

“State of the 3Rs in Asia and the Pacific” project

Nguyen Trung Thang (ISPONRE)

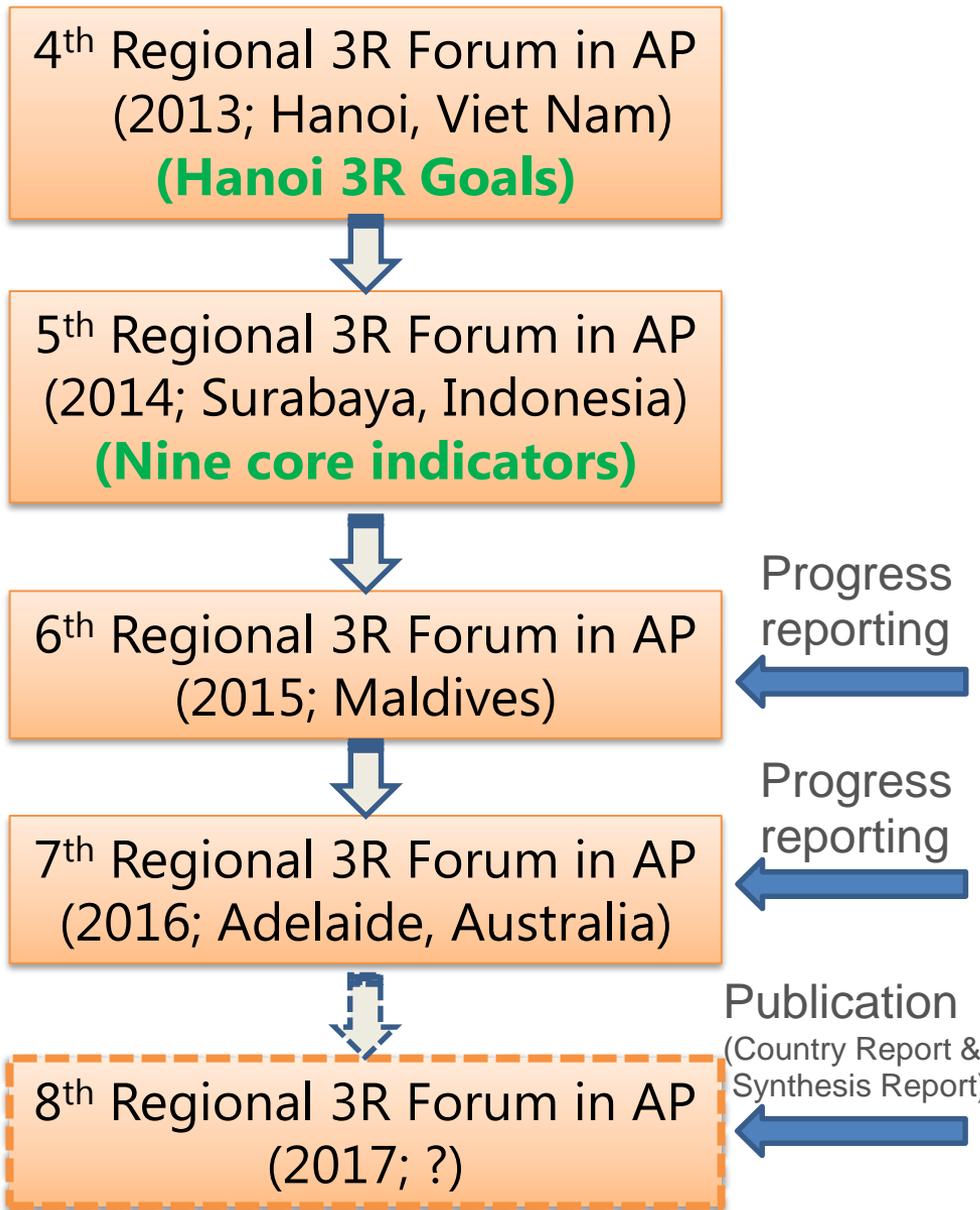
On behalf of Drafting Committee of the
State of the 3Rs in Asia and the Pacific

