



Ha Noi 3R Declaration in the Context of Rio+20 Outcome – Implications towards Resource Efficient and Zero Waste Society



**The 2013 IPLA Global Forum, 9-11 September, 2013,
City of Borås, Sweden**

**CRC Mohanty
Environment Programme Coordinator, UNCRD**

Rio+20 Outcome – The Future We Want

In the “Future We Want”, the States call for:

- **Increasing resource efficiency and reduction of waste** to achieve green economy in the context of sustainable development and poverty eradication to enhance the ability to manage natural resources sustainably and with lower negative environmental impacts
- **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
- development and enforcement of comprehensive **national and local waste management policies, strategies, laws and regulations.**
- continued, new and innovative **public-private partnerships** among industry, governments, academia and other non-governmental stakeholders aiming to enhance **capacity and technology** for environmentally sound chemicals and waste management, including for **waste prevention**



Rio+20 Outcome – The Future We Want

Sustainable cities and human settlements

(para. 134-137)

Among others, the States



- recognize that, if they are well planned and developed, including through **integrated planning and management approaches**, cities can promote economically, socially and environmentally sustainable societies.
- commit to promote sustainable development policies that support a **safe and healthy living environment for all, safe and clean drinking water and sanitation**; healthy air quality; generation of decent jobs; and improved urban planning and slum upgrading.
- support sustainable management of waste through the application of the **3Rs**.
- emphasize the importance of increasing the number of metropolitan regions, cities and towns that are implementing **policies for sustainable urban planning and design** in order to respond effectively to the **expected growth of urban populations in the coming decades**.

Rio+20 Outcome – The Future We Want

Chemicals and waste (para. 213-223)



Among others, the States call for:

- *Sound management of chemicals and waste* which is crucial for the protection of human health and the environment.
- *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
- development and enforcement of comprehensive *national and local waste management policies, strategies, laws and regulations.*
- continued, new and innovative *public-private partnerships* among industry, governments, academia and other non-governmental stakeholders aiming to enhance *capacity and technology* for environmentally sound chemicals and waste management, including for *waste prevention*

Rio+20 Outcome – The Future We Want

Other thematic areas and cross-sectoral issues..



Ocean and seas/coastal ecosystem:

- commit to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity, enabling their conservation and sustainable use for present and future generations..(para 158)
- commit to take action to reduce the incidence and impacts of various marine pollution such as debris, especially **plastic**, persistent organic pollutants, heavy metals and nitrogen-based compounds, from a number of marine and land-based sources, including shipping and land run-off (para 163).

Sustainable production and consumption:

- recognize that **fundamental changes in the way societies consume and produce** are indispensable for achieving global sustainable development (para 224).

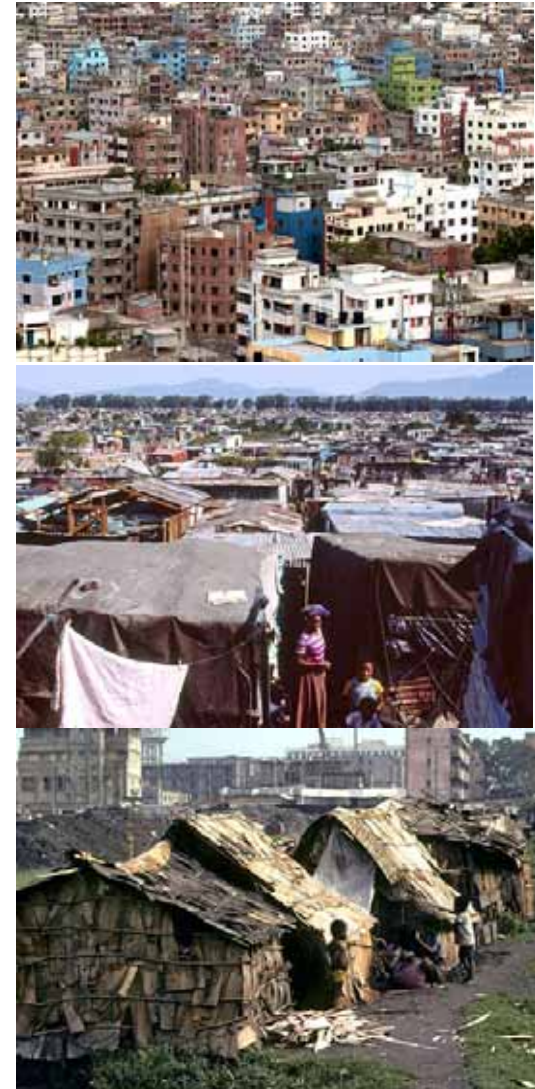
Ground realities & challenges - urbanization trend and its impacts

Facts and figures

- ✓ Half of humanity – 3.5 billion people – live in cities today.
- ✓ By 2030, almost 60 per cent of the world's population will live in urban areas.
- ✓ 95 per cent of urban expansion in the next decades will take place in developing world.
- ✓ 828 million people live in slums today and the number keeps rising.
- ✓ The world's cities occupy just 2 per cent of the Earth's land, but account for 60-80 per cent of energy consumption, 75 per cent of carbon emissions, approximately 70% of global GDP, and consume 70% of all resources.
- ✓ Rapid urbanization is exerting pressure on fresh water supplies, sewage, the living environment, and public health.

