



BANDUNG ENVIRONMENTAL MANAGEMENT



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BANDUNG MUNICIPAL GOVERNMENT

THE PLANNING DEVELOPMENT FOR MIDDLE TIMES OF BANDUNG STRATEGICAL ISSUES YEAR 2009-2013

- The increase of quality and the prevention of city environmental degradation ;**
- The conduct and the management of infrastructure and city system;**
- The conduct of superfine public service in the city;**
- The growth of creative economy in the city;**
- The optimization of municipal management .**

The Visions of Bandung Year 2009-2013

**“ To stabilize Bandung as The Dignified
Service City “**

Which has the dimension of:

- 1. The fulfillment of clean, safe, orderly, stable, dynamic, healthy, beautiful, green and colorful environmental condition;**
- 2. The fulfillment of economic and social environmental condition to reach the economic prosperity of its citizens;**
- 3. The fulfillment of religious environmental condition which is full of tolerant, noble and aware of diverse livelihood;**
- 4. The fulfillment of balanced and harmonious layout condition.**

The Mission of Bandung

Year 2009-2013

1. Develop healthy, smart, noble, professional, and competent human resources;
2. Develop competitive urban economy to support the conduct of job fields and public services and also to increase the role of private sectors in the urban economic development;
3. Increase the awareness of the orderly, safe, creative, accomplished city's culture to support The Dignified Service City;
4. Regulate Bandung to become an integrated metropolitan city which is environmental insight;
5. Improve the performance of city's government to become more effective, efficient, accountable and transparent to increase the service capacity of metropolitan city;
6. Improve the capacity of financial management and urban developmental fund which is accountable and transparent to support clean and commanding municipal system.



7 BANDUNG PRIORITY AGENDA

1. **Smart Bandung**
2. **Healthy Bandung**
3. **Wealthy Bandung**
4. **Green Bandung**, *supported by 5 (five) movements:*
 - Green and Save the Water Movement
 - Clean Cikapundung River Movement
 - Clean Air Movement
 - A Million flower for Bandung Movement
 - The Environmental Movement of Nursery, Plant, Preservation and Control.
5. **Art and Cultural Bandung**
6. **Bandung with Achievements**
7. **Religious Bandung**

MAIN ENVIRONMENTAL ISSUES IN BANDUNG

- The decreasing of air quality
- The decreasing of ground water level
- The increasing of water pollution
- The increasing of soil pollution, mainly by B3 (hazardous and toxic waste)
- Floods in rainy season

Programs and Activities which are done continuously to solve environmental problems:

- To solve the decreasing quality of air, the actions are: continuously do green movements by planting shade trees and productive trees; vehicle emissions test at crowded points annually; the substitution of vehicle fuel with alternative fuel which is friendly to the environment (biofuel and bioetanol); the usage of lead-free petrol; the requirement of passing the emissions test upon the renewal of vehicle registration; and the implementation of long-term strategic plan to control Bandung air quality (Urban Air Quality Improvement/ UAQi).

- To solve the decreasing of ground water level, the actions are: construct human-made lake(s) and raindrop pool; construct infiltrated water source, do not permit the new ground water takings for commercials at critical or sensitive area; regulate drilled water source; and decrease about 10% of permitted water capacity upon the renewal permission.
- To solve the increasing of surface water pollution, the actions are: control the liquid waste from IPAL/waste water treatment plant in industrial, hotel, hospital, and restaurant sectors; control the quality of Bandung 16 rivers, control and improve the quality of industrial waste treatment through Proper Program (Company's Performance Rank Program), Prokasih (Clean River Program), and Superkasih (Clean River Statement Letter); responsible to process IPAL for all commercial sectors; and facilitate the finishing of water pollution case done by commercial sector which is complained by citizen.

- To solve soil pollution by B3 waste (hazardous and toxic waste), the actions are: inventory, identify, and control B3 waste producer and user; control and guide B3 waste treatment for commercial sectors; and do soil sample test around B3 producer and user location.
- To solve flood problems in rainy season, the actions are: clean the rivers from garbage and sediments; control city layout; plant shade trees; and socialize water flow system to prevent landslide in sensitive areas.

BANDUNG STRATEGICAL MOVEMENTS FOR ENVIRONMENTAL IMPROVEMENT

- Environmental Subject in education
- Green Belt
- Green And Clean Bandung (BGC)
- Car Free Day
- Clean Air Appreciation (AUB)
- Clean Award
- Environmental-based school / Adiwiyata
- A liability to donate water infiltration and seed(s) for the new civil service
- A liability to donate seed(s) for new married couple
- **Bandung Garbage Treatment**

Bandung Garbage Management

Garbage Management Problems :

- The increasing of garbage which has not been disposed yet;
- The difficulties in looking for the location of Final Garbage Dump (TPA) replacement outside Bandung;
- The rejection from citizen to Final Garbage Dump (TPA) replacement plan at new location;
- The impact for environment and health for citizen;
- The impact for economic and tourism activities.