(UNCRD, IGES, IDE-JETRO, Kyoto University, Tottori University, University of Tokyo, NIES of Japan, ISPONRE of Viet Nam, The Promotion of Low Carbon City across Thai Municipalities, Chulalongkorn University, Tsinghua University, University of Philippines Los Banos, North South University, SPREP, Japan Waste Management and 3R Research Foundation, Anna University, University of Phnom Penh, CSIR Indian Institute of Petroleum, National Environment Agency of Singapore, University of Malaya (UM), Asia Institute of Technology (AIT), Institut Teknologi Bandung (ITB))

About “State of the 3Rs in Asia and the Pacific”

- The overall **objective** is to provide knowledge base to assist the member countries of the Regional 3R Forum in AP at **for improved decision making towards effective implementation of 3R** and **environmentally sound waste management** at local/national level.
- Provide technical inputs to policy consultation at the forum (both processes are complementary)
- **A collaborative initiative** among member countries, 3R forum secretariat and experts
- It also aims to contribute to **Sustainable Development Goals (SDGs) process** by providing progress of 3R policy indicators in the region.

3R Forum ↔ “State of the 3Rs in AP” Project



Structure of “State of the 3Rs in Asia and the Pacific”

Part 1: Synthesis Report

State of the 3Rs in Asia and the Pacific

- Expert’s Assessment of Progress in Hanoi 3R Goals-

Part 2: Country Reports

Case of progress of 3Rs in AP region

- * The 1st series of the work is based on case studies from **11 countries** (Bangladesh, Cambodia, China, India, Indonesia, Japan, Malaysia, Philippines, Singapore, Thailand, Viet Nam) and **a region** (Pacific Island countries).
- * The 1st series of publication will be provided as inputs to Regional 3R Forum in AP to be held in **2017-2018**.

Current Status & Follow-up of *Country Reports*

- Secretariat of Drafting Committee

- Sent request to nominated government officials (Malaysia, China, Thailand and Indonesia) for comments/inputs
- by Mid. October.

Malaysia, Viet Nam, China, Japan, Thailand has been prepared.

- IGES

- English/Style editing
- Coordinating among stakeholder



Once comments come, we will feedback the author and incorporate experts to those and will publish in order.

Contents of Country Reports

- A. Waste Definition and Categorization
- B. Country's Basic Policy Direction Past and Future
- C. 3R indicators based on 9 core indicators proposed at the regional 3R Forum in Surabaya
 - ① Total MSW Generated and MSW Generation Per Capita
 - ② Overall Recycling Rate and Target (%) and Recycling Rate of Individual Components of MSW
 - ③ Amount of Hazardous Waste Generated and Disposed in Environmentally Sound Manner
 - ④ Indicators based on macro-level material flows
 - ⑤ Amount of agricultural biomass to be used
 - ⑥ Marine & coastal plastic waste quantity
 - ⑦ Amount of E-waste Generation, Disposal and Recycling.
Existence of policies and guidelines for E-waste management
 - ⑧ Existence of policies, guidelines, and regulations based on the principle of extended producer responsibility (EPR)
 - ⑨ GHG Emission from waste sector
- D. Experts Assessment on 3R Policy implementation

Contents of Synthesis Report (tentative)

Executive Summary

1. Background and Scope of Work
2. Urgent Needs and Multiple Benefits of Improving 3R Approach in AP
3. Major Trends of 3R policy Implementation in AP
 - 3.1. Trends in 3R and Waste Management Policies and Responses
 - 3.2. Trends of Key Concerned Waste Streams (MSW, HW, Agricultural Biomass Use, E-waste, Marine & Coastal Plastic)
 - 3.3. Trend of Global Waste Issues (Macro-Level Material Flow, Greenhouse Gas Emission)
4. General Assessment of Related Hanoi 3R Goals
5. Recommendation (short-term / medium and long-term)

Images of some data for Synthesis Report

MSW Generation & MSW Generation per capita - 1

Country	Trend	Notes
Japan	<p>(10³ tonne/year) (kg/person/day)</p> <p>— MSW — MSW per capita</p>	<p>Includes all waste except industrial waste. Total population. Survey data at source. Source: MOEj statistics.</p>
China	<p>(10³ tonne/year) (kg/person/day)</p> <p>— MSW — MSW per capita</p>	<p>Collected and transported waste by municipality. Not include recyclable waste such as paper, bottles, cans and etc. Urban population. Weighted data at waste transfer center. Source: Statistical yearbook.</p>
Malaysia	<p>(10³ tonne/year) (kg/person/day)</p> <p>— MSW — MSW per capita</p>	<p>It includes all waste except for scheduled waste. Total population. The data is a combination of real time data collected at source and also data estimated.</p>

