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CSD INTERSESSIONAL CONFERENCE ON BUILDING PARTNERSHIPS FOR MOVING TOWARDS ZERO WASTE

Prepared by
United Nations Department of Economic and Social Affairs (UNDESA),
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I. Introduction

1. The United Nations Department of Economic and Social Affairs (UNDESA), the United Nations Centre for Regional Development (UNCRD), and the Ministry of the Environment of Japan (MOEJ) jointly organized the “CSD-19 Intersessional Conference on Building Partnerships for Moving towards Zero Waste” from 16 to 18 February 2011 in Tokyo, chaired by Hon. Takeshi Hidaka, Parliamentary Secretary of the Environment of Japan. The meeting was attended by approximately 180 participants including representatives of local and national governments, public waste utilities (PWUs), the private sector, academia, and NGOs, and international resource persons from 50 countries in Africa, Asia, Europe, Latin America and the Caribbean, North America, and Oceania as well as UN organizations (UNDP, UNEP, Secretariat of Basel Convention, UN ESCAP, UNIDO, WHO), development agencies (GEF, GIZ, IDB, JICA), regional organizations (REC, SACEP, SPREP), and others.
2. Within the context of the current cluster of issues being considered by the CSD and as a contribution to CSD-19 in 2011, this meeting mainly focused on building partnerships as a basis for sustainable waste management as well as an effective means to expand the waste management services of PWUs towards the goal of zero waste.
3. Rising waste volumes and the increasing complexity of waste streams have become major and growing public health and environmental issues, particularly in urban areas of developing countries, and threaten the attainment of the Millennium Development Goals (MDGs).
4. Zero waste reflects a shared global vision where resources are used sparingly, efficiently, and optimally with systems in place to ensure that waste is effectively managed without significant negative impacts on the health of citizens and the quality of the environment. It represents an aspiration to both minimize the use of resources in the manufacture, distribution, and use of products consumed by society and maximize the capture, reuse, recycling, and recovery of the intrinsic resource value within the waste generated by society.
5. Moving towards zero waste is inherently a multi-stakeholder process which calls for partnerships within and between communities, businesses, industries, and all levels of government. Inclusivity of all stakeholders in the process of formulating and implementing policies, strategies, and plans is essential to creating the conditions for sustainable partnerships to flourish. Other key stakeholders meriting particular attention include women, youth, disadvantaged groups, isolated communities including mountain and island populations, research establishments, civil society groups, trade unions, the informal sector, waste management industry representatives, and industrial and agricultural processing entities.
6. Solid waste management has traditionally been the sole responsibility of local authorities and PWUs. However, national governments have a critical role in establishing the framework conditions for the resource economy to function. Other non-state actors, including the private

sector, have an important role in the delivery of investment, professional and human resources, technology, and equipment required in order to deliver the necessary level of services.

7. Cities typically spend between 5 to 15 per cent of their total budget on solid waste management. In low-income countries, 90 per cent or more of that budget is spent on waste collection alone, although only 45 to 60 per cent of the waste is actually collected. Providing waste collection services to all people, building on existing recycling systems, and raising the environmental standards of waste disposal, are major challenges in low-income countries. In many middle-income countries, significant progress has been made in achieving the primary goal of universal collection service coverage and secure disposal. However, there is a need to focus on improving the standards and sustainability of these services and to put in place the policies and mechanisms needed to control the rapidly increasing rate of waste generation. In high-income countries, the situation is markedly different. While services and facilities are largely in place, the major challenge is to continue to innovate, de-link resource use and waste generation from economic growth, and further improve systems in order to address the challenge of achieving zero waste.
8. The diversification of waste streams and the growing presence of chemicals and hazardous elements in general waste streams further compound waste management challenges. Multi-stakeholder partnerships could bring much needed support to local authorities and public waste utilities, enhancing their capacity to tackle these challenges through various mechanisms and approaches such as enhancing institutional and human capacity, research and information-sharing, and technology transfer. Improving access to various investment and financial mechanisms would also relieve the burden on government budgets.
9. Against this background, concerted efforts at the local, national, and international levels in building effective partnerships for moving towards zero waste are essential. The meeting was organized with the following objectives: (a) expand waste management services in developing countries; (b) raise awareness about win-win opportunities for public-private partnerships (PPPs); (c) facilitate dialogue on building partnerships for waste management, including sharing good models and practices of partnerships in waste management; (d) identify and/or establish concrete collaborative initiatives to match needs with appropriate solutions; (e) identify the necessary enabling conditions for 'successful' PPPs, especially regarding quality service that is demand-responsive, cost-effective, and sustainable; and (f) discuss and finalize the scope of a prospective international partnership with the objective of expanding waste management services of the local authorities and PWUs, to be launched during CSD 19.

