

Zero Draft

Ha Noi 3R Declaration - Sustainable 3R Goals for Asia for 2013-2023 -

Preamble

We, the representatives of Asia-Pacific countries (Bangladesh, Brunei Darussalam, Cambodia, People's Republic of China, Fiji, India, Indonesia, Japan, Kiribati, Republic of Korea, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Palau, the Philippines, Samoa, Singapore, Solomon Islands, Thailand, Timor Leste and Viet Nam), international organizations, bilateral and multilateral agencies, research organizations, and professionals on waste management, who have met at the Fourth Regional 3R Forum in Asia, held in Ha Noi, Viet Nam, from 18 to 20 March 2013, to demonstrate our renewed commitment to realizing a promising decade (2013-2023) of sustainable actions and measures for achieving resource efficient society and a green economy in Asia and the Pacific through the implementation of the 3Rs (reduce, reuse, and recycle),

Reaffirming, as noted in the Johannesburg Plan of Implementation (JPOI), the need for consolidated efforts to prevent and minimize waste and to maximize reuse, recycling and use of environmentally friendly alternative materials, with the participation of government authorities and all stakeholders, in order to minimize adverse effects on the environment and improve resource efficiency,

Noting the key global issues in the waste sector highlighted at the 18th and 19th sessions of the Commission on Sustainable Development held in 2010 and 2011, such as: the need to move towards a zero waste society; the requirement for a special attention on particular types of waste, in particular the emerging new waste streams such as electronic waste, plastics in the marine environment, and oil and lubricants; the critical role of partnerships and international cooperation; and the significance of education and public awareness that lead to behavioral change,

Reaffirming and building upon the *Tokyo 3R Statement* agreed upon by the participants at the Inaugural Meeting of the Regional 3R Forum in Asia, held in Tokyo, Japan, on 11 and 12 November 2009, which endorsed the establishment of the Forum and set the regional priorities in the area of the 3Rs, and subsequently on the outcome of the Second Regional 3R Forum held in Kuala Lumpur, Malaysia on 4 to 6 October 2010, which addressed the 3Rs for Green Economy and Sound Material-Cycle Society,

Building on the *Recommendations of the Singapore Forum on the 3Rs in Achieving a Resource Efficient Society in Asia*, annexed to the Chair's Summary of the Third Regional 3R Forum held in Singapore on 5 to 7 October 2011 and submitted by the Government of Singapore to the Rio+20 process as an official input, which listed a comprehensive set of recommendations covering a wide range of sectors based on the fundamental understanding that the 3Rs is intrinsically linked with resource efficiency in a wide range of sectors such as agriculture, industry, and energy, among others, towards transitioning to a resource efficient and a green economy,

Underscoring the critical importance of improving water use, central to all the other dimensions of sustainable development, and the fact that a third of the world population is affected by water scarcity, which is further compounded by widespread discharge of wastes and untreated industrial effluents into rivers, water bodies, and valuable wetlands in many parts of the world, and thereby **noting** the important nexus between protection of freshwater resources and integrated waste management,

Noting the growing urbanization along with the diversification of waste streams worldwide as well as the growing presence of chemicals and hazardous and toxic elements in the general waste stream, which requires a more extensive collaboration and partnerships among the different stakeholders – governments, civil society, private sector, local communities, and the UN system, to deal with such complex and daunting nature of waste management challenges faced by local authorities and municipalities, and thereby further **noting** the objectives of IPLA¹,

Acknowledging the unique and effective roles the 3Rs can play by offering a complementary and integrated package of measures and tools to harness recyclable resources, energy, and economic benefits from waste,

Recognizing that the 3R approach, which is fundamentally an approach that requires efficient use of resources from the point of extraction up to their final disposal, could make significant contribution in reducing greenhouse gas emissions from the entire life-cycle of resources and products,

Noting the rapid growth of resource use in the Asia-Pacific region in the last three decades and the huge potential for future growth, and also **noting** the rapid growth of energy use in the region, now accounting to over 35% and expected to grow further under the business as usual scenario², thereby **recognizing** the need to increase resource and energy efficiency for sustainable development in Asia and the Pacific,

