

As of 21 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 VII: 21 September 2021 (Tuesday)

Japan Time: 14:30-16:00 PM

Format: WeBex (Online Platform)

Theme: Healthcare and Medical 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: 21 September 2021 (Tuesday)

Japan Time: 14:30-16:00 PM

Theme: Healthcare and Medical Waste

Short Introduction

This workshop is on the sub-section “3.2.7. Healthcare and Medical 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 describe progress on describe national policies, programmes and its implementation to eliminate illegal disposal and improper treatment of healthcare and medical waste.

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 “Healthcare and Medical 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:

Mr. Vijay Prakash Yadav,
*Additional
Director,
Central
Pollution
Control Board,
Delhi, India*

working in a country should be add in box)	
<p><u>Experts</u></p> <ul style="list-style-type: none"> • Dr. Trung Thang Nguyen, Deputy Director General, Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE), Ministry of Natural Resources and Environment (MONRE), Vietnam • Ms. Youthika Puri, Working as Scientist 'D', Central Pollution Control Board, Delhi, India • 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 Malini R Capoor, Professor Microbiology, In-charge Biomedical Waste, VMMC and Safdarjung Hospital, New Delhi, India • Prof. Iris Borowy, Distinguished Professor, Center for the History of Global Development, College of Liberal Arts, Shanghai University, PR China • Mr. Guilberto Borongan, Head of Waste and Resource Management Cluster, Regional Resource Centre for Asia and the Pacific (AIT RRC.AP) Asian Institute of Technology, Thailand • Mr Hussain Rasheed, Regional Advisor WASH and Climate Change, World Health Organization, Office for Southeast Asia region, India • Ms. Misato Dilley, Associate Expert, United Nations Environment Programme, International Environmental Technology Centre (UNEP-IETC), Japan • Ms. Miho Hayashi, Programme Manager, CCET, Institute for Global Environmental Strategies (IGES), Japan 	<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. Sadhan Kumar Ghosh, President, International Society of Waste Management, Air and Water (ISWMAW), Professor, Jadavpur University, Kolkata, India and Dr. Anupam Khajuria, Researcher, United Nations Centre for Regional Development (UNCRD)-DSDG/UN DESA, Japan</p>

- **Prof. Shinichi Sakai**, Vice President, Advanced Science, Technology & Management Research Institute of Kyoto (ASTEM), Japan
- **Mr. Amit Jain**, Managing Director, IRG Systems South Asia Pvt. Ltd, India
- **Mr. Jupei Yabushita**, Senior Environmental Engineer, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan
- **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

End of Workshop

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 “Healthcare and Medical Waste”

3.2.7. Healthcare and Medical Waste

3.2.7.1. Overall Trends in Asia and the Pacific

(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 healthcare and medical waste by sources
(Include hospitals, individual houses etc.)
- iii. Quantification and Generation of healthcare and medical waste generation (2020-2030) in the region
- iv. Negative impact on public health and environment

3.2.7.2. Local and National Policies, Legislation and Regulations in Asia and the Pacific

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

- i. Local, regional and national policies and regulations including policy and institutional 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 frameworks.

3.2.7.3. Circular Economic opportunities of healthcare and medical 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 following indicators- Ha Noi 3R Goal 16: Promote the 3R concept in health-care waste management; and Ha Noi 3R Goal 22: Integrate the 3R concept in relevant policies and programmes, of key ministries and agencies such asMinistry of Health and other relevant ministries towards transitioning to a resource efficient and zero waste society.

Include -SDG 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 medical and healthcare waste and its sites
- ii. Role of the Informal Sector
- iii. Treatment technology, methods and capacity, and final disposal.
- iv. Insights from a various case study
- v. Emergency response during pandemic such as COVID-19

3.2.7.4. Conclusion and Way Forward