II. Opening Remarks

10. In his opening speech, H.E. Ryu Matsumoto, Minister of the Environment of Japan, referred to the Japanese experience in overcoming a variety of serious waste problems and cited Japan as providing excellent examples at both the local and national levels for improving waste management and 3R activities through developing partnerships among stakeholders. In light

of its experience, Japan recognizes the need for, and the potential benefits of, developing and enhancing international partnerships for improving waste management. Referring to the Regional 3R Forum in Asia, the regional platform recently established jointly by MOEJ and UNCRD, he expressed his hope that this Conference would pave the way in establishing and strengthening partnerships among the many stakeholders involved in waste management and provide meaningful input to CSD-19 and Rio+20.

11. Mr. Abdelghani Merabet, Vice Chair of the United Nations Commission on Sustainable Development (CSD-19), emphasized that moving towards zero waste cannot be achieved without a strong partnership among states and all stakeholders and the awareness of civil society. He called for special attention to the critical challenges faced by developing countries such as limited human and institutional capacity, technological capabilities, and financial resources, as well as the need for improved communication and greater commitment of all stakeholders in local areas.
12. Mr. Sha Zukang, Under Secretary-General for Economic and Social Affairs, UN DESA and Secretary General for the UN Conference on Sustainable Development (UNCSD)/Rio+20, underscored the need for a vision for managing urbanization. Citing waste management as an important theme of CSD-19, he urged the meeting to discuss zero waste issues, interim targets, the need for a registered partnership, and linkages between waste management and the sustainable consumption and production agenda. He expressed his high expectations toward this meeting in demonstrating the critical role of waste management within a green economy, urban development, employment creation, and investment in the context of the UN Conference on Sustainable Development (UNCSD)/Rio+20. He also highlighted the key role that strengthening institutional frameworks played in empowering urban managers and fostering partnerships.

III. Turning waste into resources and economic opportunities

13. The concept of ‘zero waste’ challenges the assumption that waste is ‘inevitable and unavoidable’. Zero waste shifts the focus from ‘end-of-pipe’ solutions and disposal practices, to promote cyclical use of materials in the economy. Zero waste is a long-term vision that ultimately envisages a thriving society that exists within nature’s resource constraints and its ability to assimilate waste.
14. Zero waste contributes to more than resource and environmental conservation. Parallel and complementary benefits include social and economic development, good governance, job creation, public health, and community cohesion. The 3Rs and Circular Economy policies found in East Asia provide leadership on the guiding principles of transitioning to zero waste which cannot be achieved solely through end-of-pipe solutions.
15. The conversion of waste into resources and economic opportunities is a critical issue for all countries. While waste is a resource for some, the full economic potential of managing and utilizing waste as a resource has generally not been tapped.