Affirming the recommendation made by the United Nations Secretary-General's High-Level Panel on Global Sustainability, in its report titled "Resilient people, resilient planet: A future worth choosing," that Governments should adopt whole-of-Government approaches to sustainable development issues, under the leadership of the Head of State or Government and involving all relevant ministries for addressing such issues across sectors (Recommendation 42),

Noting the importance of adopting a life cycle approach and of further development and implementation of policies for resource efficiency and environmentally sound waste management as contained in the Outcome of the Rio+20 – the United Nations Conference on Sustainable Development (UNCSD) - "The Future We Want", and wherein, the Heads of States and Governments committed to further reduce, reuse and recycle waste (3Rs) and to increase energy recovery from waste, with a view to managing the majority of global waste, including e-waste and plastics that pose particular challenges, in an environmentally sound manner and, where possible, as a resource,

¹ International Partnership for Expanding Waste Management Services of Local Authorities (IPLA), a UN registered partnership launched at CSD-19, New York, on 12 May 2011.

² UNEP, 2011. *Resource Efficiency: Economics and Outlook for Asia and the Pacific*. Nairobi, UNEP.

Noting further the call of the Heads of States and Governments at Rio+20 for the development and enforcement of comprehensive national and local waste management policies, strategies, laws and regulations, and new and innovative public-private partnerships among industry, governments, academia and other non-governmental stakeholders aiming to enhance capacity and technology for environmentally sound chemicals and waste management, including for waste prevention,

Express our intent to voluntarily develop, introduce and implement policy options, programmes, and projects towards realizing the following sustainable 3R goals in the region, with an ultimate goal of achieving a resource efficient and resilient society and transitioning to a green economy:

Sustainable 3R Goals (3RGs) for Asia for 2013-2023

I. 3R Goals in the Urban/Industrial Areas

a) 3Rs in municipal solid waste

- Goal 1: Significant **reduction** in the quantity of **municipal solid waste** generated, by instituting policies, programmes and projects at national and local levels, encouraging both producers and consumers to reduce the waste.
- Goal 2: Full scale utilization of **organic component of municipal waste** as valuable resource, thereby achieving multiple benefits such as the reduction of waste flows to final disposal site, reduction of GHG emission, improvement in resource efficiency, and energy recovery.
- Goal 3: Achieve significant **increase in recycling rate** of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders (e.g., producers, consumers, recycling industry, users of recycled materials, etc.).
- Goal 4: Complete elimination of **illegal engagement of children** in the **informal waste sector** and **improve** the working conditions and livelihood security, including **mandatory provision of health insurance** for all workers.
- Goal 5: Build **sustainable cities** by encouraging “**zero waste**” through sound policies, strategies, institutional mechanism, and multi-stakeholder partnerships (with specific importance to private sector involvement) with primary goal of **waste minimization**.

b) 3Rs in Industrial sector (including SMEs)

- Goal 6: Encourage **private sector**, including small- and medium-sized enterprises (**SMEs**) to implement measures to increase **resource efficiency and productivity**, and to improve **environmental practices**.

- Goal 7: Promote the **greening of the supply chain** by encouraging industries and associated suppliers and vendors.
- Goal 8: Promote **industrial symbiosis** (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support.
- Goal 9: Build **local capacity** of both current and future practitioners, to enable private sector (including SMEs) obtain the necessary knowledge and technical skills to foster green industry.
- Goal 10: Develop proper **classification and inventory of hazardous waste** as a prerequisite towards sound management of hazardous waste.

II. 3R Goals in Rural Areas

- Goal 11: **Reduce losses in the entire food supply chain** (production, post harvesting and storage, processing and packaging, distribution), leading to reduction of waste while increasing the quantity and improving the quality of products reaching the consumers.
- Goal 12: Promote full scale **use of agricultural biomass waste and livestock waste** through reuse and/or recycle measures as appropriate, to achieve a number of co-benefits including GHG emission reduction, energy security, sustainable livelihoods in rural areas and poverty reduction, among others.

