

CONCEPT NOTE

Fifth Regional 3R Forum in Asia and the Pacific

25-27 February 2014, Surabaya, Indonesia

Venue: Shangri-La Hotel

Theme: Multilayer Partnerships and Coalition as the Basis for 3Rs Promotion in Asia and the Pacific

1. BACKGROUND

Natural resources and ecological assets are being depleted across many parts of Asia and the Pacific region along with the rising economy, unprecedented urbanization, and consumption trend. Resource efficiency and material efficiency with an underpinning objective to achieve waste prevention and reduction have become a significant part of many government policies and programmes, including macro economic policies. Following the Rio+20 outcomes – *The Future We Want*, a number of countries in Asia and the Pacific region voluntarily agreed the *Ha Noi 3R Declaration – Sustainable 3R Goals for Asia and the Pacific (2013-23)* at the Fourth Regional 3R Forum in Asia held in March 2013. The Declaration aims to provide an important basis and framework for Asia-Pacific countries to voluntarily develop and implement 3R policies and programmes, including monitoring mechanisms to measure their attainments of the underlined goals and targets.

The Fourth Regional 3R Forum, among others, urged the need for a resource-efficient Asia and the Pacific because of its large population, population density, burgeoning economy, and its growing dependence in sourcing natural resources from global markets, and the need to improve the material standard of living of its people. Over the past three decades, Asia has made remarkable progress in human development and improving the material standard of living of its people. Many countries have invested in public infrastructure and urban development and have established a manufacturing base. But at the same time, many countries have become net importers of raw materials (fossil fuel, metals, timber, and other natural resources), the rapidly increasing volume, changing characteristics of urban and industrial waste, increasing consumption and per capita waste generation have posed serious challenges for the sustainability of the region. With the rapidly growing urbanization and associated life style changes, this gives rise to an important fact that the way Asia-Pacific countries will handle and manage their finite resources and natural assets will have tremendous implications on the waste generation (volume, characteristics, and diversification) and their very waste management approach (policy and programmes, technological intervention, institutional capacity and framework, partnerships and collaboration, community participation, etc.) will have significant implications on the sustainability of their natural resources and ecological assets, including societal well-being (decent life, improved living condition and public health).

Moving towards resource efficient and sound material cycle society is inherently a multi-stakeholder process which calls for multilayer partnerships within and between communities, businesses, industries, and all levels of government. In the Rio+20 outcomes document – *The Future We Want*, the Heads of State and high level representatives called for, among others, continued, new and innovative Public-Private Partnership (PPP)s 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; development and implementation of policies for resource efficiency and environmentally sound waste management, including commitment to further 3Rs as well as to increase energy recovery from waste with a view to managing the majority of global waste in an environmentally sound manner.

Such multi-stakeholder partnerships are keys to realizing the thirty-three Goals underlined in the *Ha Noi 3R Declaration (2013-2023)*. But one of the critical challenges is that the capacities of municipalities in most of the developing countries have remained weak and infrastructure investments on waste management are often fraught with financial and technical constraints. The situation is increasingly demanding multi-stakeholder partnerships as the basis for enhancing the capacity of municipalities. In these partnerships, central government and cities need to set overarching 3R policy frameworks, provide viability gap funding and carry out enforcement; private sector should bring in investments, efficiency and technological innovations, and the community should ensure sustainability of the 3R projects by taking full ownership at the grass-root level. There could be many forms of partnerships and cooperation - country-country cooperation, city-to-city cooperation, industry-industry cooperation and triangular cooperation (government-research and scientific institutions, private sector; government-NGOs-community). While city-to-city cooperation is suitable for municipal solid waste management, knowledge and technology transfer, a regional industrial symbiosis could be better implemented through governmental cooperation schemes, mainly through a strong collaboration between national and local government, to deal with industrial wastes. Industrial symbiosis engages traditionally separate industries in a collective approach to competitive advantage involving physical exchange of materials, energy, water, and/or by-products. If effectively pursued, there is a large potential for industrial symbiosis in the emerging heavy and manufacturing industries in Asia-Pacific and also an underutilized potential for metals recycling because of very low recovery rates for many precious metals.

