

IPLA Global Forum 2012 on Empowering Municipalities in Building a Zero Waste Society — A Vision for post-Rio+20 Sustainable Urban Development

5-6 September 2012, Seoul, Republic of Korea

MEETING SUMMARY

I. Introduction

1. The Ministry of Environment, Republic of Korea (MoE-Korea) and the United Nations Centre for Regional Development (UNCRD) jointly organized the Global Forum 2012 of the International Partnership for Expanding Waste Management Services of Local Authorities (IPLA) on Empowering Municipalities in Building a Zero Waste Society — A Vision for the post-Rio+20 Sustainable Urban Development, from 5 to 6 September 2012, in Seoul, Republic of Korea. The Forum was supported by the Korea Society of Waste Management (KSWM), the Sudokwon Landfill Site Management Corp. (SLC) and the Korea Environment Corporation (KECO), and was held in conjunction with the 7th International Conference/Exhibition on Combustion, Incineration/Pyrolysis, Emission and Climate Change (ICEPEC) on the 4th anniversary of Resource Recirculation Day in the Republic of Korea. The Forum, chaired by Prof. Jae Young Kim, Seoul National University/Chair of the International Committee of KSWM, was attended by 103 participants, including, inter alia, representatives of local and national governments, the private sector, academia, NGOs, international resource persons from 31 countries in Africa, Asia, Europe, Latin America and the Caribbean, North America, and Oceania as well as representatives from UN organizations and regional organizations (See Annex 1).
2. The United Nations estimates that more than half of the world's population lives in urban areas, and it is expected that by 2050, three quarters of the total world population will be city dwellers, with almost all of the growth occurring in the developing world. Together with growing urbanization, waste management is becoming a major and growing public health and environmental concern in the urban areas of many developing countries. With the diversification of waste streams worldwide and the growing presence of new emerging waste streams such as e-waste, chemicals, hazardous and toxic elements in the general waste stream, the complexity and daunting nature of waste management challenges have gone beyond the capacity of local authorities and municipalities in terms of finance, technology and institutional mandate. 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 in the world are running out of landfills.

3. Rio+20 highlighted sustainable cities as one of the priority areas. In the Rio+20 outcome document, *The Future We Want*, Heads of State and Government recognized the need for: increased resource efficiency and a reduction of waste to achieve a green economy in the context of sustainable development and poverty eradication; development and implementation of national and local policies and strategies for resource efficiency and environmentally sound waste management; further support for the sustainable management of waste through the application of the 3Rs, in the context of sustainable cities and human settlements; and new and innovative public-private partnerships to enhance capacity and technology for environmentally sound waste management.
4. In the above context, the IPLA Global Forum 2012 was organized with the objectives to: (i) reinforce the recommendations of the Declaration for Moving towards Zero Waste through IPLA (Daegu Declaration), which was agreed at the first IPLA meeting held in October 2011 in Daegu, Republic of Korea, with an aim to help mainstreaming zero waste and resource efficiency into the political agenda and to promote partnership for sustainable waste management; and (ii) discuss the best means of addressing the Rio+20 recommendations on sustainable cities and how to make those actions the basis for empowering municipalities in developing countries to become zero waste societies.

II. Opening remarks

5. Extending appreciation to the organizers, participants, and sponsors of the 7th ICIEPC conference and the IPLA Global Forum, Prof. Yong-Chil Seo, President, Korea Society of Waste Management (KSWM), briefly addressed the background of hosting the IPLA Global Forum in the Republic of Korea, recalling the first IPLA meeting held in Daegu during the ISWA World Congress 2011. He emphasized that participation and collaboration between the public and private sectors are the keys to success in achieving the goal of reducing and efficiently managing waste. He stressed that the exchange of information/practices and mutual collaboration should be actively done through the IPLA Global Forum, and encouraged participants to gain fruitful outcomes and promote activities for local communities to manage and minimize wastes. Both the empowerment of local authorities and support from the private sector, including via technology provisions, play a very important role in making a zero waste society worldwide.
6. On behalf of UNCRD, C.R.C. Mohanty, Environment Programme Coordinator, addressed the issue of growing urbanization, the diversification of waste streams worldwide, and the growing presence of new emerging waste streams such as e-waste, chemicals, hazardous and toxic elements, and healthcare wastes in the general waste stream. The complexity and daunting nature of waste management challenges have exceeded the capacity of local authorities and municipalities in terms of finance, technology, and institutional mandate. A resource efficient and zero waste society is indispensable for 21st century cities. At the same time, there is a need to address: the nexus between water and waste management, issues of plastics in coastal-marine environment, and the synergy between 3R policies, infrastructure, and integrated waste management. In the context of the Daegu Declaration of IPLA members and partners and the Rio+20 outcome document, *The Future We Want*, he underscored that a pre-requisite to transitioning to a green economy is the importance of mainstreaming zero

waste and resource efficiency into the political agenda and city development strategies and action plans.