MSW Generation & MSW Generation per capita - 2

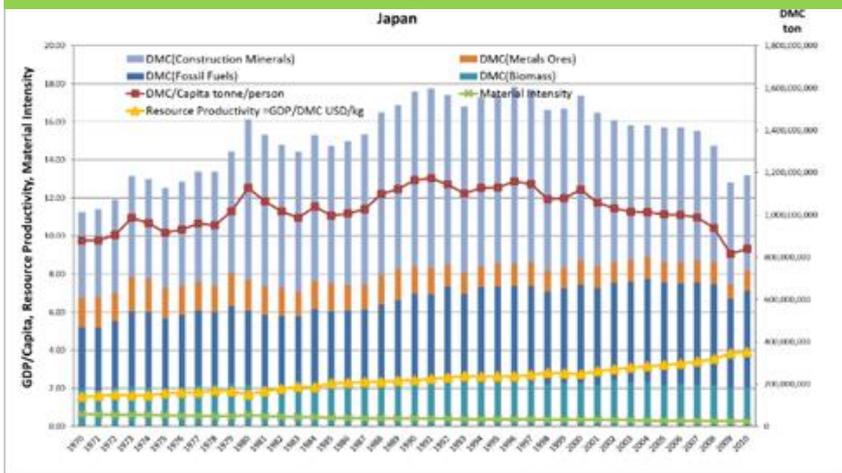
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Indonesia	<p>In 2007, 38.5 million tonnes/year; 0.45 kg/person/day.</p>																																											

Status of implementation of EPR-based legislations and policies in the selected countries in AP

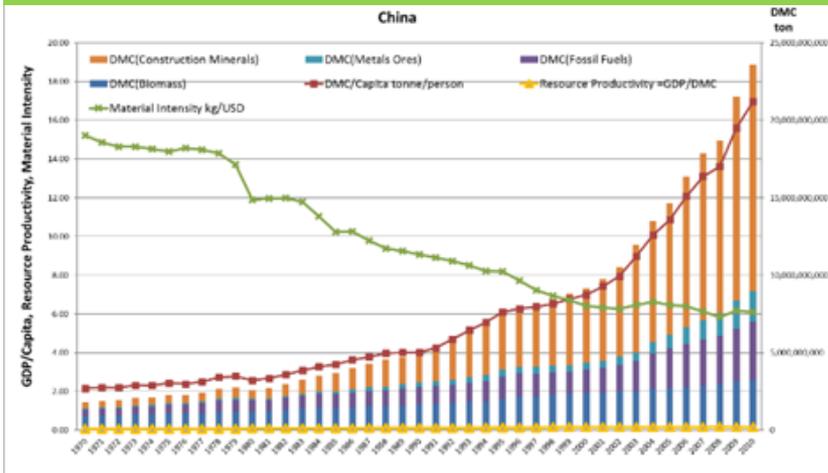
	Fully implemented	Postponement period before full implementation	Specific legislations are under preparation	Existence of provisions supporting EPR principle	Based on voluntary approach/ agreement
Bangladesh	N.A.	N.A.	N.A.	N.A.	N.A.
Cambodia	N.A.	N.A.	N.A.	N.A.	N.A.
India	E-waste rules (IT products and home appliances, E. 2011) Battery rules (lead acid batteries, E. 2010)	N.A.	N.A.	N.A.	N.A.
Japan	Law for promotion of effective utilization of resources (Revised 2000, FI. 2001) Container and packaging recycling act (E.1995. FI. 2000) Home appliance recycling act (E. 1998, FI. 2001) End of life vehicles recycling act (E. 2000, FI. 2005) Small appliances recycling act (E. 2012, FI. 2013)	N.A.	N.A.	Basic Act for Establishing Sound Material Cycle Society	voluntary take-back under Law for promotion of effective utilization of resources

