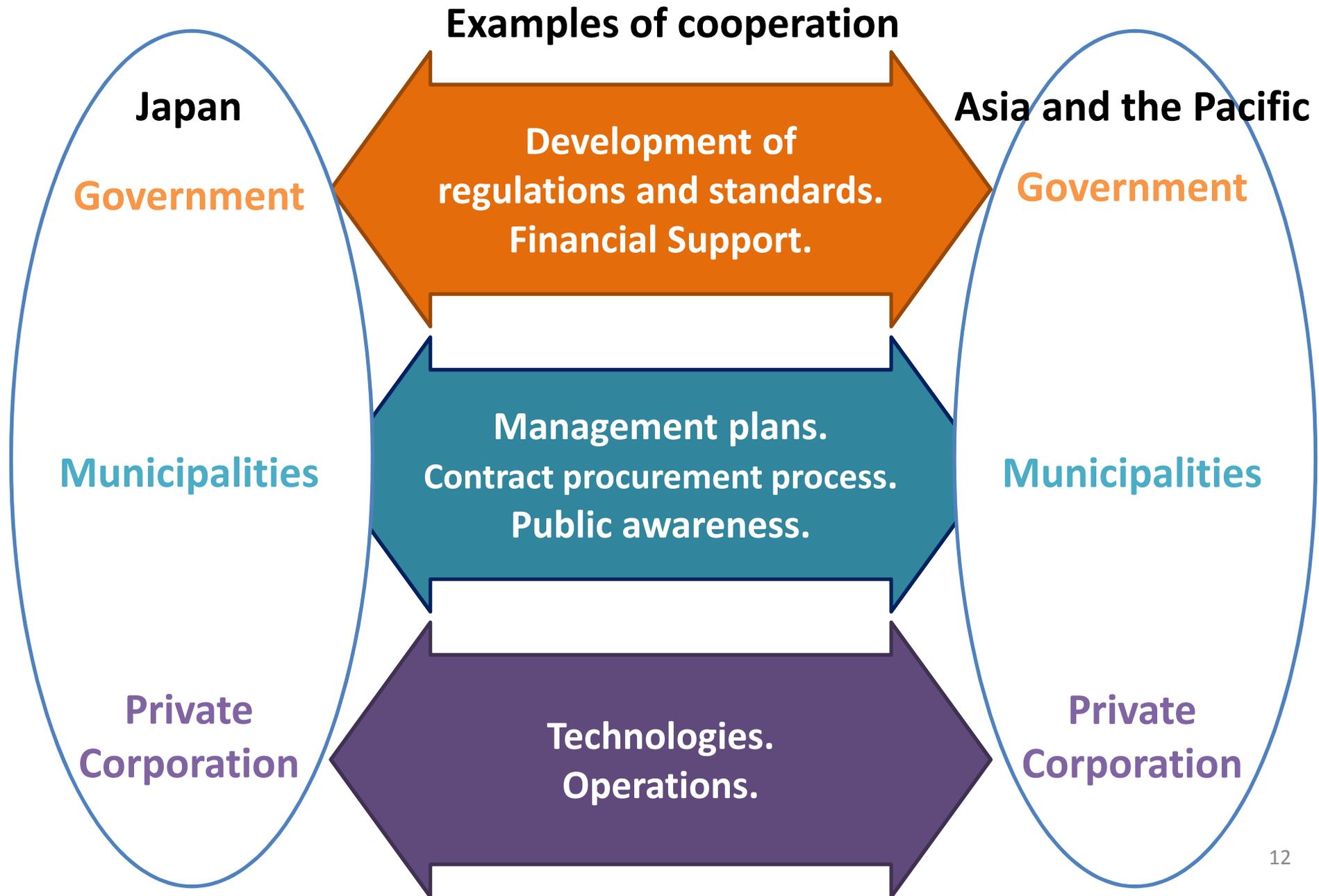


A person collecting valuables from open dumping site

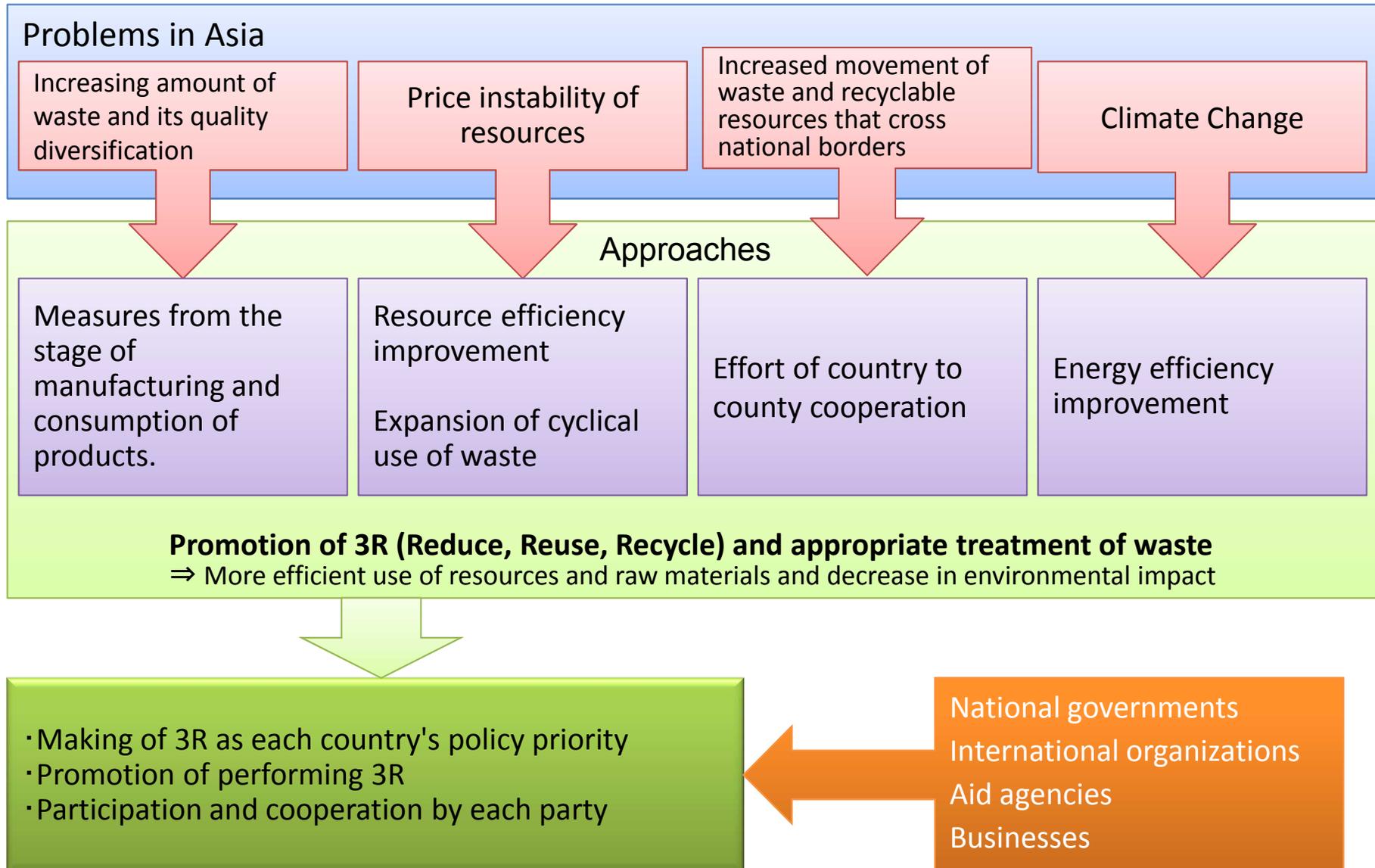
Source: Japan Industrial Waste Information Center



Roles Model for cooperation



Promotion of 3R in Asia



3. Climate and Clean Air Coalition

Outline of CCAC

- Launched on 16th 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)
- 33 States, EC and 41 Non-State Partners
- 10 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, Jordan,
IGSD(Institute for Governance and Sustainable Development), World Bank