7. On behalf of Dr. Yoon Jong-soo, Vice Minister, Ministry of Environment, Republic of Korea (MoE-Korea), Dr. Choi Heung-Jin, Director General, Resource Recirculation Bureau (MoE-Korea) delivered an opening speech, mentioning the Daegu Declaration. He said that the Republic of Korea took part in the Rio+20 summit to present the vision of “Green Growth for All” and to play a leading role in reflecting the significance of green economy in the Rio+20 outcome document, *The Future We Want*. He emphasized that building a resource recirculating society stands at the heart of green growth because it rightly fits in with the decoupling of economic growth and environmental degradation. He remarked that the IPLA Forum on ways to realize zero waste sustainable cities and accelerate public-private partnerships will contribute to: expanding waste management services in local communities; tackling global climate challenge; developing better policy measures; and finding the path to improving the policies already in place. His wish was that the Forum would pave the way for one step closer to “the future we want” as was declared at Rio+20.

III. Keynote speech

8. In his keynote speech, entitled “Zero Waste Society in Boras City, Sweden — Strategies to Action”, Dr. Hans Bjork, Dean of the School of Engineering, University of Boras, Sweden, introduced how the City of Boras, Sweden moved towards zero waste by shifting its attention from infrastructure development to environmental protection. He emphasized that the motivation to “reduce, reuse and recycle” and energy recovery from waste (to avoid landfill) are at the heart of waste management in the city. Since 1992, the city has reduced landfills and today has achieved almost 0% landfill. He emphasized that waste management requires comprehensive thinking, and must include the perspectives of health, environment, economy, markets, and account for the kinds of waste collection system and treatment methods, while remaining mindful of the future of cities. Zero waste was developed in the city since 1986 with long-term waste planning, legislation and financial incentives (e.g. tax, extended producers’ responsibility), identification of material values for recycling, involvement of the public, and recovery and production of bio-gas. Multi-stakeholder partnership was an important driver in the process. The city has been working closely with the private sector for recovering waste energy for district heating, district cooling, electricity and biogas. The promotion of source separation and the development of recycling stations in the communities has educated and involved the public. The Waste Recovery-International Partnership, established between universities, municipalities, and private companies, is sharing the city’s experiences with countries in Asia, Africa and Latin America.
9. Prof. Ralph E. H. Sims, of Massey University, New Zealand, delivered his keynote speech, entitled “Recent Climate Change Issues and GHG Emission Reduction Potential from Biomass Resources”, which examined the current technologies and mitigation potentials relating to waste-to-energy. Biomass sources, including forest, agricultural, and livestock residues, short-rotation forest plantations, dedicated energy crops, the organic component of municipal solid waste (MSW) and other organic waste streams are used as feedstocks that

produce energy carriers in the form of solid fuels, liquid biofuels and gaseous fuels. Methane emissions from non-OECD countries are increasing due to more landfills and their poor management. Improved waste management practices and development of landfill gas recovery technologies, such as the clean development mechanism (CDM), could reduce these emissions. Incineration, composting and other strategies that reduce landfilled waste volumes are complementary mitigation measures to landfill gas recovery in the short- to medium-terms. CDM projects can assist developing countries with respect to both waste and wastewater management. Providing infrastructure for wastewater management in developing countries can have multiple benefits for GHG mitigation and can improve public health, conserve water resources, and aid in the reduction of untreated discharges to surface water, groundwater, soils and coastal zones.

