

The Asia 3R Conference

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UNEP

Regional Office for Asia and the Pacific

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Regional Background and Strategy

1. **Waste** management has been a topic discussed by all of the Ministerial forums in Asia and the Pacific region.
2. All countries in the region have challenges of both the conventional waste and new emerging issues such as e-waste. These challenges in waste management are a growing concern to the political leadership in the Region.
3. Governments have requested for development of national strategies as well as “pilot demonstration “ projects for replication.

4. There is a need for a paradigm shift from “waste management approach” to “3Rs approach”. It requires an integrated approach for management of waste.
5. Recently we recognize waste is not waste, waste is renewable resources for sustainable development. Particularly organic waste can be changed to organic fertilizer and Biofuel.
6. It is needed to create new industry on waste, particularly organic waste.

Regional Activities on 3R

1. Supporting to establish 3R National Strategy/Policy
2. Promoting Regional/Sub-Regional Cooperation
3. Providing 3R information, good practices etc. through 3RKH

Key Factors in 3R Waste Management

- Sustainable consumption and production for sustainable development
- Reduction of CO₂ emission for prevention of climate change
- Energy efficiency
- Shifting from Petrol to Biomass

3R National Strategy Project in Model Countries by UNEP/ROAP

- Project Period : *2005 to 2008*
- Sponsor : *IGES*
- Financial Support : *Ministry of the Environment, Japan*
- Model Country : *Thailand, Philippines, Malaysia, Cambodia*
- Output : *Establishment of National Strategy(Policy)*

Expected Strategy on 3R

(National Policy)

- A holistic approach covering upstream (design and manufacturing) and downstream (waste management)
- New or improved legislation on 3R
- Establishing clear targets for waste reduction and recycling in regulation
- Stable, effective and enabling policy, fiscal support and incentives by the government

Expected Strategy on 3R

(Methodology)

- Promotion of capacity development on 3R
- Facilitation of pilot/demonstrative project implementation
- Collaboration/linkage with municipalities, business sectors and NGOs/CSOs
- Environmental Education and Public Awareness
- Information Service

Regional Cooperation

- 3R SOM, March 2006
- 3R South Asia Workshop, 31-2 Aug.2006
- The Asia 3R Conference, 30-1 Nov.2006
- 3R South East Asia Workshop, Feb.2007
(tentative)

3R Knowledge Hub



**ADB, AIT, ESCAP,
UNEP**

- Partnership was Launched to Create '3R' Knowledge Hub on 7 August 2006 (Letter of Intent signed)
- The knowledge hub will function as a **think tank** on technology, good practices, policy strategy and management, and issues related to 3R, which promotes sustainable production and consumption of limited natural resources, and improved economic and environmental efficiency.

Functions of 3R Knowledge Hub

- Undertake research and disseminate new concepts on 3R to the region's developing countries and other stakeholders
- Promote sharing of information on development related topics and collaborations in providing new and constantly updated content on 3R throughout the region
- Build research capacity to create knowledge in the area of 3R
- Liaise with academic, research, and scientific and technical institutions, the private sector, and civil society
- Devise and disseminate new information products on 3R, including periodicals, website and newsletters, workshops, and training courses

Main Activities

- Create, collect and capture 3R knowledge
- Storage and retrieval of 3R knowledge
- Share, enrich, and disseminate 3R knowledge
- Monitoring and management of 3RKH

Waste to Energy

- Waste to combustion for incinerator from palm waste, cane bagasse etc.
- Organic Waste can be turned into;
 - Ethanol from cane bagasse, cellulose
 - Methane from landfill, livestock/forest/agriculture waste such as casaba waste
 - Bio Diesel Fuel from waste cooking oil

Type of Biomass

- ***Agricultural Waste*** : Rice husk, Rice straw, Grasses, Rapeseed, Bagasse
- ***Livestock Waste*** : Dung of cattle and pig, Fowl dropping
- ***Forestry resources*** : Thinnings, Forest residues, Branches and tops
- ***Industrial Waste*** : Wood waste, Architectural waste, Organic sludge, Black liquor
- ***General Waste*** : Garbage, Cooking oil waste
- ***Others*** : Landfill gas, Mixed intensive treatment

Biomass Industrial Complex Network of Distributed Small Industries