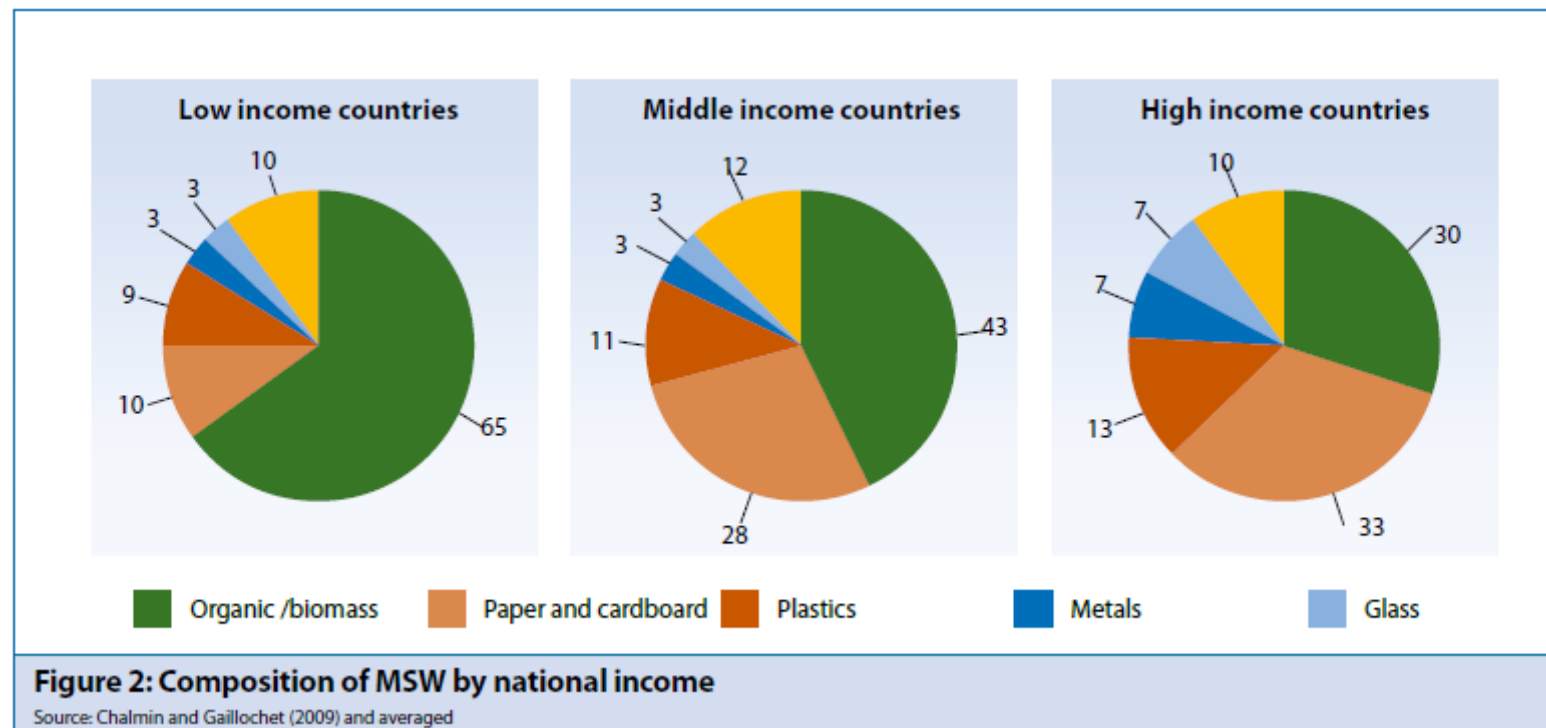
Source: United Nations 2012

<http://www.un.org/en/sustainablefuture/cities.shtml#overview>



Copyright (c) United Nations 2012

Composition of waste becomes more complicated as the economically & industrially grow, which is also compounding the issues ...

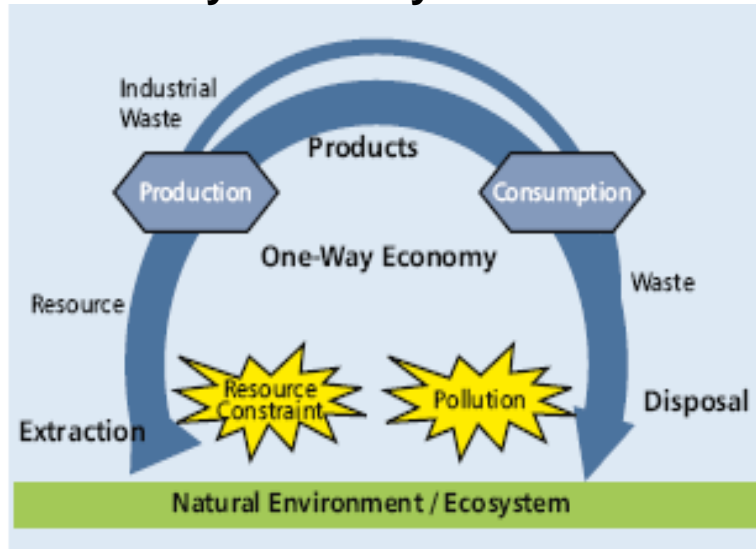


Source: UNEP, 2011, Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication.

- New emerging waste streams such as **e-waste, and industrial wastes (including hazardous waste construction and demolition waste, end-of-life vehicles, healthcare waste, etc.)** further compound the pressure to the local environment

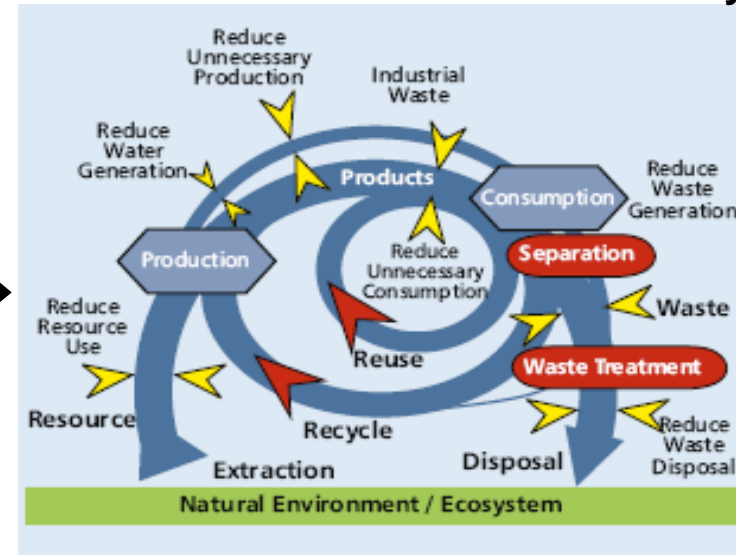
Resource efficiency is not business-as-usual – which path to follow?