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

10 Initiatives
Municipal Solid Waste/ Oil and Gas/ HFCs/ Diesel/ Bricks/
Financing/ NAP(National Action Planning)/ Regional
Assessments of SLCPs/ Household Cooking and Domestic
Heating/ Agriculture

CCAC Trust
Fund

Secretariat:
UNEP/DTIE

Japan's intensive efforts in CCAC

○ Leadership in Municipal Solid Waste Initiative

Technical cooperation

City-City cooperation

- To extend knowledge and transfer technology regarding Japanese advanced waste management system
- To promote 3R internationally
- To improve waste management

○ Scale-up of CCAC

- Contribution of 2.5 million U.S. dollars per year to CCAC
- Hosting regional meetings in Asia
 - The Regional Intergovernmental Consultation on Near-Term Climate Protection and Clean Air Benefits in Asia and the Pacific, held in Bangkok in March 2013, co-hosted by Japan and Bangladesh
 - Municipal Solid Waste Initiative Workshop held in Surabaya in February 2014, led by Japan
- Extension of knowledge of SLCPs and Advocacy of CCAC membership in order to advance our efforts in Asia where fine particulate air pollution PM2.5 and greenhouse gas emissions are serious.

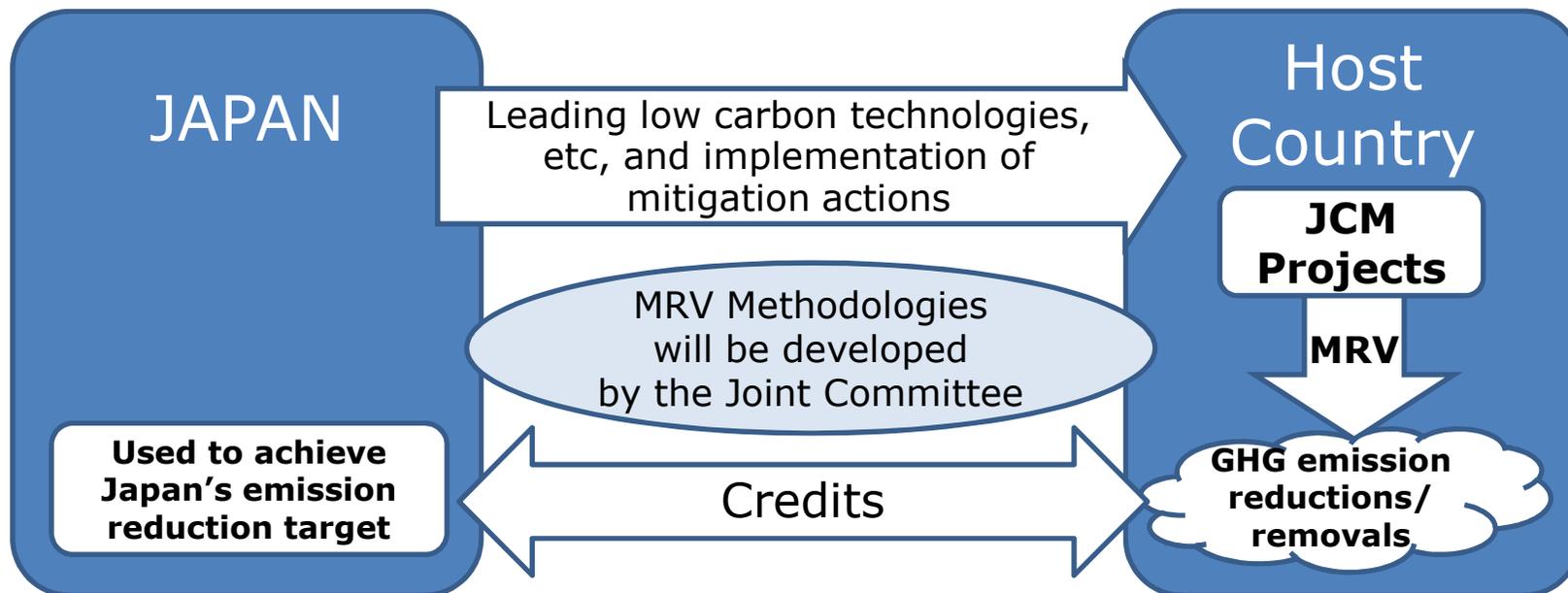
○ Contribution to scientific knowledge concerning SLCPs