In the face of growing challenges for local and city authorities, PPP needs to form the basis of sustainable waste management and expanding their services for the communities. PPP can create new opportunities for national and local governments to improve waste management services. PPP provide win-win solutions both for the local authorities and private sector if duly supported by appropriate policy frameworks. Such partnerships could lead to savings in municipal budgets, where waste management usually consumes a large portion. The private sector, on the other hand, may use this opportunity to convert waste into environmentally friendly products and energy that could also serve as income generating opportunities. For instance, IPLA, a Rio+20 partnership, aims to foster multi-stakeholder partnerships, in particular PPP, as the basis for expanding waste management services of local authorities and for achieving zero waste society. IPLA network, which has now more than 200 registered members from 62 countries world-wide, could be effectively utilized to this regard. To achieve its full potential, PPPs may require also collaboration with research and development (R&D) institutions in order to develop and implement best practices. R&D is important to lay the basis and to share risks for greening the value chain of various industries

as well as to assist in implementing extended-producer-responsibility (EPR) approaches locally, regionally and internationally.

Country-country cooperation is vital for implementation of the *Ha Noi 3R Declaration*. National level governments can have the resources, power and influence to direct, guide or to be engaged in promoting 3Rs at various levels. There is a need to emphasize, among others, knowledge transfer through bilateral and regional (South-South and North-South) partnerships in implementing resource efficiency and green productivity in the private sector, including SMEs which lack required financing and technical know-how. Country-country cooperation could not only play a key role in promoting specific 3R infrastructures and facilities (eco-industrial zones, science parks, eco-towns, etc.) to promote industrial symbiosis but could also encourage and create necessary ground in which the private sector exchange discarded materials and recyclables as valuable resources. Country-country cooperation could effectively promote markets for recyclables and re-used products in Asia and the Pacific (for instance, the recycle loop of PET bottles in the region). Moreover, country-country cooperation is also highly important for addressing marine and coastal waste problems in the region. Due to the transnational nature of the problem, country-country based cooperation and partnerships can provide a comprehensive and regional frame for solutions (for instance, NOWPAP which is a cooperative framework where countries co-sharing Northwest Pacific are grouped for region-suited solutions to deteriorating coastal and marine environment due to land-based activities and sources of pollution - industrial effluents, untreated municipal sewage, plastics, and run-off of agricultural pesticides and nutrients, etc.). These experiences will provide valuable solutions to issues faced by Small Islands Developing States (SIDS).

New emerging waste streams such as e-waste (WEEE), hazardous waste and chemicals are a growing concern in Asia and the Pacific. E-waste management requires a bigger attention and support from all stakeholders, in particular the private sector and consumers, for its proper management. There are other new and emerging waste streams such as – chemicals and hazardous wastes and plastics in coastal and marine environment. Country-country cooperation is indispensable when trying to address illegal import and export of e-waste, for instance, governments can collaborate and establish regional (voluntary) uniform standards for hazardous and e-wastes; to cope with each other to improve information flow regarding e-waste movements in the region; or to partner between ports to mitigate illegal trading of e-waste. In addition, country-country cooperation can promote and ensure environmentally-sound management of e-waste, for instance, through transfer of know-how and establishing partnerships under existing international mechanisms (e.g. Basel Convention).