1. One-way Economy?



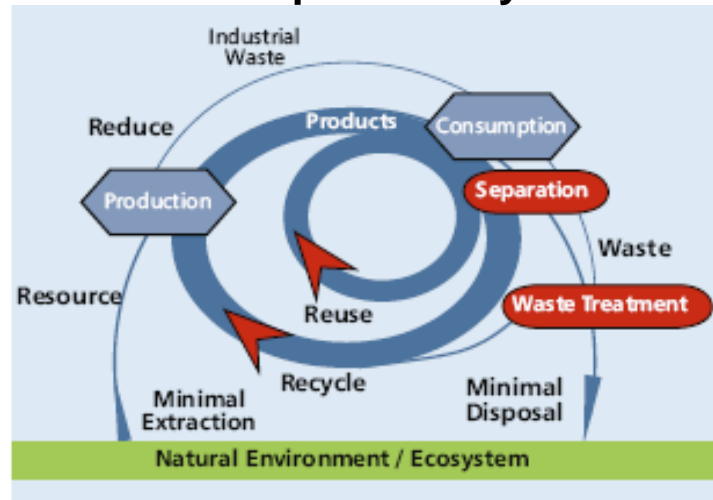
Source: ADB.

2. More resource efficient economy?



Source: ADB.

3. Closed Loop Economy?

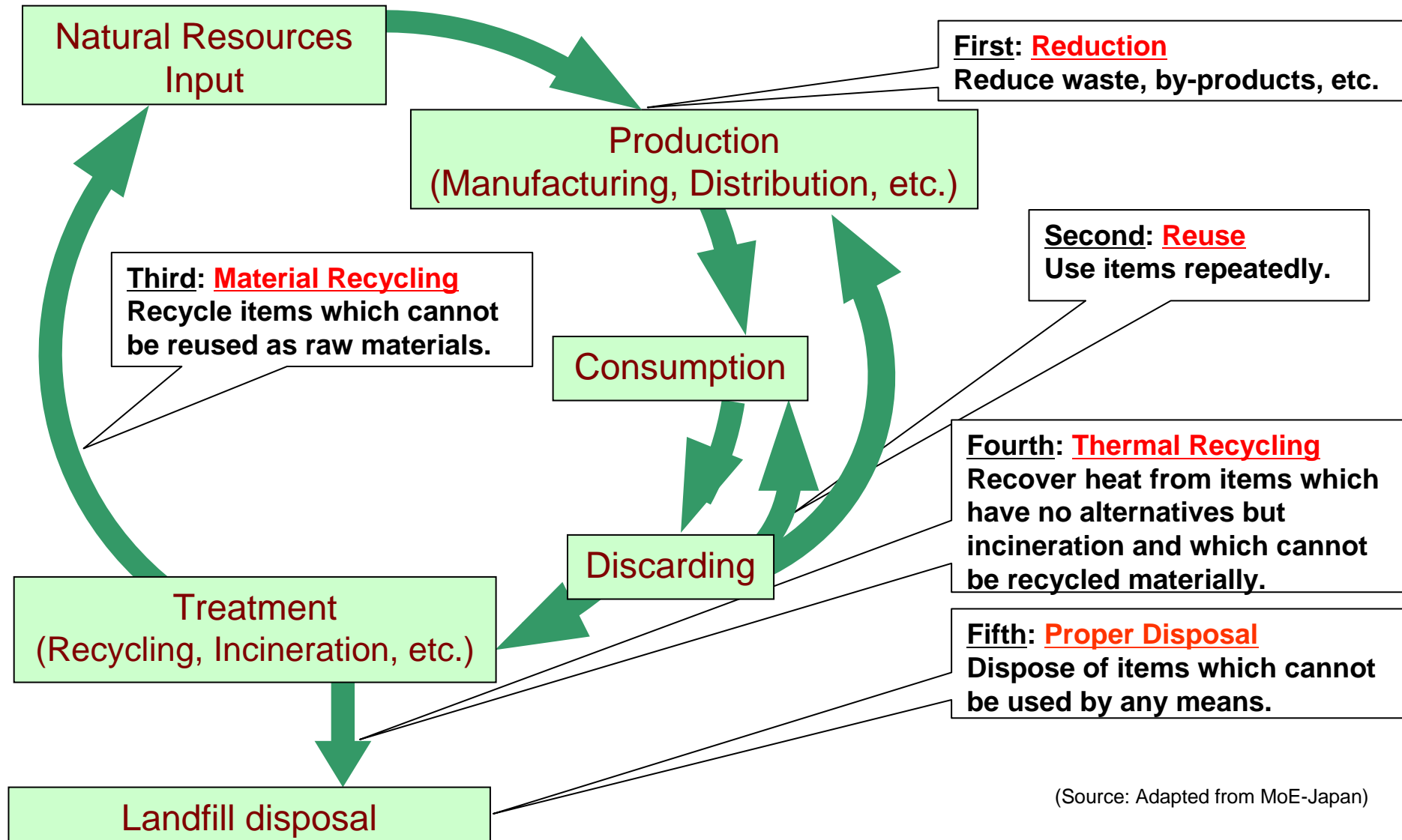


Source: ADB.