IV. Partnerships in the context of sustainable and resilient cities: Realizing Rio+20 outcome document *The Future We Want*

10. A sustainable city is a city where achievements in social, economic, and physical development are made to last; that has a lasting supply of the natural resources on which its development depends; and that maintains a lasting security from environmental hazards which may threaten development achievements.¹ Resilience is the capacity and ability of a community to withstand stress, survive, adapt, bounce back from a crisis or disaster; it needs to be understood as the societal benefit of collective efforts to build collective capacity and the ability to withstand stress.²
11. The Rio+20 recommendations state that sustainable cities and human settlements require: (i) integrated planning and management for promoting economically, socially and environmentally sustainable societies; (ii) commitment to promote sustainable development policies that support a safe and healthy living environment for all, including safe and clean drinking water and sanitation; (iii) support for sustainable management of waste through the application of the 3Rs; and (iv) policies for sustainable urban planning and design in order to respond effectively to the expected growth of urban populations in the coming decades. In the Rio+20 outcome document, waste is addressed as one of the issues for environment and sustainable development, which reflects the importance of the solid waste sector in the environmental agenda of global leaders.
12. A sustainable city attaches significant importance to the need for moving towards a resource-efficient and zero waste society. Development of integrated planning and management approaches for resource use that includes the 3Rs is critical for achieving zero waste cities. While the 3Rs (reduce, reuse, and recycle) and resource efficiency measures are intrinsically linked in a mutually beneficial way, resource efficiency aims to minimize: (a) net resource (materials, energy, water, etc.) inputs to unit production and services; and (b) pollution and waste, simultaneously. By implementing the 3Rs, and thereby improving resource efficiency, cities and countries can tackle local environmental problems, address climate change, ensure

¹ UN HABITAT

² ICLEI 2011

energy security, preserve natural capital, improve economic competitiveness, and pursue social benefits, ultimately contributing to the promotion of a green economy.

13. Waste management needs to address the three pillars of sustainability (social, environmental and economic). Sustainability of waste management can be ensured when there is no negative impact on the environment, where there are no polluted sites and emissions, and when there is full use, recycling and recovery of waste and consideration of both the social and economic aspects of waste management. Political will and consensus towards sustainable city and waste management and the continuity of policies and actions across changes in political administrations is crucial for cities/municipalities to make progress towards resilient urban communities.
14. Integrated waste management systems and coordinated actions are required to improve resource and energy efficiency. Concept and design of overall community system integration, including food production, wastewater treatment, energy generation, electricity supply, and solid waste processing, is essential for sustainable communities that conserve natural resources, maintain quality of human life, and protect the environment. Waste management itself is one key component of the community system.
15. Greater synergy among resource development partners, rather than isolated and stand alone developments, is required to promote the efficiency of resource conservation and energy production and the optimization of resource use. Local and national governments should apply either local or national economic instruments to promote financing for building resilience in cities. The applicable incentives should target the development of a closed loop economy within cities so as to mainstream waste management into the major economic activities. This would be done by utilizing the output (waste) from one sector as input for others. For example, a heat recovery system could use the “waste heat” from power generation as input for greenhouses.
16. Local governments could consider a number of local financial incentives and measures such as charges and taxes for emitters and polluters (carbon, waste water, solid waste, property taxes for vulnerable locations) and subsidies and tax incentives for developments contributing to financing resilience. At the same time, municipalities/cities are the principal agency that can influence general public attitudes, consumers, and manufacturers towards better urban environment. This can be done through: (i) appropriate regulations and incentives; (ii) education and capacity-building; and (iii) bringing different stakeholders, including consumers and manufacturers, onto a common platform to jointly decide systems and innovations for reducing waste. In the case of Borås, Sweden, the strong consensus among the political parties in making the city sustainable led the people to accept a small tax increase at the beginning of the project. Today the heat delivered to citizens is among the cheapest available, and the company that is running the energy recovery makes a good profit.
17. Education and capacity-building are required at all levels, including local and national governments, industry and private sector, the citizens and schools. Municipalities can use modern technologies, such as social media, to strengthen communication and public awareness-raising strategies for influencing public behaviours and practices, national policies

and programmes, and creating trust among citizens through greater transparency in their operations.