III. 3R Goals for New and Emerging Wastes

- Goal 13: Strengthen regional, national and local efforts to address the issue of **plastic waste** in the marine and coastal environment.
- Goal 14: Ensure **environmentally sound management of e-waste** at all stages, including collection, storage, transportation, recovery, treatment and disposal, with appropriate considerations on **health and safety aspects** of those involved.
- Goal 15: Establish effective mechanisms for **preventing inappropriate export and import of waste**, especially hazardous waste and e-waste.
- Goal 16: Progressive implementation of **“extended producer responsibility (EPR)”** by encouraging producers, importers and retailers to cover the cost of collecting, recycling and disposal of e-waste.

IV. 3R Goals for Cross-cutting Issues

- Goal 17: Improve **resource efficiency and resource productivity**, and **promote green jobs** nation-wide in all economic and development sectors.

- Goal 18: Enhance **national and local knowledge base and research network on the 3Rs and resource efficiency**, through facilitating an effective and dynamic linkage among government, private sector and scientific community.
- Goal 19: Raise **public awareness** on the 3Rs, sustainable production and consumption, and resource efficiency, leading to the behavioral change of the citizens.
- Goal 20: Integrate the 3Rs in formal **education** at primary, secondary and tertiary levels.
- Goal 21: **Integrate the 3R concept** in relevant policies and programmes of key ministries and agencies such as Ministry of Agriculture, Forestry and Fisheries, Ministry of Industry, Ministry of Trade and Commerce, Ministry of Energy, Ministry of Water Resources, Ministry of Transport, Ministry of Health, Ministry of Construction, Ministry of Finance, towards transitioning to a resource efficient and zero waste society.
- Goal 22: Promote **green procurement** at all levels, thereby creating and expanding 3R industries and markets for environmentally friendly goods and products.
- Goal 23: **Phase out harmful subsidies that favor unsustainable use of resources (raw materials and water) and energy**, and to channel the freed funds in support of implementing the 3Rs and efforts to improve resource/energy efficiency.
- Goal 24: **Protect public health and local ecosystem, including freshwater resources** by complete elimination of open dumping and open burning waste in both urban and rural areas.

Annex 1:**Commonly Agreed Core Set of 3R Indicators for monitoring the progress made by countries**

This annex outlines the type of indicators that countries may consider in achieving a resource efficient society and a green economy, through the implementation of the 3Rs. The Ha Noi 3R Declaration is a voluntary document, and thus countries may opt for developing a number of additional / alternative indicators and measures to monitor progress in their respective countries.

The objective of such comprehensive list of indicators is to provide guidelines for objective measurement and monitoring of the implementation of the 3Rs to achieve the desired goals.

The countries may wish to develop their own set of indicators in order to set **specific, quantifiable targets with a timeframe** using these recommended set of indicators below, against which the progress can be monitored and reported in a systematic manner.

GOALS	MONITORING INDICATORS
I. 3R Goals in the Urban/Industrial Areas	
a) 3Rs in municipal solid waste	
1) Significant reduction in the quantity of municipal solid waste generated, by instituting policies, programmes and projects at national and local levels, encouraging both producers and consumers to reduce the waste.	<ul style="list-style-type: none"> - Total generation of MSW per capita. - Total amount of MSW going to landfill. - Number of ISWM/3R or other relevant policies and programmes introduced at local levels. - Specific policies and mechanisms that lead to reduction of disposable plastic bags, packaging, and other single-use consumer products, - Annual government expenditure per capita on consumer awareness raising.
2) Full scale utilization of organic component of municipal waste as valuable resource, thereby achieving multiple benefits such as the reduction of waste flows to final disposal site, reduction of GHG emission, improvement in resource efficiency, and energy recovery.	<ul style="list-style-type: none"> - Organic waste landfilled per capita, or per amount landfilled. - Amount of organic component of MSW composted. - Amount of organic waste component of MSW treated by anaerobic digestion. - Number of cities that have introduced successful source separation programmes.
3) Achieve significant increase in recycling rate of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders (e.g., producers, consumers, recycling industry, users of recycled materials, etc.).	<ul style="list-style-type: none"> - Recycling rate (%) of paper - Recycling rate (%) of plastic - Market size of recyclables - New policy/programme/system/measure introduced, or existing policy/programme/measure/system strengthened. - Number of state-of-art recycling facilities for key recyclables. - Employment in recycling industries - Number of cities that have introduced successful source separation programmes.

