

As of 28 September 2021



United Nations Centre for
Regional Development



Ministry of the Environment,
Government of Japan

Provisional Programme of Experts' Workshop for the Second State of the 3Rs and Circular Economy in Asia and the Pacific

Date of Experts Workshop VIII: 28 September 2021 (Tuesday)

Japan Time: 14:30-16:00 PM

Format: WeBex (Online Platform)

Theme: Chemical and Hazardous Waste

Co-organizers:

Ministry of the Environment, Japan (MOEJ)

United Nations Centre for Regional Development (UNCRD) of Division
for Sustainable Development Goals (DSDG) / UN DESA

*Duration of Webinars: Approximately 90 minutes

PROGRAMME OF WORKSHOP

Date: 28 September 2021 (Tuesday)

Japan Time: 14:30-16:00 PM

Theme: Chemical and Hazardous Waste

Short Introduction

This workshop is on the sub-section “3.2.3. Chemical and Hazardous Waste” of the report of “The Second State of the 3RS in Asia and the Pacific - Advancing Circular Economy in Asia and the Pacific Towards Achieving the Sustainable Development Goals (SDGs) –”.

This workshop aims to monitor national policies, standards and implementation in proper classification and inventory of chemical and hazardous waste towards environmentally sound circular economy.

Reference 1: *Table of Content of report*

*“The Second State of the 3RS in Asia and the Pacific
- Advancing Circular Economy in Asia and the Pacific
Towards Achieving the Sustainable Development Goals (SDGs) –”*

Reference 2: *Table of Content of chapter “Chemical and Hazardous Waste”.*

Discussion Points

Discussion Points

- Any major issues including new emerging issues that needs to be highlighted in this section.
- Any potential source of data, information, reports which could be useful for developing this chapter.
- Any specific box, graph and chart that could be included in this chapter. (For example, any new policy initiative that is very effectively

Chair:

Dr. Trung Thang Nguyen,
*Deputy Director General,
Institute of Strategy and Policy on Natural Resources and Environment*

<p>working in a country should be add in box)</p>	<p>(ISPONRE), Ministry of Natural Resources and Environment (MONRE), Vietnam</p>
<p><u>Experts</u></p> <ul style="list-style-type: none"> • Mr. Feroz Muhammadzaie, Nanagarhar Environmental Protection Director, National Environmental Protection Agency, Afghanistan • Ms. Thi Phuong Anh Duong, Researcher, Deputy Head, Department of Environment and Sustainable Development, Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE), Ministry of Natural Resources and Environment (MONRE), Vietnam • Dr. Prabhakar Sripadi, Senior Principal Scientist, Department of Analytical & Structural Chemistry, CSIR-Indian Institute of Chemical Technology, Hyderabad, India • Dr. S Venkata Mohan, Scientist, CSIR-Indian Institute of Chemical Technology, Hyderabad, India • Mr. Jakob Maag, Senior Advisor, Chemicals and Waste Management Programme Unit, United Nations Institute for Training and Research (UNITAR), Switzerland • Mr. Anil Ranveer, Scientist-E, Central Pollution Control Board, New Delhi, India • Ms. Deepti Kapil, Scientist-D, Central Pollution Control Board, New Delhi, India • Dr. Eeva Leinala, Principal Administrator, Environment Health and Safety Division, Organization for Economic Cooperation and Development (OECD), France • Mr. Qingyin Dong, Programme Officer, Basel Convention Regional Centre for Asia and the Pacific, Tsinghua University, PR China • Assoc. Prof. Kitikorn Charmondusit, Vice President for Environment and Sustainable Development/ Lecturer, Mahidol University, Thailand 	<p><u>Facilitator / Moderator:</u> Mr. Choudhury Rudra Charan Mohanty, Environment Programme Coordinator, United Nations Centre for Regional Development (UNCRD)-DSDG/UN DESA, Japan</p> <p><u>Rapporteur:</u> Prof. Jinhui Li, Executive Director of Basel Convention Regional Center for Asia and the Pacific, Professor in School of Environment, Tsinghua University, P.R. China and</p>