16. Numerous challenges need to be overcome including lack of reliable data and information and insufficient linkages between local authorities and the global recycling markets.
17. Converting waste into resources will generate employment, but requires requisite legal and institutional frameworks, as well as education and awareness. In addition, rights of access to basic services, carbon financing, secondary raw material/recycling markets, fiscal instruments and pricing mechanisms (including CDM and EPR), technological innovation and capacity development must be considered.
18. There are many existing 3Rs success stories at the community, regional, and national levels. Environmental and public health protection and the creation of economic opportunities are key criteria for success.
19. Human capacity development and regional knowledge transfer networks, particularly among local authorities should be prioritized so as to promote viable approaches. Sharing of knowledge and experiences is an essential ingredient for sound policy making.
20. Behavioural change is necessary in order to achieve the paradigm shift leading to zero waste. This will require participatory approaches and collaborative efforts that go beyond conventional education and awareness raising.
21. Separation of waste at source reduces the quantity of waste requiring treatment and disposal and improves the quality and marketability of secondary raw materials, thereby contributing to local economic development, employment generation, and improved working conditions, especially for people working in the informal sector.
22. Waste offers a significant resource as an alternative source of energy. Consequently, the waste industry has an important role to play in reducing greenhouse gas (GHG) emissions and providing cost effective energy options.

IV. Empowering and developing capacity of local authorities and public waste utilities

23. Local authorities require the resources and capacity to effect service delivery, whether provided themselves, through a PWU, or through service delivery delegated to the private sector (formal, community or informal). The institutional structure needs to be clear and coherent. Data collection and management is vital, both technical and financial. All professional staff, both administrative and technical, need to be trained, and collectively they need to possess all the multi-disciplinary skills and knowledge required. Continuity of high-level technical expertise is important.
24. High-level political commitment is instrumental in transforming waste management practices. Waste management services play an important role in protecting the public health and the living environment of citizens and should be recognized.

25. In many cities, the community/informal sector is already handling and recycling 20 per cent or more of the waste, at little or no cost to the local authorities. This important contribution of the informal sector needs to be recognized, along with the need to improve its working conditions.
26. Partnerships are vital to leverage the delivery of waste services. Within the local authorities, for example, collaboration with land-use and economic development planners is valuable in facilitating the siting of necessary facilities for both resource and waste management. Local governments can consider reducing business taxes or fast-tracking the permits for these types of businesses to further foster their creation. Sites for landfills, transfer stations, and other waste infrastructure should be clearly designated in local and regional land-use plans. Inter-municipal cooperation should also be promoted to expand waste management services as well as regionalization of successful models.
27. A clear national policy and strategic framework is needed. Local authorities need to work with a clear strategic framework to synergize the strengths of all stakeholders including the private sector. This will also enable the raising of finance from banks and international donors.
28. Providing a service that is sustainable from social, environmental and economic points of view is key. Communities need to be included in both service planning and facility siting, with particular emphasis given to the role and inclusion of women. Mechanisms need to be in place to measure customer satisfaction. Education and awareness promotion are critical.

V. Addressing new and emerging waste issues

29. The production and use of hazardous chemicals are increasing in developing countries. The waste stream is becoming more complex (e-waste, medical waste, household chemicals, batteries, etc.) and the capacity to manage it in an appropriate manner is lagging behind. Capacity building for waste segregation needs to be prioritized so that hazardous materials can be kept out of the general waste stream and safely treated. Collaborative efforts of national, regional and international bodies with required experience in hazardous and/or chemical waste management, such as standards agencies, research institutes and universities, should be promoted.
30. Hazardous chemicals present in various types of wastes or generated from improper waste treatment pose health and environmental risks. Of special concern is the range of synthetic organic compounds, such as persistent organic pollutants (POPs), which remain in the environment for long periods of time. It is vital to engage multilateral institutions and donor communities in financing waste related technical cooperation projects that address emerging chemical issues, and provide useful knowledge and practical training for local and national authorities.
31. Many transboundary movements of hazardous waste occurring today are illegal or are taking place in a legal gray zone. The frequent intermixing of hazardous wastes with other wastes

and valuable resources, poses particular management challenges to local authorities. Prevention of inappropriate transboundary movements of hazardous waste depends on effective measures taken by both exporting and importing countries. Although the Basel Convention and related national legislation address this issue, there is an urgent need to build capacity at the local level both in importing and exporting countries, to strengthen their enforcement.