18. Building the capacity of cities and municipalities to handle hazardous and healthcare waste is essential for avoiding environmental and health risks. Cities and municipalities in developing countries tend to lack information on how to treat and dispose of healthcare waste, particularly hazardous elements. They also require information on technologies, sustainability-based technology assessment (operational and strategic levels) and selection for each municipality. UNEP's Compendium of Technologies for Treatment and Destruction of Healthcare Waste (2012), which was officially launched at the Forum, is a useful reference in this field.
19. Moving towards a zero waste society is inherently a multi-stakeholder process that calls for a wide range of partnership within and between local and national governments, the public and private sectors, banks and financial institutions, scientific and research institutions and universities, NGOs and citizens. For example, Zero Waste South Australia (ZWSA) works very closely with industry, local government and the community in implementing waste strategy for the State of South Australia. ZWSA has also introduced new waste avoidance and reduction initiatives across a range of industries and sectors (manufacturing, wine, hospitality, not-for-profit and government). 192 companies across 236 sites have been assisted to reduce their energy, waste and water consumption. With a return of almost \$7 for every \$1 invested by ZWSA, this is not only saving companies money, but changing the way they view resources and waste at all levels within the organisations.
20. Public-Private Partnerships (PPP) for delivering waste management services provides a number of mutual benefits for cities/municipalities and the private sector. The success of PPP depends on whether benefits are generated for all stakeholders in the process. Through PPP, municipalities can shift from being a service provider to the facilitator of service by focusing its activity on planning and management. While a private company takes up the day to day operation, the private sector brings in a large scale financial capital injection, technical & management expertise in solid waste management, and improved operating efficiencies in the system.
21. Private sector involvement in the day to day operations toward waste management activities requires greater market signals from municipalities and national Governments. Cities/municipalities should aim to increase the active participation of the private sector within the waste management framework so as to leverage the financial resources and cost-effectiveness; access appropriate technologies; and develop markets and innovations. For better engagement of the private sector, municipalities should set rules, responsibilities, and organizational standards. For example, Germany focuses on rules (clear, stringent, comprehensive legislation on duties, responsibilities, technical and organisational standards and requirements), enforcement (prohibition and stopping of low standards, permitting procedures, regularly monitoring by authorities), and financing (investments, running costs, loans for high standards).
22. Opportunities for the private sector within the waste management value chain should extend beyond the awarding of contracts from governments for waste collection services. In

developing countries, private sector involvement is often limited to hardware-selling or installation of technologies/facilities. Long term holistic business practices and soft services such as capacity-building should be enhanced to maximize the benefits and potential of PPP.

23. Incentives for private sector investment, such as long term contracts and licensing, which can sustain over changes in administration, are required for the promotion of PPP. Governments and the private sector can jointly develop markets and opportunities and thereby the private sector can better understand investment risks and benefits. At the same time, the resilience of cities and municipalities increases the attractiveness and competitiveness for private sector investment, through lower costs for public services (transportation, energy, waste management, clean water supply, etc.), lower business risk, lower long-term insurance costs, and job creation.
24. PPP are necessary to leverage financing, introduce appropriate technologies, and attract suitable innovation to the waste management sector. The best approach for PPP can be a combination of measures such as development and enforcement of regulations, price signals including fees/taxes and incentives/rewards (e.g. corporate image), and education and awareness on behavioural changes. Zero waste policies should cover compliance requirements for manufacturing activities, while manufacturers should aim their activities towards integrating the 3Rs.
25. PPP, as a collaborative interface, are multi-stakeholder approaches that identify stakeholders with a significant interest in sustainable development. UNDP acknowledged the valuable contributions of private sector partnerships to poverty reduction and job creation. While considerable progress has been made by involving civil society organizations and other local stakeholders in the process of decision-making and reviewing sustainable development documents, a variety of challenges, such as the lack of technical capacity to design PPP, low ability to coordinate among stakeholders, and inadequate funding are hampering local development with regard to the effective participation of local stakeholders. There is a need for the development of future PPP that will primarily focus on community level activities and initiatives, as well as investments for institutional design and reform.
26. Waste management efforts can be linked with local and national initiatives for climate change, such as the CDM. The case of Dhaka, Bangladesh, showed key issues to scale up organic waste management and measures to promote private sector investment in composting, including a decentralized approach of composting using PPP and carbon financing.
27. Proper involvement of the informal sector is essential, particularly in developing countries. This can be done through provision of social support, training and education to waste pickers and through the improvement of health, welfare, and environmental standards.
28. Capacity development of municipal officials and other major stakeholders in the solid waste management sector and industry can be sought through exchange and cooperation between regions and cities, including North-South and South-South cooperation. The cases of exchanges and collaboration between Sweden and Indonesia, and Cambodia and Thailand, are some of the successful examples for international cooperation on capacity-building and knowledge transfer.