<ul style="list-style-type: none"> • Dr. Yuan Chen, Senior Program Officer, Basel Convention Regional Centre for Asia and the Pacific, PR China • Dr. Shunichi Honda, Programme Officer, United Nations Environment Programme, International Environmental Technology Centre (UNEP-IETC), Japan • Dr. Mushtaq Ahmed Memon, Regional Coordinator for Resource Efficiency Subprogramme in Asia and the Pacific, United Nations Environment Programme, Thailand • Mr. Amit Jain, Managing Director, IRG Systems South Asia Pvt. Ltd, India • Mr. Piyush Mohapatra, Senior Program coordinator (Chemicals and Health), Toxics Link, New Delhi, India • Mr. Mridul Chakravorty, Senior Program Officer -Communication, Toxics Link, New Delhi, India • Mr. Takaaki Ito, Director, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan • Mr. Takayuki Shigematsu, Deputy Director, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan • Mr. Koji Maeshima, Deputy Director, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan • Mr. Yasuki Yamamoto, Senior Environment Engineer, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan 	<p>Dr. Anupam Khajuria, Researcher, United Nations Centre for Regional Development (UNCRD)- DSDG/UN DESA, Japan</p>
<p>End of Workshop</p>	

Reference 1: Table of Contents of the report

“The Second State of the 3Rs in Asia and the Pacific - Advancing Circular Economy in Asia and the Pacific Towards Achieving the Sustainable Development Goals (SDGs) –”

1. Background and Scope of Work

- 1.1. About the State of 3Rs in Asia and the Pacific Project
- 1.2. Regional 3R and Circular Economy Forum in Asia and the Pacific, Ha Noi 3R Declaration, and 3R Monitoring Performance Indicators
- 1.3. Structure of this Report

2. Urgent Needs and Multiple Benefits of Implementing 3Rs and Circular Economy Approach in Asia and the Pacific

- 2.1. 3R and Resource Efficiency as the Heart of Circular Economy
- 2.2. Key Factors for Promoting Circular Economy in Asia and the Pacific
 - 2.2.1. Circular Economy towards Sufficiency Economy
 - 2.2.2. Sound Material Flow and Accounting towards Sufficiency Economy
 - 2.2.3. Technology as a Driver for Clean Energy and Green Industry towards Sufficiency Economy
 - 2.2.4. The Importance of Public-Private-Partnership (PPP) for Advancing Circular Economy
 - 2.2.5. 3Rs and Circular Economy under COVID-19 Pandemic
This sub section will aim to address what 3Rs and Circular Economy can offer aftermath of COVID-19

3. Trends of 3R and Circular Economy in Asia and the Pacific

- 3.1. Trends in 3Rs and Waste Management Policies and Responses
This part section will mainly build on by updating the First State of the 3Rs in Asia and the Pacific by addressing the same set of nine indicators selected from the Ha Noi 3R Declaration (2013-2023).
 - 3.1.1. Reduction in the Quantity of Municipal Solid Waste Generated (Goal 1)
 - 3.1.2. Increasing Recycling Rate of Recyclables (e.g., plastic, paper, metal, etc.) (Goal3)
 - 3.1.3. Inventory of Hazardous Waste (Goal 9)
 - 3.1.4. Agricultural Biomass Waste Management (Goal 11)
 - 3.1.5. Eliminating Marine Plastics (Goal 12)
 - 3.1.6. E-Waste Management (Goal 13)
 - 3.1.7. Implementation of Extended Producer Responsibility (EPR) (Goal 15)
 - 3.1.8. Improving Resource Efficiency and Resource Productivity (Goal 17)

3.1.9. Co-benefits for Local Air, Water, Oceans, and Soil Pollution and Global Climate Change (Goal 18)

3.2. Growing Volume and Diversification of Waste Streams with Presence of New Emerging Waste Streams

This section will focus on the emerging waste streams and issues corresponding to the goals and indicators of the Ha Noi 3R Declaration (2013-2023)

(SDG Tier1 and Tier 2 indicators will be used as applicable for 3.2.1. to 3.2.5.)