32. Due to rising resource demand and increasing resource scarcity, there is need for mechanisms to encourage environmentally and socially sound resource circulation, both at domestic and international levels. In this context, e-waste needs special attention, since it contains a number of strategic metals that get lost in the recycling processes typically used in developing countries and also contains hazardous materials. Sustainable resource management requires advanced recycling technologies that can recover resources in an environmentally sound manner.

VI. Financial sustainability in municipal waste management

33. The size of the world's waste management industry is estimated at approximately Euro 300 billion per year. The world is facing an increasingly acute shortage of primary resources, which impacts the prices of secondary raw materials derived from waste, adding much instability to the industry's financial reserves. Investment demand for municipal waste in urban areas over the next ten years is projected to reach between Euro 150-350 billion. There is also anticipated significant demand for investment in the management of other waste streams, the recycling industry and for the greening of production and consumption cycles.
34. Waste management should be placed higher on the financing agenda. Regional, national, and international financial institutions could strengthen access to and create specific schemes to achieve zero waste.
35. Investments from international financial institutions only satisfy a part of the demand. There is therefore a need to identify frameworks to leverage investment from other sources.
36. Supply of investment generally flows to those countries that have the ability to attract, deliver and sustain investment. Investment finance can generally be sourced for projects that have sound data and where a predictable income stream can be clearly identified.
37. Investment demand gaps are easier to close in large cities, where economies of scale increase the profitability of projects. Meeting investment demand is a real challenge in small towns and poor urban areas, with small economies of scale.
38. National and local authorities should foster their investment climates by addressing key institutional and policy-related obstacles.
39. Financing instruments to address climate change such as CDM, GEF, and Green Climate Fund provide opportunities to meet some aspects of the demand for waste management

services. However, there are still considerable financing gaps which need to be addressed. Waste management should mobilize such opportunities in large scale. CDM currently provides investments but only in certain parts of the waste management chain. There is therefore need for more easily accessible financing.

40. Producer responsibility is an important economic/policy instrument to provide incentives for reducing waste quantities, and injecting finance into the management of packaging and other special waste streams.
41. Financing of both capital investments and operation & maintenance costs are needed.
42. Affordable fees for the collection of waste are essential. Linking fee collection to utility bills and property tax has proven effective in certain cases.
43. Waste management has many linkages with other investment sectors. Inter-sectoral approaches combining climate change, urban development, health, sanitation, land-use planning, and urban transport should be encouraged.
44. Capacity should be strengthened within the PWUs and local authorities in order to improve bankability of projects and increase access to financing. Revenues of waste management projects and recycling largely depend on the predictable availability of feedstock to facilities, and therefore it is essential to have reliable data on composition and quantity of different waste streams.
45. Small Island Developing States (SIDS) have particular investment needs. Well-tailored approaches are necessary due to land constraints, lack of local markets for recyclable materials, high energy costs, logistics, and low economies of scale. Investment in appropriate technologies, including those developed locally, is crucial for the sustainability of waste management in SIDS.

VII. Strategic approach to enhance participation of the private sector

46. The meeting cited the following reasons for enhancing participation of the private sector (including formal sector, community based organizations and informal sector) in waste management: need for improving services and operations; shifting away from tax-based systems to user-pay systems; reducing local government costs and creating job opportunities; creating flexibility in operations and increasing efficiency; and providing creativity, productivity, technical know-how and experience, past track records of success, and access to capital.
47. The following key barriers for private sector participation in waste management were identified: lack of reliable data; lack of holistic policy and regulatory frameworks; lack of practices for separating waste at source; lack of finances; lack of clear procedures for private sector involvement such as procedures for granting permits; and limited capacities of local authorities to engage the private sector.