The significance of the 3Rs and resource efficiency measures has gradually gained recognition in Asian countries over the years, and now several countries, such as Viet Nam, Bangladesh, Indonesia, Thailand, Cambodia have developed or in a process of developing national 3R strategies and related laws and regulations. There are a number of successful examples of macro-economic policies in the region that have integrated 3Rs and resource efficiency –

- **Japan**: Fundamental Law for Establishing a Sound Material Cycle Society (2001); New Growth Strategy (2010) which places green innovations as top of seven strategic areas; Finance initiatives to build a Low Carbon Society (providing

grants, investments, financing, interest subsidies for – (i) promotion of Green Buildings, (ii) development of Low Carbon Cities, (iii) bilateral offset Credit Mechanism, and (iv) enhancement, commercialization, and R&D of Low Carbon Technologies;

- **Republic of Korea**: National Strategy and Five Year Plan for Low Carbon and Green growth (2008); Framework Act and Presidential Decree on Low Carbon, Green Growth; Green New Deal policy – 2% of GDP investments in Green Growth (2009); Resource Recirculation Policy;
- **PR China**: Circular Economic Law (2009); Long Term Renewable Energy Development Plan (2007); Chinese Circular Economic Law offers a long term plan for transformation that seeks to integrate economic, environmental, and social strategies to achieve high resource efficiency as the way of sustaining improvement in quality of life within natural and economic constraints;
- **India**: National Solar Mission; National Mission on Enhanced Energy Efficiency;
- **Indonesia**: Solid Waste Management Law No. 18 Year 2008; Government Regulation on Household Solid Waste and Household-like Solid Waste Management No. 81 Year 2012; Draft Government Regulation on Special Solid Waste Management; Minister of Environment Regulation No. 13/2012 on 3R Implementation Through Waste Bank; Minister of Public Works Regulation No. 3/2013 on Infrastructure Provision for Solid Waste Management;
- **Malaysia**: National Green Technology Policy (2009); Green Building Index (2009); National Renewable Energy Policy and Action Plan (2010);
- **Singapore**: Green Mark Incentive Scheme for buildings (2005); Water Efficiency Fund (2008);
- **Thailand**: Alternative Energy Development Plan and Target (2008); Thailand Climate Change Master Plan (2012–2050), etc.

The above framework policies enable waste and resource management to be undertaken in an integrated way making use of synergies and avoiding trade-offs. All those programmes aim to achieve economic and human development at much reduced environmental costs through 3Rs and resource efficiency. Country to country collaboration and partnerships could play a pivotal role in sharing and transferring these valuable country experiences and practices to scale up such actions. International cooperation is also useful in promoting advanced 3R technologies, e.g., waste-to-energy (WtE), demonstration projects on specific issues of concern, in particular sharing and disseminating useful experiences on how the technologies could be modified and adapted to favour the local economy and conditions.

International cooperation can also help share useful experiences on building sustainable and resilient cities and communities through 3R policies, programmes, and infrastructures. For instance, the experience and useful lessons learned from 2011 Great East Japan Earthquake and Tsunami in managing the disaster waste could provide valuable means

to disaster prone and low lying countries like Bangladesh and others to link waste management policies to impacts of climate and natural disasters. Japan's experience of inter-municipal cooperation also is very helpful in managing disaster waste. Similarly, international collaboration and partnerships, including regional/sub-regional cooperation, are specifically important for SIDS because of their exposed geographical locations and vulnerabilities, and other limitations. SIDS face, among others, a number of issues such as increase in volume and diversification of waste streams, plastics in coastal and marine environment, lack of resource recovery and waste recycling facilities, lack of space for waste-disposal or land-filling, contamination of scarce waste supplies, and damage to marine ecosystem due to inappropriate or absence of waste treatment. At the Fourth Regional 3R Forum, SIDS also specified the need to collaborate with Asian region for the improvement in maritime transport, encourage eco-designed products, and promotion of green jobs, among others.

Government-NGOs-communities cooperation has a great potential for reducing waste management costs to have positive economic and developmental benefits. NGOs and community based organizations (CBOs) are crucial partners, for instance, in realizing governmental schemes to reduce municipal solid waste quantities; in achieving efficient waste management (i.e. separation, collection, recycling etc.), and; for scaling up of composting activities. In addition, cooperation of NGOs and communities is extremely valuable for increasing critical awareness among the informal sector on labour, environment, occupational safety, health, and other social standards.