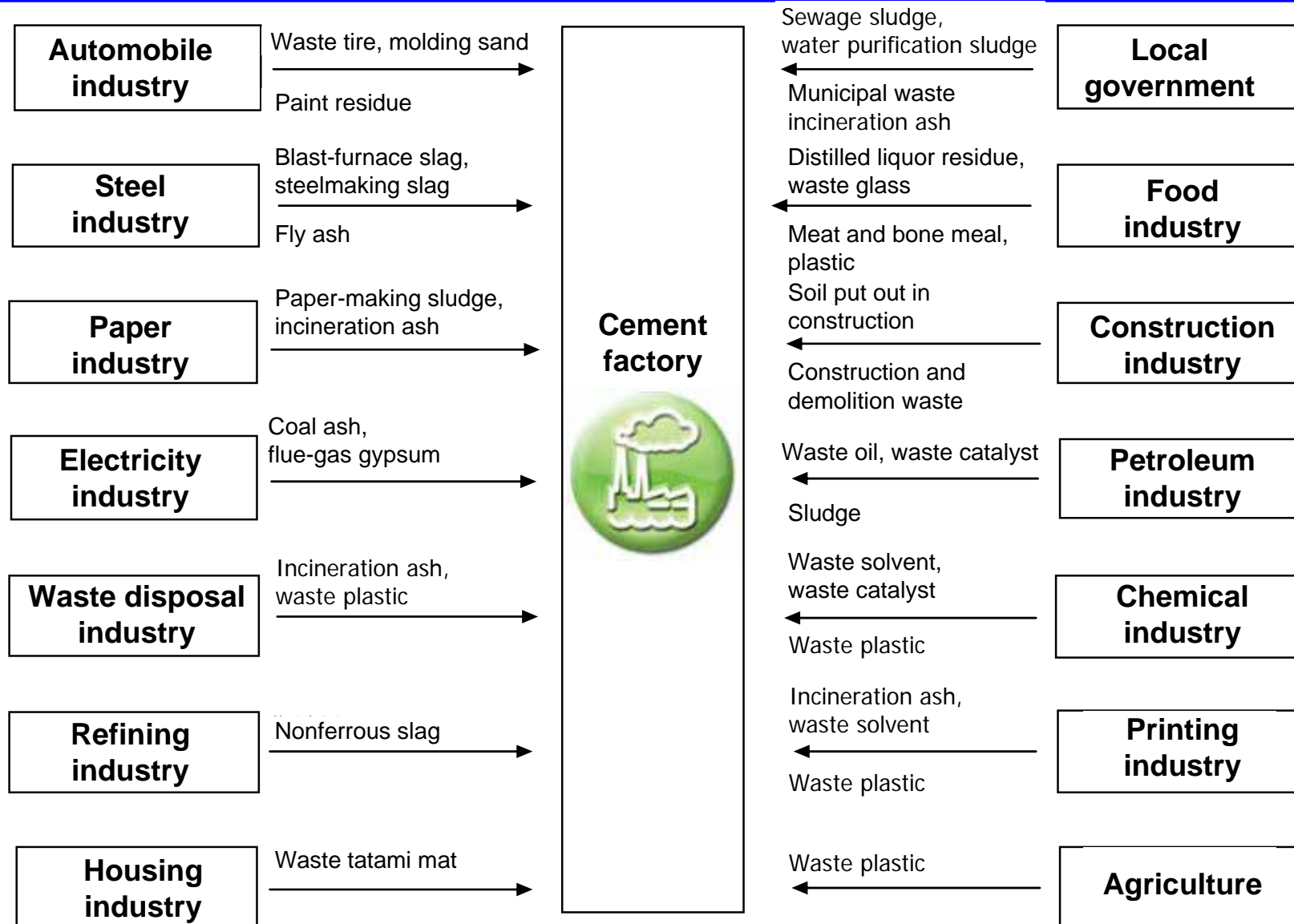
Resource efficiency => minimize per unit product or services

- Raw material input ↓
- Water input ↓
- Energy input ↓
- Emission, pollution, waste generation ↓

3Rs offer an environmentally friendly alternatives for moving towards resource efficient and zero waste society and to deal with impact of growing wastes on human health, economy and natural ecosystem....

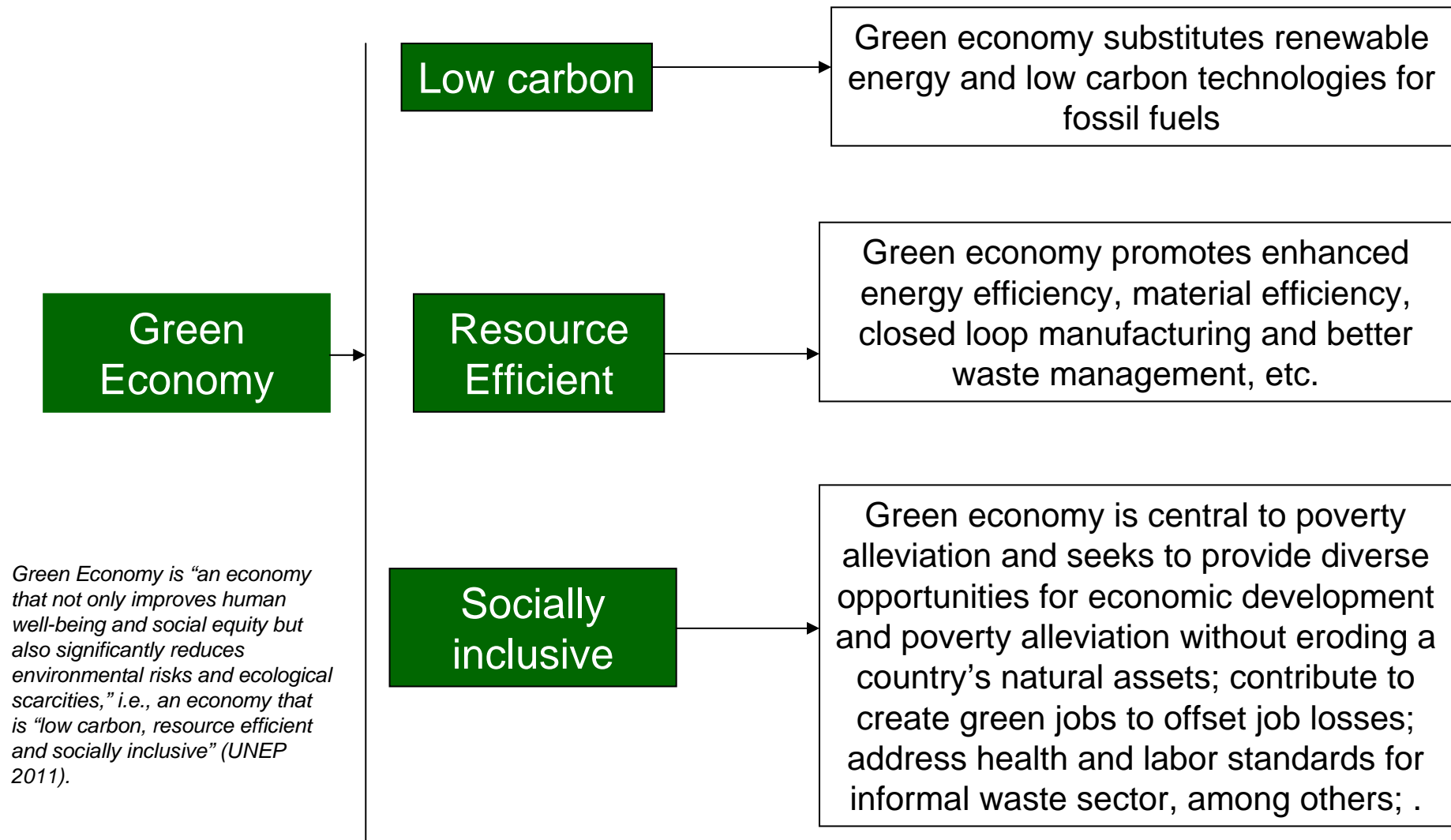


Example of effective utilization of waste and byproduct leveraging a cement factory – calls for industrial symbiosis, city-city / regional cooperation



Source: Adapted from Sameshima (2009), presented at the Inaugural Meeting of the Regional 3R Forum in Asia in November 2009 in Tokyo.