4) Complete elimination of illegal engagement of children in the informal waste sector and improve the working conditions and livelihood security, including mandatory provision of health insurance for all workers.	<ul style="list-style-type: none"> - Clear policy framework for informal waste sector integration in place. - Waste pickers provided with contributory social security. - Technical support services made available to informal sector in upgrading technology and industrial processes. - Specific welfare programs for women informal workers.
5) Build sustainable cities by encouraging “ zero waste ” through sound policies, strategies, institutional mechanism, and multi-stakeholder partnerships (with specific importance to private sector involvement) with primary goal of waste minimization .	<ul style="list-style-type: none"> - Number of cities adopting zero waste strategies. - National policies and programmes introduced/ strengthened to support local authorities in implementing zero-waste programmes. - Number of PPPs in waste management. - Amount of private sector investment in waste management sector. - Number of registered private sector and firms with track record of providing waste management services.
b) 3Rs in Industrial sector (including SMEs)	
6) Encourage private sector , including small- and medium-sized enterprises (SMEs) to implement measures to increase resource efficiency and productivity , and to improve environmental practices .	<ul style="list-style-type: none"> - Policy instrument(s) that support resource efficiency and productivity are introduced or strengthened at national and local levels. - Number of SMEs receiving expert advice, training, and other support from the Centre of Excellence for resource efficiency (e.g., Cleaner Production Centre). - Annual government expenditure on cleaner production programmes in % of GDP.
7) Promote the greening of the supply chain by encouraging industries and associated suppliers and vendors.	<ul style="list-style-type: none"> - Number of companies that have introduced green supply chain management. - Number of companies that have introduced green accounting/voluntary environmental performance evaluation (ISO14000)
8) Promote industrial symbiosis (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support.	<ul style="list-style-type: none"> - Number of eco-industrial parks & the like. - Policy instrument(s) introduced or strengthened to incentivize industrial symbiosis. - Recycling rate (%) of industrial waste from selected sectors.
9) Build local capacity of both current and future practitioners, to enable private sector (including SMEs) obtain the necessary knowledge and technical skills to foster green industry.	<ul style="list-style-type: none"> - Number of qualified technical advisors on resource/energy efficiency. - Specific curricular developed and/or introduced for universities, business schools and vocational schools. - Annual government expenditure in building capacity of SMEs in promoting environmentally friendly technologies and practices.
10) Develop proper classification and inventory of hazardous waste as a prerequisite towards sound management of hazardous waste.	<ul style="list-style-type: none"> - Proper classification and inventory of hazardous waste developed.
II. 3R Goals in Rural Areas	
11) Reduce losses in the entire food supply chain (production, post harvesting and storage, processing and packaging, distribution), leading to reduction of waste while increasing the quantity and improving the quality of	<ul style="list-style-type: none"> - Percentage (%) of food loss at each stage of food supply chain.