Partnerships within the private sector, i.e. between two or more businesses (large, or SMEs), can contribute in several ways for advancing 3Rs. The private sector, for instance, can promote and develop green economic activity within local and regional markets according to its own needs or as corporate sector responsibility or as a way to achieve governmental targets or standards. Industry-industry or business-business cooperation can reduce the public's financial, social and organizational share in implementing 3R policies and programmes, and can help industries to greening the value chain. Industry-industry partnerships might be suitable for industries' self-regulated or self-enforced mechanisms as opposed to top-down regulation from public bodies. Industry-industry partnerships can be realized in, for instance, the exchange of resources, by-products and other materials between different industries in order to reduce wastes and increase efficiency of production line. Industry partnerships can be part of the broad view of Extended-Producer-Responsibility (EPR), i.e. using industry-collaboration to make a change throughout production chains, by improving and transforming them into sustainable ones. Industry-industry partnerships can contribute towards minimizing, for instance, food losses and food wastes by collaboration between producers and retailers in order to improve food chain efficiency (a growing trend in Europe). Similarly, partnerships can be formed between the agricultural sector and energy and composting industries for trading agricultural and animal-wastes (e.g. biomass energy). As an example, 5 billion tons of waste agriculture biomass are generated globally equivalent to 1.2 billion tons of mineral oil – about 25 per cent of today's global crude oil production. Asia alone accounted for 77 per cent of global biomass, and most of the biomass is left to decompose or burnt in the fields losing many economic opportunities, including climate mitigation and job creation.

An important form of cooperation and partnership could be addressed among various international initiatives to achieve meaningful synergies. For instance, through cooperation between Regional 3R Forum in Asia and the Pacific and Climate and Clean Air Coalition

(CCAC), countries could benefit from synergies between different policy domains such as air pollution, climate change, 3Rs, and waste management. CCAC is a global partnership committed to taking action on Short-lived Climate Pollutants (SLCPs), and aims for, among others things, mitigating SLCPs such as CH₄ and black carbon from municipal solid waste by working with cities and central governments. In order to mitigate emissions of methane and air pollution across the municipal solid waste sector, it is important to discuss feasibilities of various technical cooperation, capacity-building, and awareness-raising programmes. The Regional 3R Forum in Asia and the Pacific could provide an outreach knowledge management and networking support to CCAC by catalyzing national level actions to scale up of such mitigation actions through 3R actions and measures.

Under the overall theme of "*Multilayer Partnerships and Coalition as the Basis for 3Rs Promotion in Asia and the Pacific*", the Fifth Regional 3R Forum in Asia and the Pacific, 25-27 February 2014, hosted by the Government of Indonesia, aims to address various forms of partnerships and coalition for implementation of the *Ha Noi 3R Declaration (2013-2023)*. The multilayer partnerships are based on the fundamental understanding that the 3Rs are much more beyond municipal waste management, and are intrinsically linked with resource efficiency in a wide range of key development sectors such as agriculture, industry, and energy, among others, toward transitioning to a resource efficient economy and society.

2. OBJECTIVES

The main objectives of the Fifth Regional 3R Forum in Asia and the Pacific are to:

- discuss and explore various forms of partnerships and coalition for the implementation of 3Rs policies and programmes, including ***implementation of the Ha Noi 3R Declaration (2013-2023)***;
- discuss possible ***regional cooperation among SIDS*** in addressing issues of common concern and challenges in waste management, including plastics in coastal and marine environment;
- discuss and explore ***viable business models*** with active cooperation between public, private/business sector, and research and development (R&D) institutions;
- address and identify opportunities for collaborative actions and partnerships including bilateral, multilateral and regional supporting mechanisms for developing ***3R infrastructures and pilot project schemes*** (eco-industrial zones, science parks, resource recovery facilities, recycling industries, WtE projects; greening SME operations, EPR, green products/eco-labelling, etc.); and
- address possible ***cooperation between Regional 3R Forum in Asia and the Pacific and Climate and Clean Air Coalition (CCAC)*** in mitigating SLCPs.