3Rs and Resource Efficiency in a Green Economy



Regional 3R Forum in Asia

Goal: To achieve low carbon and sound material cycle societies in Asia through facilitating bilateral and multilateral cooperation for increasing resource and energy efficiency through the 3Rs, and for promoting environmentally sound management of wastes in the region; to set in motion a regional mechanism to address 3R issues, needs and priorities in Asian countries, including emerging issues of concern in waste management (Tokyo 3R Statement, 2009).



Objectives:

- (a) facilitate **high-level policy dialogues** on 3R issues, challenges, & opportunities;
- (b) facilitate **improved dialogue and cooperation with international organizations and donor communities** for materializing and implementation of 3R projects at local and national level identified through national 3R strategies;
- (c) provide a **strategic and knowledge platform** for sharing experiences and disseminating among Asian countries best practices, tools, technologies, policy instruments on various aspects of the 3Rs;
- (d) provide a platform to develop **multilayered networks of stakeholders** such as governments, academia, scientific and research community, private sector, and NGOs;
- (e) generate international consensus and understanding on the beneficial aspects of the 3Rs in the context of achieving **MDGs, resource and energy efficiency, resource efficient economy, and climate change mitigation**; and to
- (f) provide a platform for **proliferation of national 3R strategies** in developing countries.

Ha Noi 3R Declaration

Sustainable 3R Goals for Asia and the Pacific for 2013 2023

Adopted at the Fourth Regional 3R Forum in Asia, 18 -20 March 2013, Ha Noi, Viet Nam



- aims to provide an important basis and framework for Asia-Pacific countries to voluntarily develop and implement 3R policies and programs, including monitoring mechanisms, towards transitioning to a resource efficient and zero waste society.

Consisting of 33 goals under the following areas:

- I. Sustainable 3R Goals (3RGs) for Asia and the Pacific for 2013 2023
- II. 3R Goals in Rural Areas
- III. 3R Goals for New and Emerging Wastes
- IV. 3R Goals for Cross cutting Issues



Key messages from 4th Regional 3R Forum in Asia-Pacific

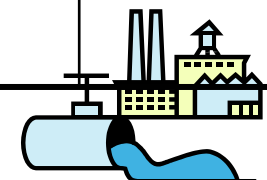
Sustainable resource use will be instrumental for Asia to ensure socio-economic development in a world in which **resources are more constrained and the absorptive capacity of ecosystems is decreasing rapidly**

- 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**

Hanoi 3R Declaration - Sustainable 3R Goals for Asia and the Pacific for 2013-2023	Green Economy ← ↔			Rio+20 Outcome – The Future We Want / Framework for Action			
	Environmentally protective/ Low Carbon	Resource (material, water, energy) Efficient (RE)	Socially Inclusive /poverty /green jobs /health	Sustainable cities	Decent work /social protection /health	Ocean and marine /coastal ecosystem	Water and sanitation /fresh water ecosystem
I. 3R Goals in Urban and Industrial Areas							
a) 3Rs in municipal solid waste							
Goal 1: Significant reduction in the quantity of municipal solid waste generated through greening production, greening lifestyle, and sustainable consumption.							
Goal 2: Full-scale utilization of the organic component of municipal waste, including food waste, as a valuable resource, thereby achieving multiple benefits such as the reduction of waste flows to final disposal sites, reduction of GHG emission, improvement in resource efficiency, energy recovery, and employment creation.							
Goal 3: Achieve significant increase in recycling rate of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders							
Goal 4: Build sustainable cities /green cities by encouraging “zero waste” through sound policies, strategies, institutional mechanisms, and multi stakeholder partnerships (giving specific importance to private sector involvement) with a primary goal of waste minimization							



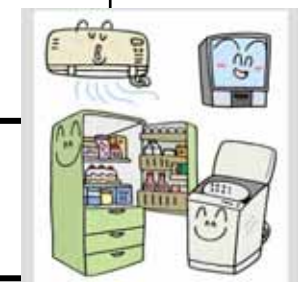
Hanoi 3R Declaration - Sustainable 3R Goals for Asia and the Pacific for 2013-2023	Green Economy ← ↔			Rio+20 Outcome – The Future We Want / Framework for Action			
	Environmentally protective/ Low Carbon	Resource (material, water, energy) Efficient (RE)	Socially Inclusive /poverty /green jobs /health	Sustainable cities	Decent work /social protection /health	Ocean and marine /coastal ecosystem	Water and sanitation /fresh water ecosystem
b) 3Rs in Industrial Sector							
Goal 5: Encourage the private sector, including small and medium sized enterprises (SMEs) to implement measures to increase resource efficiency and productivity, creation of decent work and to improve environmentally-friendly practices through applying environmental standards, clean technologies, and cleaner production.							
Goal 6: Promote the greening of the value chain by encouraging industries and associated suppliers and vendors in socially responsible and inclusive ways.							
Goal 7: Promote industrial symbiosis (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support.							
Goal 8: Build local capacity of both current and future practitioners, to enable the private sector (including SMEs) to obtain the necessary knowledge and technical skills to foster green industry and create decent, productive work.							
Goal 9: Develop proper classification and inventory of hazardous waste as a prerequisite towards sound management of such waste							