- Focus on Asia by active involvement in survey and investigation into the behavior of black carbon, a component of PM2.5, and its empirical evidence

4. What is “Joint Crediting Mechanism”

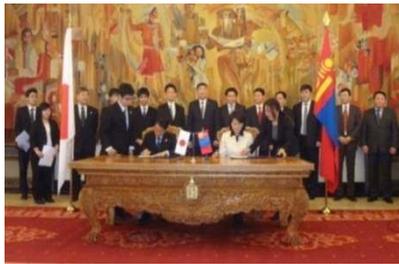
Basic Concept of the JCM

- Facilitating diffusion of leading low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries.
- Appropriately evaluating contributions to GHG emission reductions or removals from Japan in a quantitative manner, by applying measurement, reporting and verification (MRV) methodologies, and use them to achieve Japan's emission reduction target.
- Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals, complementing the CDM.



Countries with which Japan has signed on bilateral documents

- Japan has held consultations for the JCM with developing countries since 2011 and signed the bilateral document for the JCM with Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica and Palau.
- Intend to increase the number of signed countries to at least 16 in 3 years



Mongolia

On January 8, 2013
(Ulaanbaatar)



Bangladesh

On March 19, 2013
(Dhaka)



Ethiopia

On May 27, 2013
(Addis Ababa)



Kenya

On June 12, 2013
(Nairobi)



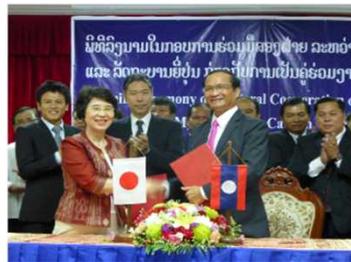
Maldives

On June 29, 2013
(Okinawa)



Viet Nam

On July 2, 2013
(Hanoi)



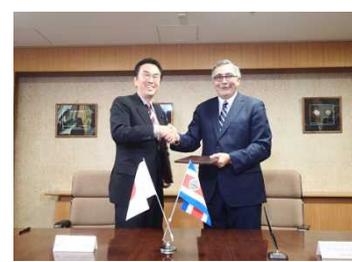
Lao PDR

On August 7, 2013
(Vientiane)



Indonesia

On August 26, 2013
(Jakarta)



Costa Rica

On December 9, 2013
(Tokyo)



Palau

On January 13, 2014
(Ngerulmud)

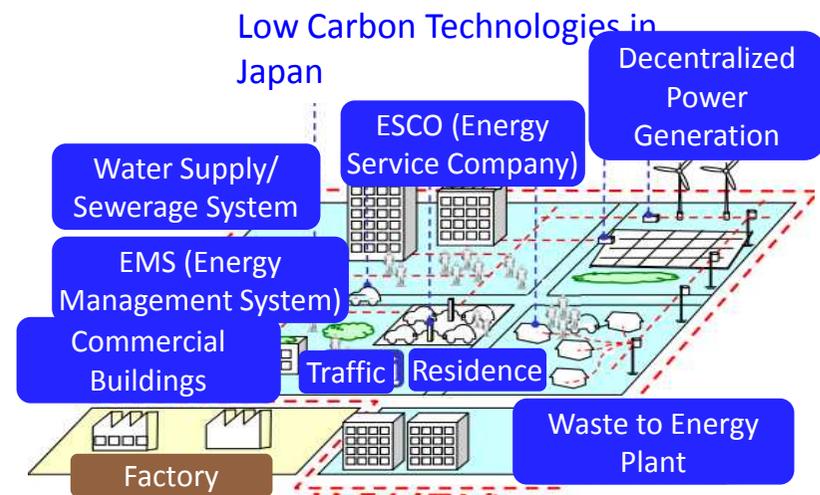
- Japan held the 1st Joint Committee with Mongolia, Bangladesh, Ethiopia, Kenya, Viet Nam and Indonesia respectively.