DMC, Material intensity and Resource productivity

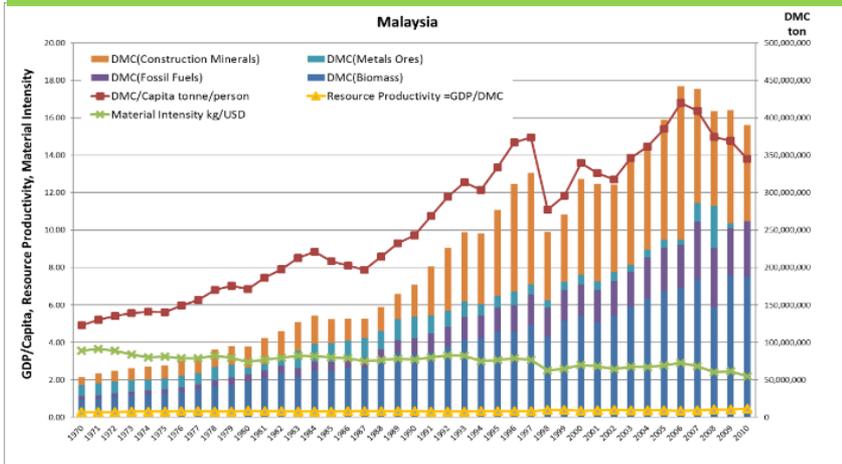
Japan



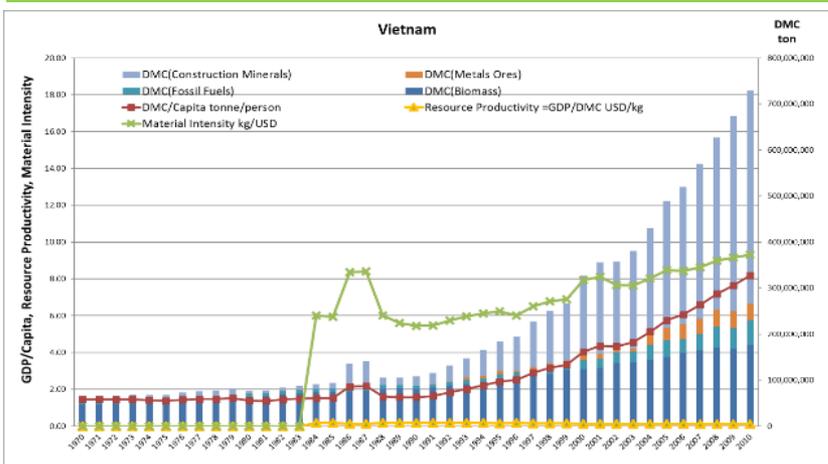
China



Malaysia



Viet Nam



(Based on UNEP-Live)

Current situation of progress on the related 3R goals (image not final)

Hanoi Goals	Assessment (⊙ achieve progress; ○ started to implement; △ the regulation has been issued but not yet implemented; — No data/information)						
	Viet Nam	Indonesia	Thailand	Philippines	Pacific region	Cambodia	Bangladesh
Goal 1: MSW	—	○	○	—	○	○	△
Goal 3: Recycling rate	⊙	—	○	○	—	—	—
Goal 9: HW	○	○	—	○	○	○	○
Goal 17: Resource efficiency	—	—	○	△	○	—	—
Goal 11: Agricultural biomass	⊙	⊙	○	—	○	○	—
Goal 12: Marine waste	—	—	○	—	○	—	—
Goal 13: E-waste	—	—	○	—	○	○	△
Goal 15: EPR	△	△	△	—	○	—	△
Goal 18: Climate Change	○	—	○	—	○	—	○

(Based on the information by each countries' experts)

Expected Outputs

- **Synthesis report** on current status of 3R policy implementation in the region;
- **Regular update of data** regarding selected 3R policy indicators;
- **Establishment of a knowledge platform** on progress of 3R policy implementation at local and national level;
- **Assist to establish thematic expert working groups** on various common themes on 3R policy in the region, which aims to develop common understanding/guideline/policy discussion papers to facilitate multi-stakeholders dialogues;
- **Science-based advice to Regional 3R Forum in AP** on existing and future challenges.

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