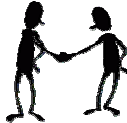


Hanoi 3R Declaration - Sustainable 3R Goals for Asia and the Pacific for 2013-2023	Green Economy			Rio+20 Outcome – The Future We Want / Framework for Action			
	Environmentally protective/ Low Carbon	Resource (material, water, energy) Efficient (RE)	Socially Inclusive /poverty /green jobs /health	Sustainable cities	Decent work /social protection /health	Ocean and marine /coastal ecosystem	Water and sanitation /fresh water ecosystem
II. 3Rs in Rural Areas							
Goal 10: Reduce losses in the overall food supply chain (production, post harvesting and storage, processing and packaging, distribution), leading to reduction of waste while increasing the quantity and improving the quality of products reaching consumers.							
Goal 11: Promote full scale use of agricultural biomass waste and livestock waste through reuse and/or recycle measures as appropriate, to achieve a number of co benefits including GHG emission reduction, energy security, sustainable livelihoods in rural areas and poverty reduction, among others							




Hanoi 3R Declaration - Sustainable 3R Goals for Asia and the Pacific for 2013-2023	Green Economy ← ↔			Rio+20 Outcome – The Future We Want / Framework for Action			
	Environmentally protective/ Low Carbon	Resource (material, water, energy) Efficient (RE)	Socially Inclusive /poverty /green jobs /health	Sustainable cities	Decent work /social protection /health	Ocean and marine /coastal ecosystem	Water and sanitation /fresh water ecosystem
III. 3Rs for New and emerging wastes							
Goal 12: Strengthen regional, national, and local efforts to address the issue of waste, in particular plastics in the marine & coastal environment..							
Goal 13: Ensure environmentally-sound management of e waste at all stages, including collection, storage, transportation, recovery, recycling, treatment, and disposal with appropriate consideration for working conditions, including health and safety aspects of those involved.							
Goal 14: Effective enforcement of established mechanisms for preventing illegal and inappropriate export and import of waste, including transit trade, especially of hazardous waste and e-waste.							
Goal 15: Progressive implementation of “extended producer responsibility (EPR)” by encouraging producers, importers, and retailers and other relevant stakeholders to fulfill their responsibilities for collecting, recycling, and disposal of new and emerging waste streams, in particular e waste							
Goal 16: Promote the 3R concept in health-care waste management.							



Hanoi 3R Declaration - Sustainable 3R Goals for Asia and the Pacific for 2013-2023	Green Economy ↔			Rio+20 Outcome – The Future We Want / Framework for Action			
	Environmentally protective/ Low Carbon	Resource (material, water, energy) Efficient (RE)	Socially Inclusive /poverty /green jobs /health	Sustainable cities	Decent work /social protection /health	Ocean and marine /coastal ecosystem	Water and sanitation /fresh water ecosystem
IV. 3R Goals for Cross cutting Issues							
Goal 17: Improve resource efficiency and resource productivity by greening jobs nation wide in all economic and development sectors.							
Goal 18: Maximize co-benefits from waste management technologies for local air, water, oceans, and soil pollution and global climate change.							
Goal 19: Enhance national and local knowledge base and research network on the 3Rs and resource efficiency, through facilitating effective and dynamic linkages among all stakeholders, including governments, municipalities, the private sector, and scientific communities..							
Goal 20: Strengthen multi-stakeholder partnerships among governments, civil society, and the private sector in raising public awareness and advancing the 3Rs, sustainable consumption and production, and resource efficiency, leading to the behavioural change of the citizens and change in production patterns.							
Goal 21: Integrate the 3Rs in formal education at primary, secondary, and tertiary levels as well as non-formal education such as community learning and development, in accordance with Education for Sustainable Development							

Hanoi 3R Declaration - Sustainable 3R Goals for Asia and the Pacific for 2013-2023	Green Economy ↔			Rio+20 Outcome – The Future We Want / Framework for Action			
	Environmentally protective/ Low Carbon	Resource (material, water, energy) Efficient (RE)	Socially Inclusive /poverty /green jobs /health	Sustainable cities	Decent work /social protection /health	Ocean and marine /coastal ecosystem	Water and sanitation /fresh water ecosystem
Goal 22: Integrate the 3R concept in relevant policies and programmes, of key ministries and agencies							
Goal 23: Promote green and socially responsible procurement at all levels, thereby creating and expanding 3R industries and markets for environmentally-friendly goods and products.							
Goal 24: Phase out harmful subsidies that favour unsustainable use of resources (raw materials and water) and energy, and channel the freed funds in support of implementing the 3Rs and efforts to improve resource/energy efficiency.							
Goal 25: Protect public health and ecosystems, including freshwater and marine resources by eliminating illegal activities of open dumping, including dumping in the oceans, and controlling open burning in both urban and rural areas							
Goal 26: Facilitate the international circulation of re-usable and recyclable resources as well as remanufactured products as mutually agreed by countries and in accordance with international and national laws, especially the Basel Convention, which contributes to the reduction of negative environmental impacts and the effective management of resources							

Hanoi 3R Declaration - Sustainable 3R Goals for Asia and the Pacific for 2013-2023	Green Economy 			Rio+20 Outcome – The Future We Want / Framework for Action			
	Environmentally protective/ Low Carbon	Resource (material, water, energy) Efficient (RE)	Socially Inclusive /poverty /green jobs /health	Sustainable cities	Decent work /social protection /health	Ocean and marine /coastal ecosystem	Water and sanitation /fresh water ecosystem
Goal 27: Promote data collection, compilation and sharing, public announcement and application of statistics on wastes and the 3Rs							
Goal 28: Promote heat recovery (waste-to-energy), in case wastes are not re-usable or recyclable and proper and sustainable management is secured.							
Goal 29: Promote overall regional cooperation and multi-stakeholder partnerships based on different levels of linkages such as government-to-government, municipality-to-municipality, industry-to-industry, institute-to-institute, and NGO-to-NGO. Encourage technology transfer and technical and financial supports for 3Rs from developed to less developed countries.							
Goal 30: Pay special attention to issues and challenges faced by developing countries including SIDS in achieving sustainable development							
Goal 31: Promote 3R + “Return” where recycling is difficult due to the absence of available recycling industries and limited scale of markets in SIDS,							
Goal 32: Complete elimination of illegal engagement of children in the informal sector, mandatory provision of health insurance, for all workers.							
Goal 33: Promote 3Rs taking into account gender considerations							



IPLA – International Partnership for Expanding Waste Management Services of Local Authorities



(You are welcome to join IPLA by registering at - http://www.uncrd.or.jp/env/ipla/index_form.htm)