V. Zero waste policies and programmes towards sustainable and resilient urban communities

29. Zero waste is a vision that leads cities towards a sustainable future. Zero waste is a long-term vision that projects a thriving society that exists within nature's resource constraints and its ability to assimilate waste.³ Zero Waste is a complete waste-free society, not just transferring the problem from one place to another.⁴ Zero Waste is a philosophy that provides guidance to the society on changing habits to improve the methods of using resources, thus, approaching as close to zero waste as possible. There is a need for city and municipal authorities to orient their policy directions towards a resource efficient and zero waste society, as a pre-requisite to moving towards a green economy, and to making the required changes in the existing institutional arrangements in the waste sector at the local, regional and national levels.
30. Realizing zero waste requires integrated policies and strategies, direction, planning, financing and good governance. For example, Zero Waste South Australia introduced the waste strategy for the State of South Australia in 2005, which provides the focus for activities, gives directions, sets targets and identifies actions. The State's waste strategy for 2011-2015 aims to "avoid and reduce waste" and "maximize resource value". It also addresses improving education and awareness to support informed choices by consumers, regulators and the market, as well as the Extended Producer Responsibility (EPR) of every party along the value chain — not relying on city councils to bear the total costs at the end of a product's life cycle.⁵ Source separation will continue to be the State's policy focus for MSW.
31. Development of sound and integrated policies and planning towards zero waste requires: (i) accurate, reliable, and relevant data related to waste quantities, characterization, waste streams, etc.; (ii) better information-sharing and transparency; and (iii) access and use of appropriate technologies to provide available waste management services. Development and implementation of zero waste policies and programmes require multi-stakeholder participation and collaboration. The case of South Australia shows that policymakers, regulators, revenue collectors, operators, clients and planners participate in the process. The Ahmedabad Municipal Corporation (AMC), in India, is currently working on the development of a "Roadmap for Zero Waste" through a multi-stakeholder consultation process. The roadmap is expected to serve as a visionary document that will guide AMC to introduce and implement necessary policies and strategies as well as to sensitize citizens.
32. Zero waste initiatives should emphasize efforts to avoid or reduce waste going to landfills as much as possible, in the context of material efficiency. While the more industrialized nations seemed more concerned about material recovery and recycling, there seemed to be much more focus on end of pipe solutions such as landfilling in developing countries. In the case of Europe and Sweden, policy and financial instruments that came into effect since the early 1990s (e.g. waste treatment plans, producer responsibility, local incentive programmes,

³ Chair's Summary of the CSD19 Intersessional Conference on Building Partnerships for Moving Towards Zero Waste, 16-18 February 2011, Tokyo, Japan

⁴ Multi-stakeholders Consultation on Zero Waste Road Map for Ahmedabad/India, 18 April 2012

⁵ Building resilient communities through Zero Waste Policies and Programmes — Experience of Zero Waste South Australia, Vaughan Levitzke, Chief Executive, Zero Waste SA, September 2012

landfilling tax, landfill ban on combustible waste, and incineration tax) led to the minimization of municipal waste landfilling (below 5% in some countries such as Sweden and Germany).

33. Extended Producer Responsibility (EPR) systems should be considered in collaboration with the business and manufacturing sectors in order to ensure proper management of end-of-life products and provide incentives for product redesign. In the Republic of Korea, 60% of the collection of E-waste is done by producers under the EPR system. Eco-assurance system is another methodical management of e-waste and vehicles.
34. Other technical Interventions include, inter alia: standardization and provision of reliable collection system and services to the entire population, establishment of transport and transfer systems, institutionalization of resource recovery programmes, identification and building of a sound final disposal system, establishment of comprehensive recycling programmes, identification of uses/markets for recyclable materials, development of programmes to manage the organic fraction of waste, establishment of cost recovery mechanisms, determination of the role of recycling in the economy, selection of facilities and available resources (financial and human) for sustainable operations, availability of uses/markets (product quality).