Achieving “Leapfrog” Development in Developing Countries

Japan helps developing countries in Asia Pacific region “Leapfrog” toward **Low-Carbon Societies** by Japanese advanced low-carbon technologies.

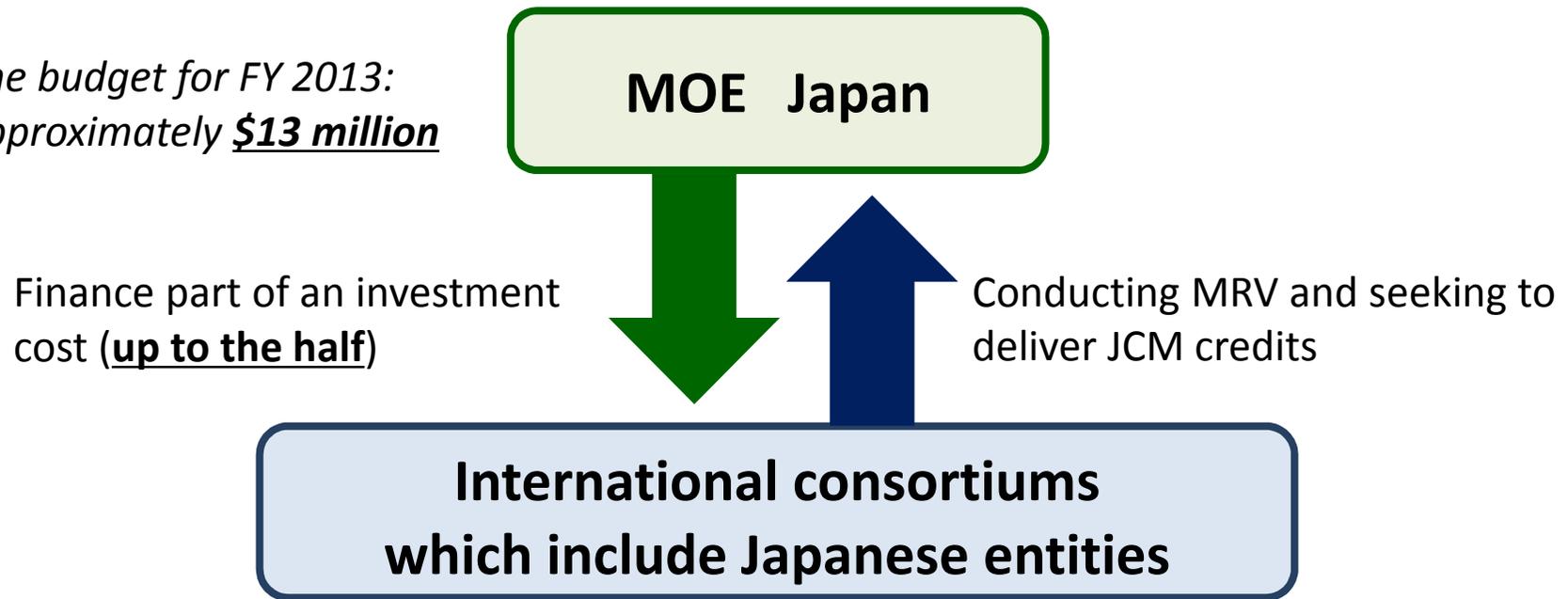
Basic Concept

- Creation of “ Low Carbon Societies ” by low-carbon social infrastructure (water supply and sewerage, waste to energy plant, etc.) in developing countries.
- Large-scale deployment of Japanese advanced low-carbon technologies
- Transfer technologies, know-how and social systems as a package



Financing Programme for JCM Model Projects

*The budget for FY 2013:
approximately **\$13 million***



- Scope of the financing: Facilities which reduce CO₂ from fossil fuel combustion as well as construction cost for installing those facilities, etc.
- Eligible Projects : Starting construction after the adaption of the financing, and finish construction within that year (one year extension may be approved).