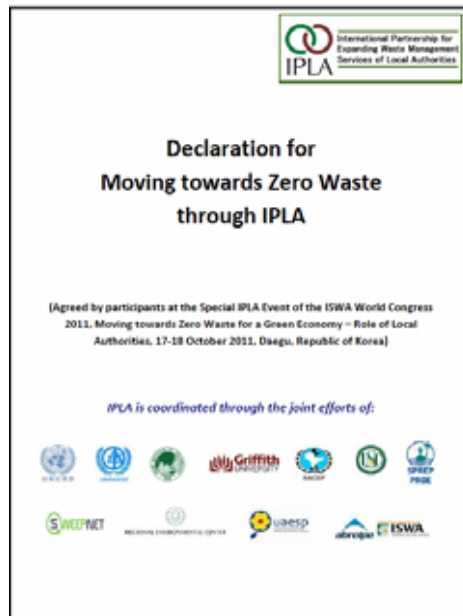
Daegu Declaration for Moving towards Zero Waste through IPLA

18 Oct. 2011, Daegu, Rep. of Korea



(Some key points)

1. move forward to a resource efficient and zero waste society by promoting **effective collaboration and partnerships** among national and local authorities, municipalities, the private and business sector, NGOs, scientific and research organizations, and all other related entities;
2. address the need for **mainstreaming zero waste and resource efficiency into the political agenda as well as city development strategies** or action plans as a pre-requisite to moving towards a **green economy**, and the required changes in the existing institutional arrangements at the local, regional, and national levels;
5. help mainstream **resource efficiency and 3Rs (Reduce, Reuse, Recycle)** principles into the local development agenda, including environmental, social, and economic plans, policies, strategies, and programmes;
7. help identify and stimulate potential partners and required financial mechanisms in support of **“green jobs,” “green industries,” and “green investments”** ;
10. **encourage awareness-raising and capacity-building programmes** targeting the local authorities and other stakeholders, especially to decouple waste generation from economic development and to manage complex and new emergent waste streams;





Marrakech Declaration towards "Greening" the Waste Sector

May 2012, Marrakech, Morocco



Agreed at the SWEEP-Net 2nd Regional Forum on Economic and Ecological Potential of "Greening" the Waste Sector in the Middle East and North Africa Region

- Legal and institutional aspects of SWM
- Financial and investment aspects for "Greening" the waste sector
- Technical aspects
- Media and public awareness, communication, training and environmental education
- Social aspects
- International partnership of local councils in the Middle East and North Africa for the improvement of SWM services
- Development of networks and support of regional cooperation





IPLA forums in Latin America during 2011-2012

First IPLA Forum for Moving towards Zero Waste in Latin America

- Bogotá, Colombia, 17 August 2011

IPLA Forum on Waste Management in Urban Territories

- Lima, Peru, 26-28 October 2011

International Meeting Bogota Zero Waste: Towards a Culture of Utilization

- Bogota, Colombia, 29 February 2012

Forum to advance toward Zero Waste in Colombia

- Bogotá, Colombia, 23 August 2012,

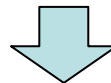
Series of IPLA Forums in Latin America in 2011 and 2012 contributing to increasing motivation of Municipalities/ Mayors for moving towards resource efficient and zero waste society (e.g., Bogotá City Administration (UAESP) is promoting zero waste strategy)



Partnership is key to expand waste management services of local authorities that lack resources, institutional capacity, and technological know-how...



- **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 as income generating opportunities.

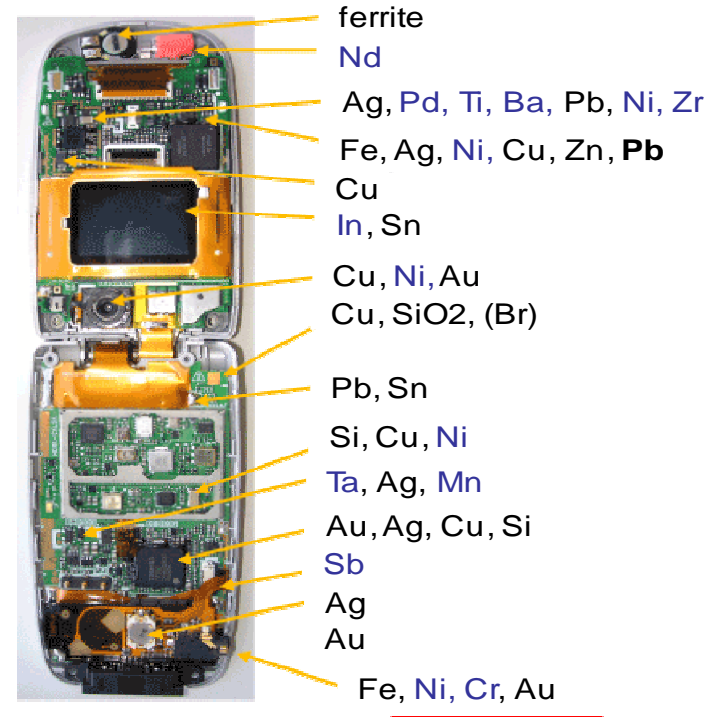
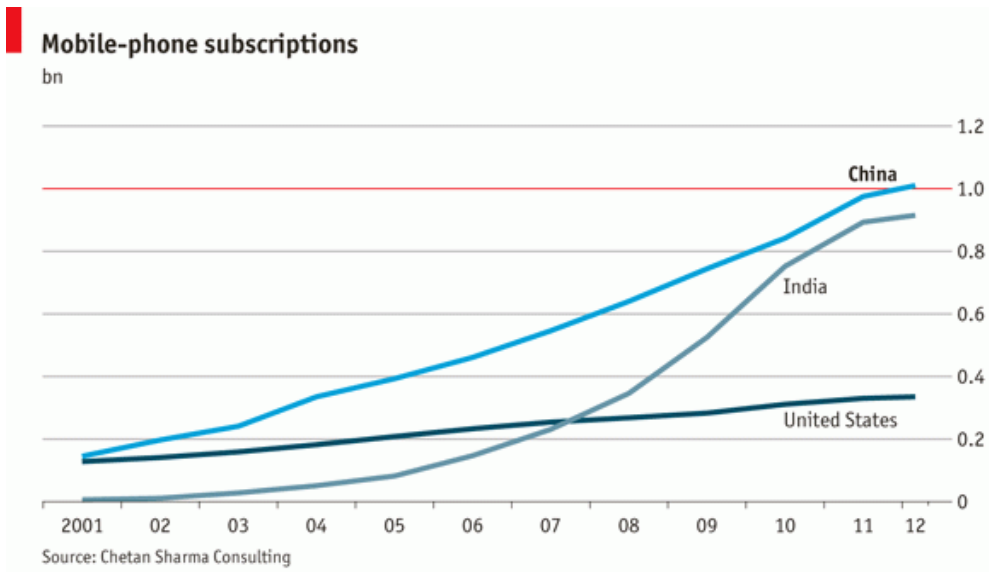


Shifting the roles of municipalities from being a 'service provider' to 'facilitator of service', by focusing its activity on planning and management, while a private company takes up the actual day-to-day operation.

