

CONCEPT NOTE

IPLA Global Forum 2013 on Sustainable Waste Management for the 21st Century Cities - Building Sustainable and Resilient Cities through Partnership

City of Borås, Sweden, 9-11 September 2013

1. BACKGROUND

Sustainable waste management is an important element for cities and municipalities to achieve resource efficiency in the societies, and it needs to be effectively addressed in the context of building sustainable and resilient cities. The Rio+20 outcome – *the Future We Want*, which highlighted sustainable cities as one of the priority areas for sustainable development, addressed the importance of a life cycle approach and of further development and implementation of policies for resource efficiency and environmentally sound waste management. Also, it expressed commitment to further reduce reuse and recycle waste (3Rs), and to increase energy recovery from waste, with a view to managing waste as a resource. Furthermore, it called for the need to develop the capacity of sound waste management particularly in the least developed countries, and for new and innovative public-private partnerships to enhance capacity and technology for environmentally sound waste management, including for waste prevention.

Amid the rapidly growing population and urbanization, developing cities and municipalities are facing capacity constraints in dealing with the rising volume and complexity of waste streams. The new and emerging waste, such as e-waste, health-care waste, plastic waste, construction and demolition waste and household hazardous waste, are recognized as particular challenges. For many cities, lack of space has been a major constraint to the containment and management of the increasing volume and diversification of wastes. While urbanization is occurring at an unprecedented pace, many cities are running out of space for constructing landfills. There is an urgent need for cities and municipalities to strengthen their capacity in the aspects of policy, technology, finance and institutional arrangements to advance waste management infrastructure and services in the context of realizing resource efficient and zero waste societies.

Waste disposal is very expensive:

- Requires substantial inputs of labor, materials, energy and land.
- Establishing new landfills and incineration facilities is difficult because of high land costs and "NIMBY" attitudes.
- Even the "modern" landfills with advanced systems could potentially face problems in a long term, as these technologies are not infallible.
- Landfills are major source of methane (GHG).

The “Daegu Declaration for Moving Towards Zero Waste through IPLA” agreed at the Special IPLA Event of the ISWA World Congress on Moving towards Zero Waste for Green Economy – Role of Local Authorities held on 17-18 October 2011 in Daegu, Republic of Korea, addressed the need for mainstreaming zero waste and resource efficiency in the political agenda as well as city development strategies and action plans as a pre-requisite to moving towards a green economy.

In Asia and the Pacific, the outcome of the Fourth Regional 3R Forum in Asia held on 18-20 March 2013 in Ha Noi, Viet Nam, vis-a-vis the “Ha Noi 3R Declaration – Sustainable 3R Goals for Asia for 2013-2023” has provided an important basis and framework for Asian countries to voluntarily develop and implement 3R policies and programmes. It is based on the fundamental understanding that the 3Rs is much more beyond the end-of-pipe solutions for municipal waste management, but is intrinsically linked with resource efficiency in a wide range of key development sectors such as agriculture, industry, energy, and mining, among others, towards transitioning to a resource efficient and economy and society.

Key messages of 4th Regional 3R Forum in Asia, 18-20 March 2013

- Sustainable resource use will be instrumental for Asia to ensure socio-economic development in a world in which resources are more constrained and the absorptive capacity of ecosystems is decreasing rapidly.
- The region is faced with a number of critical challenges when it comes to integration of resource efficiency in overall policy, planning, and development.
- 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, rising population, increasing consumption and per capita waste generation have posed serious challenges for the sustainability of the region.
- Challenge for public policy to achieve a transition to a Green Economy enabled by resource efficiency and systems innovation.
- Change will not occur spontaneously but will require well designed policies.
- 3Rs, as recognized in CSD-18/19 and Rio+20, are powerful tools to enable resource efficiency in regional development.
- 3Rs and resource efficiency measures provide employment and green job opportunities.

■ **Access, assessment, selection, transfer and adaptation of waste management technologies through international partnerships**

Development and application of sound waste management technologies is critical in achieving resource efficiency in cities and municipalities. There is a need to advance not only standard technologies for the conventional waste management such as collection, transportation and disposal, but also socially, environmentally and financially sound and innovative technologies which contribute to the minimization of waste and the recovery of resource and energy from waste, such as 3Rs and recycling and waste-to-energy (WtE). Priorities of technology development for the next decade also include proper treatment and reduction of bio-waste and organic waste, sanitary landfill, e-waste management, and end of life vehicles (ELV) management. Mechanical and biological treatment (MBT) and biomethanation have been recognized as suitable for processing organic wet waste in developing countries (UNEP, 2011).