3. EXPECTED OUTCOME

- enhanced awareness and insight to the importance of multilayer partnerships and coalition for implementation of 3R policies and programmes as well as the *Ha Noi 3R Declaration (2013-2023)*;
- improved understanding on constraints vis-à-vis various enabling conditions to foster such multilayer partnerships in 3Rs;

- identification of partnership opportunities in developing viable business models to practically scale up 3R applications and usage of relevant technologies;
- recommend a framework of regional cooperation among SIDS on 3Rs to address common issues of concern; and
- improved insight to potential synergies between Regional 3R Forum in Asia and the Pacific and CCAC.

4. CO-ORGANIZERS

The Fifth Regional 3R Forum in Asia and the Pacific will be co-organized by the Ministry of Environment of the Government of Indonesia, Ministry of Public Works of the Government of Indonesia, Ministry of the Environment of the Government of Japan (MoEJ), and the United Nations Centre for Regional Development (UNCRD), with supports from various international organizations, partner institutions and donor agencies.

5. SUPPORTING ORGANIZATIONS

The supporting organizations include - United Nations Environment Programme (UNEP / IETC); United Nations Industrial Development Organization (UNIDO); Institute for Global Environmental Strategies (IGES); Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) / Japan International Cooperation Agency (JICA); Secretariat of the Pacific Regional Environment Programme (SPREP) and others.

6. GEOGRAPHIC COVERAGE

The geographic coverage of the Forum is gradually expanded to encompasses more than thirty Asian-Pacific countries, including ten member countries of the Association of Southeast Asian Nations (ASEAN), Australia, Bangladesh, People's Republic of China, India, Japan, Republic of Korea, Mongolia, New Zealand, Timor-Leste, selected Small Island Developing States (SIDS) of the Pacific, and possibly other member countries of South Asia Cooperative Environment Programme (SACEP) such as Afghanistan, Bhutan, Maldives, Nepal, Pakistan, and Sri Lanka.

7. PARTICIPANTS

Participation in the Forum is by invitation only. It is expected that around 300 participants, including high-level government representatives from Asian-Pacific countries, City Mayors, international experts and resource persons, and others as listed below will attend the Forum:

- High level government representatives and policy makers from relevant Ministries such as - Ministry of Environment, Ministry of Public Works, Ministry of Local Government, Ministry of Urban Development, Ministry of Industry, etc.;
- City Mayors/Local Government representatives;
- Experts and international resource persons, including representatives of scientific and research and development (R&D) institutions in the areas of 3Rs/resource efficiency/waste management;

- Representatives of UN and international organizations, including international financial institutions, multi-lateral development banks and donor agencies;
- Representatives of the private and business sector;
- NGOs and CBOs, etc.

A limited number of travel supports will be available on a priority basis for nominated government representatives from the developing countries and invited experts/international resource persons. Unless otherwise stated in the official invitation, the participants are requested to kindly cover their own travel and accommodation costs through their organizations or external sponsorships.

8. ABOUT THE REGIONAL 3R FORUM IN ASIA AND THE PACIFIC

The high level “Regional 3R Forum in Asia and the Pacific” is a strategic and knowledge platform for sharing experiences and disseminating among Asian countries best practices, policy instruments, tools, and technologies, in relation to various aspects of the 3Rs. The overall goal of the Regional 3R Forum in Asia and the Pacific is to achieve low carbon and sound material cycle societies in Asia and to set in motion a regional mechanism to address 3R issues, needs and priorities in Asian countries, including social issues and emerging issues of concern in waste management. The objectives of the Forum include:

- facilitate high-level policy dialogues on 3R issues, challenges, & opportunities;
- facilitate bil-lateral and multi-lateral cooperation in advancing 3Rs and resource efficiency at local, national, and international level;
- provide a strategic and knowledge platform for sharing and disseminating among Asian countries best practices, tools, technologies, policy instruments on various aspects of the 3Rs;
- provide a platform to foster multilayered networks of cooperation among stakeholders such as governments, academia, scientific and research community, private sector, and NGOs in implementing 3R measures and activities;
- generate international consensus and understanding on the beneficial aspects of the 3Rs and resource efficiency in the context of sustainable development, including climate mitigation;
- provide a platform for proliferation of national 3R strategies with an objective to mainstream 3Rs in the overall policy, planning and development; and
- contribute towards realizing the Rio+20 outcome – *The Future We Want*.