Precious metals left unutilized – mobile phones

Nokia Global Consumer Survey on Recycling (2008)*

- Overall, **74%** said they do not think about recycling their mobile phones.
- Half of those surveyed didn't know phones could be recycled.



Source: <http://www.coden.jp/rare-metal/use.html>

For every 1 million cell phones recycled, we can recover 75 pounds (34kg) of gold, 772 pounds (350kg) of silver, 33 pounds (15kg) of palladium, and 35,274 pounds (16 ton) of copper.

http://www.epa.gov/agingepa/press/epanews/2010/2010_0401_3.htm

Source: <http://www.slideshare.net/nokiaconversations/nokia-recycling-survey-results-presentation>, <http://press.nokia.com/2008/07/08/global-consumer-survey-reveals-that-majority-of-old-mobile-phones-are-lying-in-drawers-at-home-and-not-being-recycled/>

Each stakeholder can play very important role in promoting zero waste

National Government	Develop policies, programs, and institutions, innovative financing for resource efficiency / 3R infrastructures (eco-towns, eco-industrial parks, R&D facilities (Environment, 3Rs, Nano-Technology, IT, Biotechnology) etc.), create conducive policy framework to encourage PPPs, capacity building programs/facilities for SMEs, awareness programme for citizens, green procurement, develop and institute EPR system, foster triangular cooperation (government-private/industry-R&D/Universities) for , circular economic approach, green growth, technology transfer, information clearing house, etc.
Local Government	Integrate resource efficiency in urban development policy and strategy (energy, transport, water, industry), innovative financing for resource efficient infrastructure (eco-towns, eco-industrial parks, R&D facilities, etc.), realize PPPs, awareness programs for citizens, green procurement
Private / Industry Sector	Develop strategies to commercialize 3Rs, Environmental performance reporting, R&D (3R technologies, green products, waste recycling, waste exchange, green purchasing, PPP, in-house capacity building programs, CSR,
Banks / Financial institutions	Investment/loan schemes for eco-town projects and green industries
Scientific and Research Institutions / Universities	Provide back up for science based policy making at government level, develop dedicated R&D projects on resource efficiency/3Rs in collaboration with government and business/industry sector, create human resources and experts in the field of resource efficiency/3Rs, look for international collaboration (University-University, University-Multi-national corporation), catalyst for decision makers, technology evaluation.
Citizens / NGOs	Promote green consumerism, community awareness raising on house-hold waste segregation and its contribution to resource efficiency/3Rs, knowledge dissemination

Source: C.R.C. Mohanty, 2012

Zero Waste => A vision that leads cities towards a sustainable future by transforming current over-consuming cities to zero waste societies

- **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.
(Chair's Summary of the CSD19 Intersessional Conference on Building Partnerships for Moving Towards Zero Waste, 16-18 February 2011, Tokyo, Japan)
- **Zero Waste** could represent a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use. (Zero Waste International Alliance; <http://zwia.org/>)
- **Zero waste** is an approach that involves reducing consumption, minimising waste, maximising recycling and composting, and ensuring that products and materials are designed to use less resources and made to be reused, recycled or biodegradable. Nature is the best Zero Waste model. There is no waste in nature and by-products produced become resources for others or are assimilated harmlessly back to the surroundings.
(Zero Waste Singapore; <http://www.zerowastesg.com/zero-waste/>)
- **Zero Waste** is complete waste free society, not just transferring the problem from one place to another (Multi-stakeholders Consultation on Zero Waste Road Map for Ahmedabad/India, 18 April 2012).

Political will as key to guide a city towards Zero Waste

Examples of *Zero Waste* initiatives in the world:

- *“Towards Zero Waste by 2020” – Western Australia*
- *“Getting there! The Road to Zero Waste” – Strategies for Sustainable Communities (New Zealand)*
- *“Zero Waste Declaration” – Kamikatsu Town, Japan*
- *“Zero Waste Strategic Plan” – City of Oakland, USA*
- *“A Road Map to Maximize Waste Diversion in London” – City of London, UK*
- *“Towards Zero Waste 2020 - A Waste Strategy for Bath & North East Somerset 2005-2010” – Bath and North East Somerset, UK*
- *“Vision Stockholm 2030” – transforming Stockholm into a resource-efficient region*
- *Road Map for Zero Waste Ahmedabad – 2013-2031*



Road Map for Zero Waste Ahmedabad

- A Visionary Document to Guide Ahmedabad towards becoming a 'Resource Efficient and Zero Waste City' by 2031

Road Map for Zero Waste Ahmedabad

- Consists of **ten focal areas** and **thirty four strategic actions**

Expected to serve as a visionary document that will guide AMC to:

- (i) introduce and implement necessary policies and strategies
- (ii) sensitize citizens, businesses and industries in Ahmedabad to work together towards achieving a zero waste society.

Multi-stakeholder Consultation Meetings (April 2012)

-including local and state government officials, research and educational institutions, NGOs, business and industries, community organization, etc.



Multi-stakeholder Consultation on Pre-final draft (Sep. 2012)



Official launch at the Vibrant Gujarat 2013 Seminar on Zero Waste – A Vision for 21st Century Cities, 12 January 2013, Ahmedabad



ROAD MAP FOR ZERO WASTE AHMEDABAD

A Visionary Document to Guide Ahmedabad towards becoming
a 'Resource Efficient and Zero Waste City' by 2031



Jointly financed and commissioned by:
Ahmedabad Municipal Corporation and United
Nations Centre for Regional Development