Current Garbage Treatment Process



Waste Source

**The transportation to
Garbage Dump (TPS)**

**Temporary Garbage
Dump (TPS)**

**Final Garbage
Dump (TPA)**

Community-based Local Garbage Management



Local Garbage

Organic Garbage

Inorganic Garbage

Compost

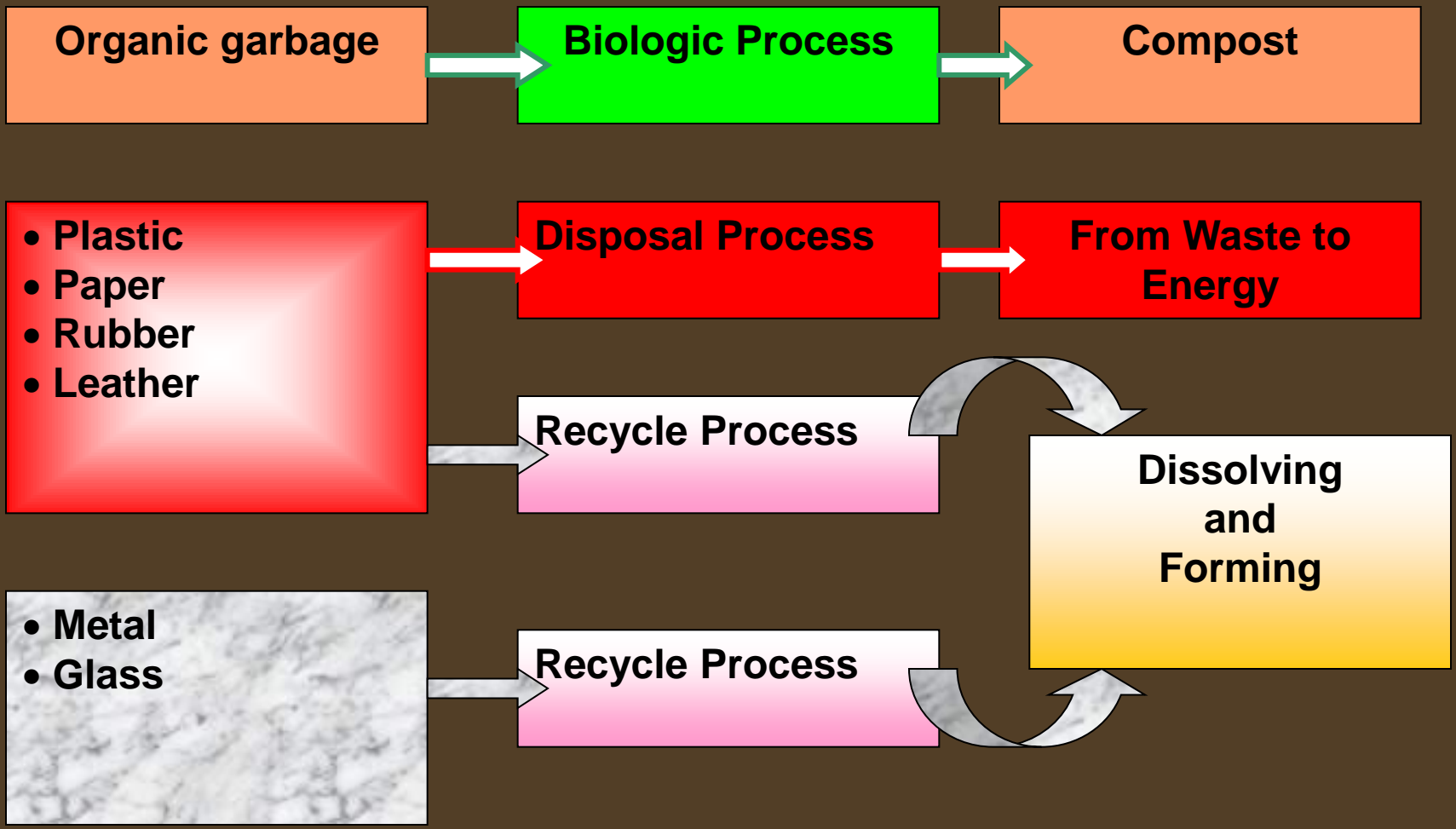
recycled

reused

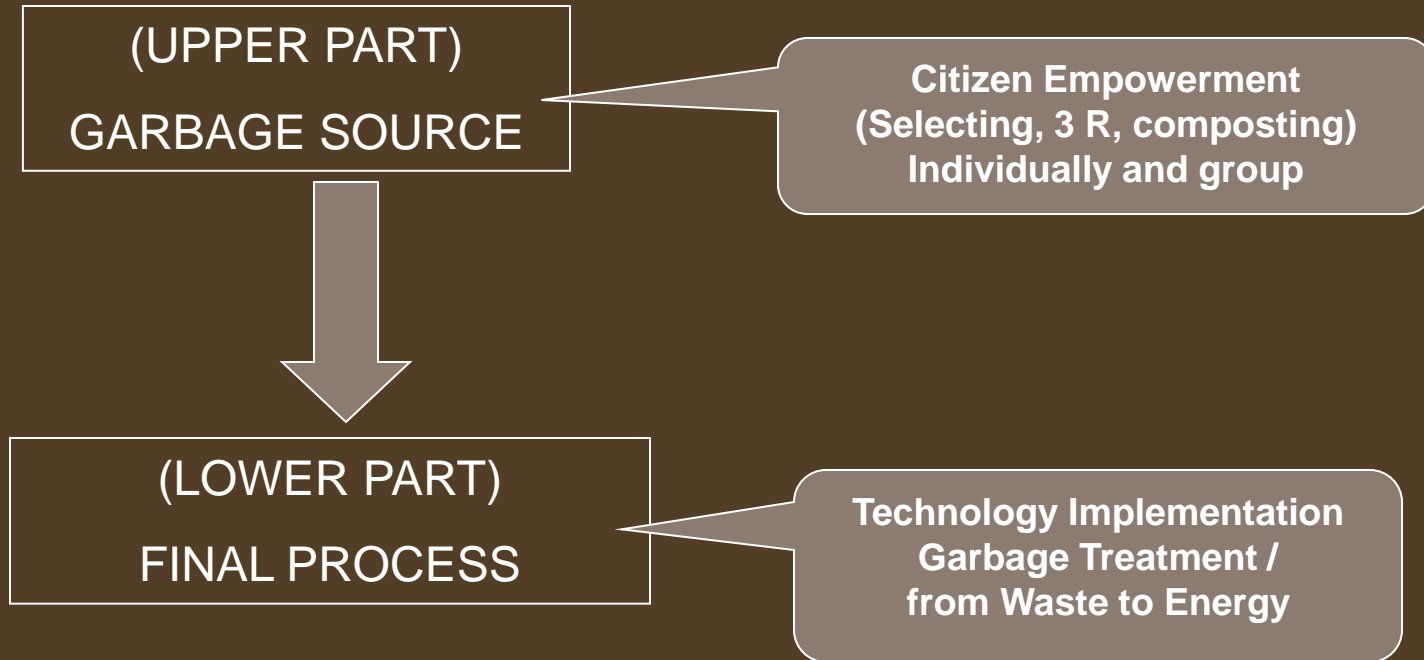
Disposed



Diagram of Garbage Treatment Process Principles



LONG-TERM MANAGEMENT CONCEPT



(UPPER PART)

GARBAGE SOURCE

1. Garbage selection start from the source
2. Organic garbage compost in household scale
3. Garbage compost in environment scale
4. Inorganic garbage reused
5. Garbage residue treatment

(LOWER PART)

LOCAL CITY SCALE

1. Technology implementation for garbage treatment to become organic fertilizer
2. Technology implementation for garbage treatment to become energy/ from Waste to Energy

Local Regulations which support Garbage Treatment Movements

- Local Regulation of Bandung No. 06/2011 concerning Implementation of environmental protection and management
- Local Regulation of Bandung No. 18/2011 concerning Land Use Plan in Bandung City 2011 – 2031
- Local Regulation of Bandung No. 11/2005 concerning Implementation Of Public Order, Hygiene And Beauty
- Local Regulation of Bandung No.17 year 2012 about the decreasing of Plastic Usage
- Major's Decree of Bandung No. 31/2007 concerning Local Content of Environmental Education