48. In light of these, the meeting recommended the following as key factors for enhancing participation of the private sector in waste management, building incrementally on success; developing partnerships based on local capacity; compiling and making available reliable solid waste data and forecasts for future changes; ensuring clarity and transparency in the contract procedures in order to better assess and share the risk and benefits among the private and public sectors.
49. Viable business models need to be developed to attract private sector investment. Risk-sharing mechanisms having a strong social component addressing the needs of vulnerable sections of society such as pro-poor public-private partnerships (5Ps), and micro-financing schemes particularly to support informal groups and NGOs should be promoted.
50. Local and national governments should develop and implement upstream and downstream measures. Such measures could include programs to promote 3Rs; bans on substances (e.g., mercury [Hg]), products, or technologies; take-back provisions; green purchasing; deposit-refund programmes, etc.

VIII. Partnerships as the basis for sustainable waste management

51. The industrial and agricultural value chains and the markets that drive resource recovery and ultimately make it possible existed before municipal recycling; they exist now in an uneasy alliance with both municipal recycling and the even newer institutional landscape of extended producer responsibility (EPR), and they are likely to continue to persist in the future. This 'commodities face' of recycling retains its own structure, institutions, practices, and market. There is a need to create a dynamic and effective platform to promote partnership between different stakeholders such as PWUs, private/business sector, informal sector, and communities.
52. The contributions of the informal sector in the value chain of waste management must be recognized and acknowledged. Over time, a strategic framework is needed to transform informal sector. Government should help and encourage formation of associations and cooperatives among the informal sector. Direct financial support from the government to formalize the informal sector is necessary in certain cases.
53. In light of the substantial time necessary to bring attitudinal and behavioural changes in communities towards zero waste, partnerships are needed to foster consultative processes, especially between communities in the areas immediately adjacent to waste management facilities. These partnerships help in improving waste segregation and generating employment opportunities while also fostering the social acceptability of treatment operations.
54. Partnerships at different levels and involving different stakeholders to holistically and comprehensively address a wide variety of issues are urgently required. In this regard, the meeting identified the need to create new partnerships and expressed its appreciation to

UNDESA/UNCRD for initiating the *International Partnership for Expanding Waste Management Services of Local Authorities (IPLA)*. IPLA and the UNEP's Global Partnership on Waste Management will be complementary and synergistic.

55. The meeting unanimously endorsed the establishment of International Partnership for Expanding Waste Management Services of Local Authorities (IPLA) to be launched during CSD19 in May 2011 (*Annex I*). The meeting extended its gratitude to the Asian Institute of Technology (AIT) in Bangkok for hosting the Global Secretariat of IPLA. IPLA will be implemented as a decentralized network of multiple stakeholders in the interest of serving the needs of PWUs. A number of institutions, government representatives and NGOs expressed their keen interest in joining IPLA in various roles such as acting as regional/sub-regional/national Secretariats.

IX. The way forward

56. Zero waste is a powerful new paradigm, which needs to become central to policy making at the local, regional, national, and international levels. It represents a long-term vision that ultimately envisages a thriving society that exists within nature's resource constraints and its ability to assimilate waste.
57. Moving towards zero waste is inherently a multi-stakeholder process which calls for partnerships within and between communities, businesses, industries, and all levels of government. Inclusivity of all stakeholders in the process of formulating and implementing policies, strategies, and plans is essential to creating the conditions for sustainable partnerships to flourish, and international attention on this issue is urgently required.
58. In light of the major funding gaps, dedicated financial mechanisms that complement existing funding sources need to be considered. This might include extension of carbon financing to recycling of different materials streams or wider implementation of EPR or technological innovation that generates additional value from waste streams.
59. Policy, legal, and institutional frameworks need to be strengthened. Capacity of local and regional authorities developed to prepare and implement bankable investment projects is critical.
60. The International Partnership for Expanding Waste Management Services of Local Authorities (IPLA) should work to strengthen the knowledge base and promote good practices and exchange of experiences between local and regional authorities.
61. Zero waste needs to be recognized on the political agenda as a prerequisite to foster green economy and the required changes in the existing institutional arrangements.