Composting techniques can convert organic waste into agricultural manure, contributing to reduction of greenhouse gas emission. These technologies are expected to lead to the creation of new market, investment and business opportunities.

In many developing cities and municipalities, there is a lack of capacity to access to, assess, transfer and adapt these waste management technologies. There is also a general perception that new technologies, such as 3Rs, are too expensive and advanced to develop and apply, whereas they are not always costly and complex. In order to promote sound waste management technologies, there is a need, first of all, to improve access to broad and up-to-date information and technologies and enhance understanding of what kind of technologies are available. Secondly, there is a need to assess and select waste management technologies that are suited to specific local conditions in order to ensure feasibility and sustainability of the technologies. Thirdly, cities and municipalities need to strengthen policies and institutional framework to promote transfer and adaptation of technologies, by, for example, setting environmental standards and regulations, creating markets and investments, and supporting research and development (R&D). All these processes require exchange, guidance, and assistance through international partnerships, including public-private partnership (PPP).

■ **Public private partnership (PPP) and financing and investment opportunities in zero waste**

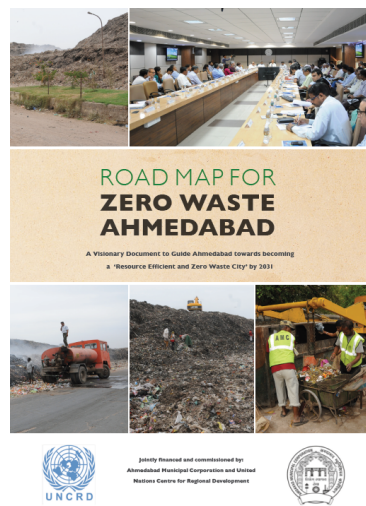
Public-Private Partnership (PPP) provides a number of benefits for both cities/municipalities and the private sector, such as introduction of better technologies and management, greater financing and investment, improved cost efficiency, and creation of new market and jobs. Particularly, PPPs are necessary to leverage financing and investment, since local government spending is often not enough to meet the increasing cost of and demand for waste management infrastructure and services in many countries. It has been demonstrated that PPP can help cities/municipalities gather the capital required for developing waste management infrastructure and services. PPPs can also generate new investment for waste minimization and resource recovery such as recycling and WtE. However, many developing cities/municipalities lack models and experience of developing and implementing PPPs in waste management. There is a need to strengthen their policy, strategies and institutional capacity to partner with the private sector and attract financing and investment. Identifying potential areas for financing and

Why partnership is important for cities and municipalities?

- **Partnerships** offer alternatives in which governments and private companies assume co-responsibility and co-ownership for the delivery of solid waste management services. Waste disposal is expensive – financially and in lost resources (substantial inputs of labour, material, energy, land resources for land filling, etc.)
- **Partnerships** combine the advantages of the private sector (dynamism, access to financial resources and latest technologies, managerial efficiency, and entrepreneurial spirit, etc.) with social concerns and responsibility of the public sector (public health and better life, environmental awareness, local knowledge and job creation, etc.).
- **Partnerships (PPP)** are indispensable for creating and financing adaptation measures towards resilient cities which in turn are more attractive for private investments.
- **Partnerships** provide win-win solutions both for the public utilities 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

investment is also needed to develop effective and sustainable PPPs in municipal waste management.

Under the International Partnership for Expanding Waste Management Services of Local Authorities (IPLA), zero waste policies and programmes/roadmap have been promoted as a way for LAs to strengthen vision and strategies for achieving sustainable waste management. For example, Ahmedabad Municipal Corporation (AMC), Gujarat, India, with the support of UNCRD and Zero Waste South Australia, launched a "Road Map for Zero Waste Ahmedabad" in January 2013. The Road Map, which consists of ten focal areas and thirty four strategic actions, offers a visionary document to guide AMC to introduce and implement policies and strategies, including a recommendation to encourage and support investment in innovative resource management technologies and infrastructure in certain areas. The development of zero waste policies and programmes/roadmap is expected to play a strategic role in identifying potential areas for financing and investment, both national and international financing, including carbon credits.



