
Developing State of the 3Rs in Asia and the Pacific Report

Y. Hotta¹, C. Liu¹, and Y. Totoki¹

¹Institute for Global Environmental Strategies, 2108-11 Kamiyamaguchi, Hayama, Kanagawa,
240-0115 Japan

e-mail: hotta@iges.or.jp; phone:+81-46-855-3859; fax: +81-46-855-3809

Abstract

State of the 3Rs in Asia and the Pacific Project was formulated as a joint initiative of Ministry of the Environment of Japan (MOEJ), United Nations Centre for Regional Development as a secretariat of Regional 3R Forum in Asia and the Pacific, and Institute for Global Environmental Strategies (IGES) to respond the needs to assess the progress of 3R-related efforts in the region based on a bottom-up process of policy-relevant data gathering on waste and resources management. This project was established to contribute to the only regional forum on waste management and the 3R policy participated by 12 countries in Asia and the Pacific region. It is intended to provide base-line information on what we know about waste and 3R-related data in each country by top-experts in the region. By doing so, this project is to develop regional assessment report on 3R policy implementation in a regular manner for Regional 3R Forum in Asia and the Pacific. The first publication will be provided as inputs to Regional 3R Forum in Asia and the Pacific to be held in 2017-2018. This presentation provides overview of development process, progress, and main findings from this process.

Keywords: The 3Rs (reduce, reuse, and recycle), indicator, policy, Regional 3R Forum in Asia and the Pacific

1. Introduction

State of the 3Rs in Asia and the Pacific Project was formulated as a joint initiative of Ministry of the Environment of Japan (MOEJ), United Nations Centre for Regional Development as a secretariat of Regional 3R Forum in Asia and the Pacific, and Institute for Global Environmental Strategies (IGES) to respond the needs to assess the progress of 3R-related efforts in the region based on a bottom-up process of policy-relevant data gathering on waste and resources management. This project was established to contribute to the only regional forum on waste management and the 3R policy participated by 12 countries in Asia and the Pacific region. It is intended to provide base-line information on what we know about waste and 3R-related data in each country by top-experts in the region. By doing so, this project is to develop regional assessment report on 3R policy implementation in a regular manner for Regional 3R Forum in Asia and the Pacific. The first publication will be provided as inputs to the next Regional 3R Forum in Asia and the Pacific to be held in 2017 in India.

wastes, and goals for cross-cutting issues. It also proposed associated sample indicators to monitor the progress of implementation of these goals.

For developing indicators for 3R goals for the Regional 3R Forum in Asia and the Pacific, a collaborative research group focused on policy research on 3R promotion in Asia named Asia Resource Circulation Policy Research Group played a major role. 8 priority goals and related indicators are chosen through two workshops held in December 2012 and in February 2013. In March 2013, the group published eight factsheets for 3R policy performance indicators at the 4th Regional 3R Forum in Asia and the Pacific[2]. Then, in December 2013 and January 2014, the group gathered again and discussion focused on a core set of indicators which would be useful for reporting and monitoring of 3R policy implementation in the future.

The nine core indicators proposed at the 5th Regional 3R Forum in Asia and the Pacific (25 Feb 2014 - 27 Feb 2014, Surabaya, Indonesia) [3] are as follows: 1) Total MSW generated and disposed MSW, and MSW generation per capita (by weight), 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 used, 6) Marine and coastal plastic waste quantity, 7) Amount of E-waste generation, disposal and recycling and Existence of policies and guidelines for E-waste management, 8) Existence of policies, guidelines and regulations based on the principle of EPR, and 9) Greenhouse Gas (GHG) emissions from waste sector.

2. Materials and Methods

Since the launch of Regional 3R Forum in Asia and the Pacific in 2009, it seems that policy issues and priorities in Asia were well-discussed and shared among member countries. Indeed, the 4th Meeting of Regional 3R Forum held in Hanoi, Viet Nam, in March 2013, agreed on a Hanoi 3R Declaration [1] which came up with 33 goals relevant to 3R promotion in the participating countries covering the area of municipal solid waste, industrial waste, goals in rural areas, goals for new and emerging

After this, since 2015, 13 country reports are now under development to report the progress of 3R policies in each country and a region; namely, Bangladesh, Cambodia, China, India, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Singapore, Thailand, Viet Nam, and Pacific Island Countries. Based on these contributions, a synthesis report summarizing findings from country reports are under development towards publication in late 2017.

3. Results and Discussion

A synthesis report will be comprised from four major parts; 1) Background and Scope of Work, 2) Urgent Needs and Multiple Benefits of Improving 3R Approach in Asia and the Pacific Region, 3) Major Trends of 3R Policy Implementation in Asia and the Pacific, 4) General Assessment of Related Hanoi 3R Goals, and 5) Analysis and Recommendation.

Main part of this report is the third section titled "Major Trends of 3R policy Implementation in Asia and the Pacific State of the 3Rs" by describing situation of indicators described above. Here, firstly, it overviews national policy and legal framework, definition and classification of wastes, major treatment and 3R-related technologies, and policy based on EPR. Then, it overviews trends in different waste streams; municipal solid waste management, hazardous waste management, agricultural biomass utilization, e-waste management, and marine and coastal plastics based on indicators. It also highlights linkages between issues related to waste management and sustainable resource management as well as climate change.

4. Conclusions

With expectation to be updated in a periodical manner in the future, this international exercise can provide periodical assessment of current status of 3R policy implementation in the region, can compile data-relevant to monitor progress of 3R policy implementation in the region in relation to the Hanoi 3R Declaration, and can contribute to the Regional 3R Forum in Asia and the Pacific by providing science-based advice on existing and future challenges and opportunities for effective 3R implementation in the region. Along with the 3RINCS, it can be developed into a knowledge-basis for thematic working of experts contributing to 3R policy development in the region.

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