products reaching the consumers.	
12) Promote full scale use of agricultural biomass waste and livestock waste through reuse and/or recycle measures as appropriate, to achieve a number of co-benefits including GHG emission reduction, energy security, sustainable livelihoods in rural areas and poverty reduction, among others.	<ul style="list-style-type: none"> - Amount of agricultural biomass waste and livestock waste recycled. - Number of new projects initiated that use agricultural biomass waste and livestock waste as material input.
III. 3R Goals for New and Emerging Wastes	
13) Strengthen regional, national and local efforts to address the issue of plastic waste in the marine and coastal environment.	<ul style="list-style-type: none"> - Number of coastal cities with complete ban of use of plastics packaging materials. - Issues of plastic waste considered as part of integrated coastal zone management (ICZM) plans. - National policies concerning plastic wastes developed or strengthened, taking into consideration the impacts of plastic waste in marine and coastal environment. - Regional initiatives initiated/strengthened to address the issue of plastic waste in marine and coastal environment.
14) Ensure environmentally sound management of e-waste at all stages, including collection, storage, transportation, recovery, treatment and disposal, with appropriate considerations on health and safety aspects of those involved.	<ul style="list-style-type: none"> - Formal standards, certification system and licensing procedures established and enforced. - Technical support services made available to informal sector and SMEs involved in e-waste management. - Presence of health insurance programme for informal sector workers. - Number of state-of-art recycling facilities for e-waste (such as mobile phones at their end-of-life),
15) Establish effective mechanisms for preventing inappropriate export and import of waste , especially hazardous waste and e-waste.	<ul style="list-style-type: none"> - Reduction in the number of incidents of illegal exports/imports of e-waste against a measured baseline in a specific year. - Number of well-trained custom officials in tracking illegal exports/imports.
16) Progressive implementation of “ extended producer responsibility (EPR) ” by encouraging producers, importers and retailers to cover the cost of collecting, recycling and disposal of e-waste.	<ul style="list-style-type: none"> - New EPR policies enacted, or existing policies strengthened. - List of (or number of) products and/or product groups targeted by EPR nationally.
IV. 3R Goals for Cross-cutting Issues	
17) Improve resource efficiency and resource productivity , and promote green jobs nationwide in all economic and development sectors.	<ul style="list-style-type: none"> - Economy-wide Material Flow Accounting (MFA) indicators, such as Total Material Requirement (TMR), Direct Material Input (DMI), and Domestic Material Consumption (DMC). - Number of green jobs.
18) Enhance national and local knowledge base and research network on the 3Rs and resource efficiency , through facilitating an effective and dynamic linkage among government, private sector and scientific community.	<ul style="list-style-type: none"> - Policies introduced/strengthened, encouraging interaction between universities and private sector. - Number of collaborative projects, joint conferences and seminars by universities, government and private sector. - Annual government expenditure in support of research and development on the 3Rs.

19) Raise public awareness on the 3Rs, sustainable production and consumption, and resource efficiency, leading to the behavioral change of the citizens.	<ul style="list-style-type: none"> - Number of NGOs actively engaged in 3R promotion (e.g., waste reduction, recycling, composting, and green purchasing). - Annual government expenditure in public extension programmes. - Existence of national association of waste management and recycling professionals.
20) Integrate the 3Rs in formal education at primary, secondary and tertiary levels.	<ul style="list-style-type: none"> - Number of universities offering courses on the 3Rs and waste management at undergraduate or post graduate levels. - The 3Rs and waste issues integrated into school curriculum.
21) Integrate the 3R concept in relevant policies and programmes of key ministries and agencies such as Ministry of Agriculture, Forestry and Fisheries, Ministry of Industry, Ministry of Trade and Commerce, Ministry of Energy, Ministry of Water Resources, Ministry of Transport, Ministry of Health, Ministry of Construction, Ministry of Finance, towards transitioning to a resource efficient and zero waste society.	<ul style="list-style-type: none"> - Existence of a national 3R task force. - No. of sectoral policies and programmes that have integrated 3R concepts. - Number of cities introducing state-of-art 3R technologies in various sectors.
22) Promote green procurement at all levels, thereby creating and expanding 3R industries and markets for environmentally friendly goods and products.	<ul style="list-style-type: none"> - Number of government ministries that have adopted green procurement policy. - Number of cities that have adopted green procurement policy.
23) Phase out harmful subsidies that favor unsustainable use of resources (raw materials and water) and energy , and to channel the freed funds in support of implementing the 3Rs and efforts to improve resource/energy efficiency.	<ul style="list-style-type: none"> - Subsidies that favor unsustainable use of resources and energy are phased out. - Policy instruments(s) and programmes are in place in support of 3Rs and resource/energy efficiency.
24) Protect public health and local ecosystem, including freshwater resources by complete elimination of open dumping and open burning waste in both urban and rural areas	<ul style="list-style-type: none"> - Number of cities with open dumping/open burning. - Number of major rivers with open dumping and direct discharge of untreated domestic waste and industrial effluents. - Biological Oxygen Demand (BOD) of major rivers, lakes, etc.