Annex 1: International Partnership for Expanding Waste Management Services of Local Authorities (IPLA)

Local authorities of emerging and developing economies suffer from capacity constraints in terms of technology, financial, institutional, and policy aspects in implementing waste management infrastructure, and associated services. The rising volume and complexity of waste streams are posing challenges to the local authorities threatening human health and ecosystem as well as security of resources. In order to respond to these challenges, an International Partnership for Expanding Waste Management Services of Local Authorities (IPLA) that focuses on networking the local authorities across the world is necessary. This IPLA should stress on the link between waste and resources and aim to connect all key stakeholders through knowledge networks following the principles of Integrated Solid Waste Management (ISWM) and strategies such as Reduce, Reuse, and Recycle (3Rs).

The proposed IPLA is structured to represent a knowledge network that emphasizes practice. The Mission of IPLA will be “to share knowledge, communicate across national boundaries, and work to spread best practice in order to accelerate the uptake of waste-related infrastructure and services at various stages of waste management such as avoidance, prevention, minimization, segregation, collection, transport, recycling, recovery, reuse treatment, and disposal”. Its primary objectives will be to:

- Enable local authorities to share experience about institutional, business, and financial models that have been successful or otherwise in addressing specific waste problems and opportunities;
- Help in mainstreaming integrated and sustainable waste management strategies such as ISWM and 3Rs;
- Facilitate expansion of waste management-related services and supporting infrastructure that caters to local authorities’ needs and meets compliance with applicable regulations; identifies partners and appropriate financial mechanisms for operation of the facilities, create "green jobs," and stimulate "green investments";
- Encourage awareness-raising and capacity-building programmes targeting local authorities and other stakeholders; especially to decouple waste generation from economic development and to manage complex and emergent waste streams;
- Help in creating a practice-oriented knowledge network to help formulate innovative projects, select most appropriate technologies, access expertise, promote waste exchange, and make best use of waste-resource-related opportunities;
- Be instrumental in the collation of databases on waste generation, technology performance and standards, benchmarks and Key Performance Indicators (KPIs) for gap assessment and target setting for the local authorities; and
- Provide a platform to local authorities in giving feedback to enhance and modernize the national policy framework.

The IPLA will have an International Secretariat guided by an Advisory Board and supported by regional/sub-regional secretariats. Thematic Working Groups (TWG) may be constituted by inviting facilitating organizations (FO) that will make contributions to the “knowledge pool” of IPLA on an honorary basis. FOs will interact with local authorities in the form of an “ecosystem” that may include knowledge-based Institutions, state/national-level urban development departments, NGOs, CBOs, waste picker associations, financing institutions, technology and service providers, industries, and other alliances related to waste management. TWG will cover cross-cutting themes such as financing, training, practice research, policy and regulations, etc. and may focus on specific waste streams as well as E-waste, healthcare waste, plastic waste, etc. In addition, local authorities from high-income countries could share their experience and provide knowledge to local authorities from low- and middle-income countries. The structure of IPLA will be non-hierarchical and flexible for promoting direct interactions between local authorities on a global basis.

Web-portals, workshops, regional and international events, training and awareness programmes, and piloting innovative projects are some of the tools and mechanisms which IPLA will use to help LAs network between each other. Monitoring arrangements and performance indicators to check the performance of IPLA will be put in place to ensure that its activities are geared towards the goal of zero waste.

Membership to IPLA will be open to all. All members of IPLA should be in complete concurrence with IPLA's mission and goals. Membership to IPLA will be of five types, *viz.*, local authorities, TWG members, Individuals and organizations, Regional Secretariat, and Sub-Regional Secretariat. Although IPLA is unique in terms of giving specific focus to local authorities, it would draw synergies with existing international initiatives and partnerships on waste management. In this manner, IPLA will ensure that there are no overlaps or duplication, and the relationship with other initiatives will be complementary.