VI. Local government initiatives towards IPLA objectives

35. The zero waste concept and policies are initiated by many local authorities, such as Borås (Sweden), Zero Waste SA (Australia), Ahmedabad (India), Shanghai (China), Phitsanulok (Thailand), towards improvement of municipal solid waste management with the 3Rs as a key policy. Legislation, institutional arrangement, public education and awareness-raising are important factors for the improvement of municipal solid waste management. Many cities try to prohibit and close open dumping and burning in order to improve the sanitary condition of the cities and to minimize the environmental load of the waste. Some cities have also included the 3Es (energy, economy, environment) in their overall waste policy framework.
36. Some governments are confronted with an insufficient budget for waste management, even though initiatives such as the collection of a waste disposal fee were introduced. In this case, some cities introduced a polluter-pay-principle to increase possible financial avenues for solid waste management, such as charging for plastic bags. Incentives also can be applied to encourage source separation of recyclable waste.
37. Public private partnership is seen as an opportunity for cities, such as Strumica (Macedonia), to meet the required regional waste management standard, while risk sharing should be discussed and distributed among the local authorities and the private sector. Public participation and democratic decisions can influence residents' behaviours to align with sustainable municipal solid waste management. The experience of Arakawa (Japan) shows that the involvement of the local community in the collection of recyclable wastes can contribute to lower operation costs, thus leading to municipal budget savings and to reduce the wastes.

38. Organic waste management and composting are an important element and strategy for municipal solid waste management in cities where the largest waste composition is organic. Initiatives in cities such as Djerba (Tunisia) and in the Western Province of Sri Lanka have developed a processing system and facilities for organic waste composting, including the generation of biogas.
39. Eco-town/city, eco-industrial zones and eco-parks can be initiated by the leadership of mayors and local authorities with the support of national Governments, as in the cases of the Republic of Korea, Japan and China. In Danyang (Republic of Korea), the resource recycling complex was developed under the city initiative for reviving local industry and economy by attracting green and recycling business, in line with the national policy on green growth.

VII. Institutional mechanism for promoting IPLA objectives and activities

40. The International Partnership for Expanding Waste Management Services of Local Authorities (IPLA), which was launched at CSD-19 in New York in May 2011, aims to address the various challenges and capacity needs of local authorities (LAs) in achieving sustainable waste management. The goal of IPLA is to help LAs move towards a resource efficient and zero waste society, ultimately achieving liveable and sustainable cities. IPLA serves as a dynamic knowledge platform and a decentralized network including a wide range of partners such as cities and municipalities, governments, the private sector, NGOs, academic and research institutions, international and donor organizations, and UN agencies to address waste management issues, including new emerging issues, at the local/municipality level. As of September 2012, 160 members and partners from 56 countries have officially registered with IPLA. Members comprises, inter alia, cities/municipalities, national Governments, the private sector, NGOs, donor agencies, and international organizations.
41. IPLA is supported by global, regional and sub-regional secretariats. The sub-regional secretariats are designated to address waste management issues in their respective regions, strengthen regional networks and partnership, and respond to specific and emerging challenges faced by municipalities in each region. The Forum unanimously endorsed the proposed roles of the sub-regional secretariats: (i) address zero waste policies and programmes in their regions; (ii) expand and strengthen IPLA networks with potential partners and institutions; (iii) take part in IPLA forums and meetings; (iv) share best practices, case studies, and innovative policy initiatives with IPLA members and partners; and (v) assist with IPLA activities (e.g. fund raising, mobilizing in-kind support/technical support).
42. The Asian Institute of Technology as the IPLA global secretariat, and IPLA sub-regional secretariats including SWEEP-Net, Griffith University, Regional Environment Centre, University of the Southern Caribbean and SACEP presented their activities in the context of IPLA. The issues and challenges highlighted by the sub-regional secretariats provided insight to their institutional capacity and requirements in further strengthening their roles and potential for addressing IPLA objectives. The Forum unanimously endorsed the proposal of the International Center for the Best Environmental Technologies (ICBET), based in Moscow, to serve as an IPLA sub-regional secretariat for the Russian Federation.

43. The formation of an IPLA Advisory Board to help guide the implementation of various activities under IPLA and the expansion and strengthening of IPLA networking worldwide was endorsed by the Forum. The expected roles of the Advisory Board are to: (i) provide overall advisory support and strategic guidance for the implementation of IPLA activities; (ii) provide strategic guidance for fundraising in support of IPLA activities; (iii) take part in IPLA meetings/forums (international, regional, and national levels) as necessary; and (iv) provide strategic advice to IPLA members and partners, including the regional and sub-regional secretariats, in developing international collaboration, joint activities, and project proposals in the key areas of concern, including the public private partnership (PPP) and capacity-building of local authorities/municipalities. The Forum unanimously endorsed the proposal of having the following representatives as the members of IPLA Advisory Board: Prof. Yong-Chil Seo Yonsei, University/President of Korea Society of Waste Management (KSWM) (Republic of Korea); Dr. Prasad Modak, Executive President of Environment Management Center (India); and Mr. Carlos RV Silva Filho, International Solid Waste Association (ISWA) (Brazil). The Forum further recommended the addition of four members to the Advisory Board, including one from a SIDS.