■ **Waste recycling markets and green jobs**

At the global level, the waste market, from collection to recycling, is growing and estimated at US\$410 billion a year (UNEP, 2011). The growth of waste market, increasing resource scarcity and the availability of new technologies offer opportunities for cities and countries to promote the development of green markets and jobs in the waste sector. Particularly, recycling market is expected to grow in response to the increasing demand for recycled products. Since recycling job is often a source of income for the poor in developing countries, the development of recycling market and jobs is expected to contribute to poverty alleviation.

Business opportunities on e-waste

Global e-waste recovery market holds enormous revenue potential and is expected to reach \$21 billion by 2020, growing from \$6.9 billion in 2009. For instance, in China alone, the volume of e-waste is expected to reach 5.1 million metric tons in 2020, an increase of more than 150% from 2005. (GBI Research, 2010)

■ **Regional cooperation(inter-municipal/ industry-industry /country-country)**

Considering the need for cities and municipalities to move towards resource efficient and zero waste societies, regional cooperation will be beneficial to promote the formulation and implementation of zero waste policies and programmes in the region by utilizing various collaborative opportunities. These include city-city cooperation and country-country cooperation including south-south and north-south cooperation. Such exchanges and cooperation can help share useful experience on building zero waste policies, programmes, and

infrastructures in the context of building sustainable and resilient cities. Capacity development of municipal officials and other major stakeholders in the solid waste management sector and industry can also be realized through exchange and cooperation between countries and cities.

Building sustainable and resilient cities attaches significant importance to the need for advancing sustainable waste management through partnerships in the 21st century. In this regard, the IPLA Global Forum 2013 provides an excellent opportunity for cities/municipalities as well as private sectors, industry, financial institutions, research organizations, NGOs, international organizations, among others, to discuss the important areas for collaboration towards realizing resource efficient and zero waste societies, building on the recommendations in the Daegu Declaration for Moving Towards Zero Waste through IPLA.

2. OBJECTIVES

The objective of the IPLA Global Forum 2013 is to:

- (i) Discuss how zero waste policies and programmes could contribute towards building sustainable and resilient cities through partnership;
- (ii) Address the need for access, assessment, selection, transfer and adaptation of waste management technologies;
- (iii) Address the role of public private partnership (PPP) in strengthening financing and investment towards zero waste;
- (iv) Discuss potentials in developing waste recycling markets and green jobs; and
- (v) Exchange experiences of regional cooperation (inter-municipal/ industry-industry/ country-country).

3. EXPECTED OUTCOME

- Enhanced awareness and insight to the significance of achieving resource efficiency and zero waste through partnerships for contribution towards Rio+20 Outcome - *The Future We Want*;
- Enhanced awareness and insight to available waste management technologies, and identification of enabling conditions for promoting and applying such technologies;
- Identification of financing and investment opportunities in promoting zero waste through PPP models;
- Identification of waste management related green markets and green jobs;
- Enhanced awareness and understanding of potentials and benefits of regional cooperation (inter-municipal/ industry-industry/ country-country); and
- Establishment of new inter-municipal networks (PPP) supporting the development of sustainable and resilient cities through international partnerships.

4. CO-ORGANIZERS

The IPLA Global Forum 2013 will be hosted by:

- United Nations Centre for Regional Development (UNCRD)
- Waste Recovery international Partnership in Borås
 - City of Borås
 - University of Borås
 - SP Technical Research Institute of Sweden
 - Borås Energy and Environment

5. GEOGRAPHIC COVERAGE

Global (Africa, Asia and the Pacific, Latin America and Europe)

6. PARTICIPANTS

Participation in the IPLA Global Forum is by invitation only. It is expected that more than 150 participants, including representatives from cities and municipalities, national governments, the private sector, NGOs, research and academic institutions, UN and international organizations, will attend the Forum.

A limited number of travel supports will be available for participants in developing countries and invited experts/international resource persons. Unless otherwise clearly indicated in the official invitation, rest of the participants is expected to cover their own travel and accommodation costs.

7. PROGRAMME

See Annex.