The key thematic areas of the Regional 3R Forum in Asia and the Pacific include - municipal solid waste; industrial and hazardous waste; agriculture/bio-mass waste; construction and demolition waste; medical/healthcare waste, and electric and electronic waste (WEEE); and the cross-cutting areas include - resource and energy efficiency; climate change mitigation/co-benefits; socio-economic issues (health, labour, safety) in informal waste sector; sustainable urban management; and multi-stakeholders partnerships.

9. CCAC Municipal Solid Waste Initiative Asia Regional Workshop

Date: 23-24 February 2014

Venue: Hotel Java Paragon, Surabaya

Framework: Climate and Clean Air Coalition

This meeting of the CCAC Municipal Solid Waste (MSW) Initiative will bring cities and initiative partners together to strengthen international “on-the-ground” action on short-lived climate pollutants (SLCPs) from the MSW sector. In doing so, the meeting aims to enhance better understanding of CCAC MSW Initiative, foster city-to-city knowledge sharing, and deliver CCAC-led specific training to support city action. It is intended that the meeting will foster a supportive network of cities and partners in the Asian region and as well develop an Asian model for direct and on-the-ground action that the CCAC and new participating cities can carry out jointly. Subsequently, at the Plenary Session 7 of the Fifth Regional 3R Forum in Asia and the Pacific, the potential synergy between the two initiatives - CCAC MSWI and Regional 3R Forum - will be addressed.

For further details about this associated event, please contact:

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10. NGO Forum – “Fifth Asia 3R Citizens Forum – Community-based 3R implemented and promoted by NGOs Converting Waste Biomass into Resource”

Associated Side Event Organized by: Pusdakota, Indonesia and Asia 3R Citizens Network, Japan

Date: 25 February 2014 (Day 1 of the Fifth Regional 3R Forum in Asia and the Pacific)

Time: 14:00 – 18:00

Venue: Shangri-la Hotel, Surabaya

Participants: NGOs from Indonesia and Japan

All other participants from the Fifth Regional 3R Forum in Asia and the Pacific are welcome to attend.

11. Fifth High Level Seminar on Environmentally Sustainable Cities (HLS ESC)

Date: 28 February - 1 March 2014 (back-to-back with the Fifth Regional 3R Forum in Asia and the Pacific)

Venue: Sheraton Hotel and Towers, Surabaya

Framework: East Asia Summit Environment Ministers Meeting (EAS EMM)

The High Level Seminar on Environmentally Sustainable Cities (HLS ESC) is a flagship collaborative initiative by 18 participating countries of East Asia Summit (EAS) (consisting of 10 ASEAN member states, Australia, China, India, Japan, Republic of Korea, and New Zealand, as well as the United States of America and Russian Federation) to foster concrete activities on ESC in the region. It provides a platform to gather a broad range of stakeholders from national and local government, international organizations, NGOs, academic, individual

experts and practitioners on urban environmental management to discuss current issues and explore possible opportunities for collaborative actions. Past seminars include: 1st HLS ESC (Jakarta, Indonesia in March 2010), 2nd HLS ESC (Kitakyushu, Japan in March 2011), 3rd HLS ESC (Siem Reap, Cambodia in March 2012) and 4th HLS ESC (Ha Noi, Viet Nam in March 2013). The 5th HLS ESC will be held on 28 February - 1 March 2014, in Surabaya, Indonesia with the support of EAS participating countries and international organizations. A draft programme and other information are provided at the HLS ESC website (<http://www.hls-esc.org>).

For further details about this associated event, please contact:
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12. PROGRAMME

Please see Annex 1