VIII. IPLA PORTAL: A multi-facet knowledge and dynamic platform for fostering partnerships

44. IPLA Portal (www.iplaportal.org), which was developed with the support of the Infrastructure Leasing & Financial Services Limited (IL&FS) and the Environment Management Center (EMC) based in Mumbai, India, was officially launched. A primary focus and role of the Portal is to provide a platform for dynamic interaction and information-sharing on waste management among IPLA members and partners, particularly government authorities and the private sector, on daily basis. The Portal has various functions and components (e.g. posting of events/meetings, data and resources, surveys, discussions, expression of interest, on-line meeting) which are designed to respond to users' needs and interests. The Portal will be further developed flexibly with decentralized and voluntary feedback, inputs and contributions (e.g. best practices, case studies, policy instruments, technologies, express of interest) from and interactions among IPLA members and partners. Quality control and systematic updates of the information and content will be ensured.
45. The Portal is expected to serve as one of the available interfaces for IPLA members and partners in accessing information and partners in the field of waste management, in line with IPLA's goal and objectives. The Portal will continue to create synergy, complementarity and links with other relevant platforms, such as the UNEP-GPWM and WASTE-Portal, etc., to avoid duplication, while allowing users to make initial entries from different sources, based on their needs or expertise. IPLA members would further consider where to house IPLA Portal, while the IL&FS will continue to host it for the interim period.

IX. The way forward

46. The Forum unanimously endorsed the idea of launching an IPLA Award for best performing municipalities in advancing zero waste policies and programmes. Further details such as selection criteria and process will be discussed among core IPLA members.
47. Resource mobilization remains a key issue and challenge in sustaining and maintaining IPLA objectives and activities. The Forum requested all IPLA members and partners, including the secretariats, to actively contribute and support the activities of IPLA in the interest of local authorities.
48. In the area of training and capacity-building, Griffith University in Australia, the IPLA sub-regional secretariat for Australia and New Zealand, in collaboration with UNCRD, developed and submitted a proposal on a training programme entitled “Leadership Training for Moving Towards Resource Efficient and Zero Waste Societies in Developing Countries” which is targeted towards leaders of waste management in local authorities registered with IPLA, for consideration of the Australian Government AusAID programme on Australian Leadership Awards (ALA) Fellowships. If approved by AusAID, the training course will be held for four weeks in early 2013.
49. Dr. Choi Heung-Jin, Director General, Resource Recirculation Bureau, MoE-Korea, extended his appreciation to the participants for their substantive contribution to the Forum as well as for joining the celebration of Korea’s Resource Recirculation Day. He recalled that the Daegu Declaration had been referenced in several regional IPLA meetings, and that its presentation to the participants of Rio+20 at its side events strengthened the momentum for improving global waste management. He addressed the need for integrating the outcomes of the first and second IPLA forums into the policies of local communities around the world, by organizing the accumulated information into a database for better accessibility, and by developing a mechanism to motivate IPLA partners to action. In this context, he attached significant importance to the official launching of the IPLA Portal and the proposal of an IPLA Award for best performing municipalities in the waste sector. He expressed his keen interest in the further development of IPLA, including diversification of host countries and enhancement of the role of the sub-regional secretariats. He called for support, commitment, and further plans to take IPLA a leap forward to become one of the highly recognized international networks on waste management.
50. Participants acknowledged and extended their sincere appreciation to the Ministry of Environment, Republic of Korea, for the generous support and cooperation in hosting the IPLA Global Forum. The participants also expressed their hope that the MoE-Korea and the KSWM would continue their valuable support in strengthening IPLA.
51. The Rio+20 outcome document The Future We Want has provided an important framework for IPLA to further strengthen the role of municipalities and local authorities in achieving sustainable urban management across the world.

Annex 1: List of Participants

Annex 1.

**IPLA Global Forum 2012 on
Empowering Municipalities in Building Zero Waste Society
- A Vision for the post-Rio+20 Sustainable Urban Development
Seoul, Republic of Korea, 5-6 September 2012**

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