

JICA's approach to E-waste Management



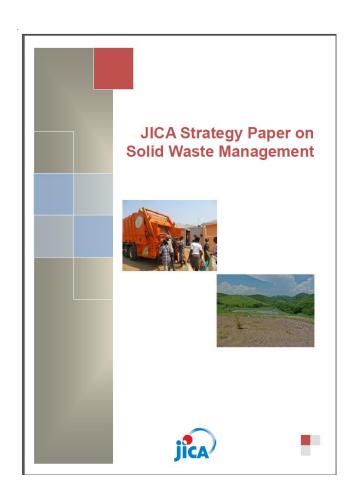
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JICA Strategy paper on Waste Management



Basic policy

Integrated Solid Waste

Management

to achieve the 3Rs



Assistance based on a Country's stage of development

Bangladesh Sudan Nigeria

Stage I

Public Health Improvement

Waste Collection

Indonesia Vietnam

Stage II

Reduce Environmental Burden, Prevent Pollution

Sanitary Landfill

Malaysia Brazil

Stage III

Establish a Sound
Circulating –
Recycle Based
Society based on
the 3R initiative

E-Waste



Assistance for Stage III

Goals

Promote volume reduction and recycling of garbage. Reduce environmental burden, including the greenhouse effect gas. Establish a sound material-cycle society.

Collaborate with the national and/or local governments, citizens, and the private sector to promote the 3R initiative.



E-Waste Generation in 2010 in Asia

- 16 million tonnes
- 3.7kg/person



High level of growth 2010-2015

(+62.7% in Ease and Southeast Asia)

Thai	+57 %
Vietnam	+90.9%
Malaysia	+39.7%
Philippines	+61.2%

Source: Shunichi Honda, Deepali Sinha Khetriwal & Ruediger Kuehr (2016), Regional E-waste Monitor: East and Southeast Asia.



E-waste Management Technical Cooperation Project

Malaysia

Project for Development of Mechanism for Household E-waste Management

Brazil

Project for E-waste Reverse Logistics improvement



Forward Logistics Retail Distributer End User *Industry*

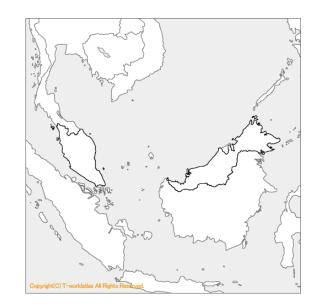
Reverse Logistics

Reverse Logistics: All activities associated with a product/service after the point of sale, the goal is to optimize or make more efficient aftermarket activity, thus saving money and environmental resources.

Recycling



(Oct. 2015 – Mar. 2017)



Project purpose

Implementing mechanism such as legal structure, organization, system for sustainable collection and environmentally sound recycling of household E-waste is prepared



(Oct. 2015 – Mar. 2017)

Output

Collection Guideline

Recycling Guideline

Reporting Guideline

Fund Management Guideline

Pilot Project







Preparation for Pilot project

E-waste Inventory
Survey





Phase I (completed)

Region-wide project (Penang City)

Project for Model Development for E-waste Collection, Segregation and Transportation From Household for Recycling

Institution-building



Legal System

Phase II (ongoing)

Nationwide project



(Oct. 2014 – Sep. 2017)



Project purpose

Action to improve E-waste Reverse Logistics are presented in the Government of the Federative Republic of Brazil.



(Oct. 2014 –Sep. 2017)

Output



E-waste Inventory Survey

Monitoring and Reporting

System

Pilot Project







Pilot project in Sao Paulo City

E-waste collection and Registration





Current project

Pilot project (Sao Paulo City)



Region-wide approach

Lessons Learned

Necessary E-waste management policy to reflect the results of the Pilot project



Establish of Nationwide Institution



What are the critical challenges for E-Waste?

-from donor's point of view-

Utilization of <u>market</u> <u>mechanism</u> is critical to establish a sustainable revers logistic system.

E-Waste involves <u>externalities which</u> require public intervention.

- Exposure to Heavy metal
- Ozone layer depletion
- Green house gas emission.



- Public sector is responsible for internalizing externalities to develop business enabling environment for E-waste.
- Good communication strategy with private sector is important to establish better policies.
- Pilot projects in targeted areas would be effective to get lessons.



Promoting E-waste management

■ Establishment of Legal Systems

Malaysia E-waste Management Regulation (in progress)

Brazil National Solid Waste Policy (Law 12,305/2010)

■ Consensus building among Stakeholders

Recognize and Acceptance of EPR (*Extended Producer Responsibility*)

■ Development of Recycling industry
Promote E-waste flow to Formal sector



Thank you very much

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