- MoU in 2009 until now “Bandung Green and Clean” program among Bandung Municipal Government, Unilever, NGO-LPTT, Newspaper-Pikiran Rakyat and Radio-Rase FM

Future Concept of Bandung as *eco-city*

- One of ways for environmental conservation and development is eco-city concept. *Eco city is a concept of green, healthy and friendly attitude towards the environment.* This concept emphasizes the physical relation between citizen and environment.
- Bandung as a big city has many supporting factors to accomplish the eco-city concept. Of course, this concept should be followed by the awareness from various parties to support the creation of a green and friendly city environment.
- *Eco city* concept has to answer urban problems such as problems related to neighborhood, transportation system, energy supply, water supply, and socio-cultural aspects. To accomplish the concept, stakeholder's involvement is needed, from the government, businessmen, and citizen.

Eco-City Concept

Bandung Diverse
Environmental Issues

Integrated treatment
needed

One of the concepts to
manage environment in
integrated way is Eco-City

Integrated Characteristics:

1. Conducive Policy Framework
2. Information and Technology
3. Fund availability
4. Effective Law Enforcement
5. Stakeholder's Active Involvement and Participation
6. Local Capacity Development

Eco-City key words :

- Systemic;
- Synergy;
- Commitment;
- Participation.



THANK YOU