3.2.1. Plastic Waste

3.2.2. Electronic waste

3.2.3. Chemical and Hazardous Waste

3.2.4. Construction and Demolition Waste (including Disaster waste)

3.2.5. Agricultural Biomass Waste and Livestock Waste

3.2.6. Food Waste

3.2.7. Healthcare and Medical Waste

3.2.8. Wastewater Treatment

3.2.9. Data Issues on new emerging waste streams

3.3. Conventional and Frontier Technologies in Advancing 3Rs and Circular Economy in Asia-Pacific

This section will address policy and technology choices made countries in following areas

3.3.1. Waste-to-Energy

3.3.2. Biobased Plastics and Biodegradable Plastics

3.3.3. Used Tire for Roads Construction

3.3.4. Plastics as Alternative Timber (for example-Case of Australia)

3.3.5. Application of Smart Technology

3.3.6. End of Life Batteries

3.3.7. Carbon Neutralization Technology

3.3.8. Assessment of world cases and best practices of circular economic utilization of food waste

3.4. Progress towards Implementation of the Ha Noi 3R Declaration (2013-2023)

3.4.1. 3R Policy Implementation in Asia and the Pacific

This sub-section will address policy progress in 3Rs and circular economy among countries

3.4.2. Nationally Implemented 3R-Related Programmes, Projects, and Master Plans

- Introduction of a fee for plastic bags in Japan / New Integrated Plastics Resource Management Policy of Japan (for example)
- Similar cases in Asia and the Pacific

4. Experts' Assessment of Policy Readiness for Related Ha Noi 3R Goals and Progress at National Level

This chapter will have comprehensive overview of the countries' progress made on the Ha Noi 3R Goals (2013-2023)

5. Main Recommendations

Reference 2: Table of Content of the Chapter “Chemical and Hazardous Waste”

3.2.3. Chemical and Hazardous Waste

3.2.3.1. Regional Overview in Asia and the Pacific region

(Include - The status of resource circulation and waste management in each country/ region, together with comparative data of each indicator.)

- i. Definition *(Include varies country by country)*
- ii. Types of chemical and hazardous waste by sources *(focus on specific types in Stockholm and Rotterdam Convention and GCO-Global Chemical Outlook)*
- iii. Quantification and Generation of chemical and hazardous waste (2020-2030) in the region
- iv. Chemical and hazardous material consumption and material trade in the region (2020-2030)
- v. Negative impact on public health and environment

3.2.3.2. Overall Assessment on National Policies, Regulations, Standards and Inventory in Asia and the Pacific

(Include - Organized information of policies and regulations designed for each sector in each country. In particular, it is important to make readers understand what are common & similar polices and challenging issues.)

(This 3.2.3.2. should be developed based on the Ha Noi 3R Goal 9 (HNG9. Indicator of the HNG9: develop proper classification and inventory of hazardous waste as a prerequisite towards sound management of hazardous waste).

- i. National policies and regulations including policy and institutional issues and technical gaps
- ii. Occupational safety and health standards of waste workers *(Include SDG 3: Ensure healthy lives and promote well-being for all at all ages)*
- iii. Protective measures of informal and formal workers with regulatory framework
- iv. International conventions of chemicals and hazardous waste *(Include- Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement)*
- v. Existence of framework for bilateral and multilateral cooperative activities *(Include HNG26: Facilitate the international circulation of re-usable and recyclable resources as well as remanufactured products as mutually agreed by countries and in accordance with*

international and national laws, especially the Basel Convention, which contributes to the reduction of negative environmental impacts and the effective management of resources).

3.2.3.3. Circular Economic opportunities of chemical and hazardous waste
(Include- The status of achievement in each sector based on Hanoi 3R Declaration and revealed problems to be solved. The section should consolidate Hanoi declaration and SDGs goals, and a discussion on the Post Hanoi declaration.)

(Include Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment).

- i. Amount of illegal dumping and/or inappropriate disposal of chemical and hazardous waste and its sites
- ii. Treatment technology, methods and capacity, and final disposal.
- iii. Insights from a various case study *(include case -involvement of Informal sector)*
- iv. 3Rs for reducing negative environmental impacts

3.2.3.4. Conclusion and Way Forward