

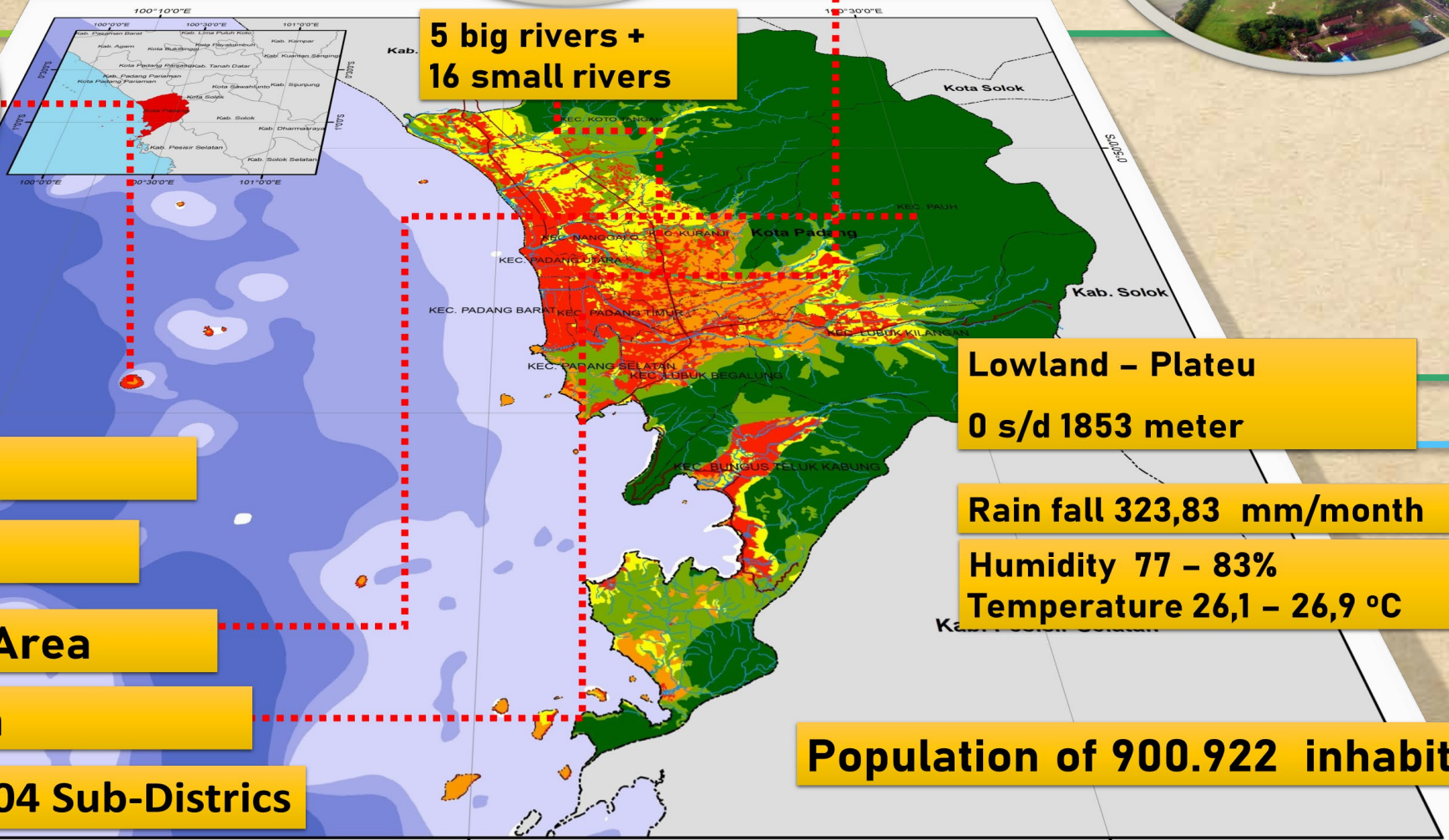


Municipal Waste Management and Marine Waste Issues of Padang

Dr. Auwilla Putri, ST, MSi

Director of Environmental Assessments, Permits
and Law Enforcement Division

PROFILE OF PADANG



**5 big rivers +
16 small rivers**

± 19 islands

Land 694,96 km²

Ocean 905,04 km²

71,2 % = Protected Area

28,8 % = Build Area

11 Districts

104 Sub-Districts

Lowland - Plateau

0 s/d 1853 meter

Rain fall 323,83 mm/month

Humidity 77 - 83%

Temperature 26,1 - 26,9 °C

Population of 900.922 inhabitants

100°10'0"E

100°20'0"E

100°30'0"E

GENERAL DESCRIPTION OF WASTE MANAGEMENT IN PADANG

Government (EPA)

1. Providing Temporary Disposal Sites/Containers
2. Providing a Final Disposal/Landfill
3. Transportation of waste from Containers to Landfill
4. Provide waste facilities and infrastructure in public places
5. Provide socialization about waste management
6. Facilitate and develop appropriate technology in waste management
7. Coordinating with the private sector, the community for waste management

Community

1. Perform household scale waste sorting and processing
2. Reducing household waste generation

District

1. Coordinate the Village-level Waste Management Institution
2. Supervise the implementation of waste management
3. Propose the need for waste management facilities and infrastructure to the related SKPD



Neighborhood Association

1. Facilitating the availability of trash cans and transporting waste from households to temporary disposal sites in community level
2. Ensuring the implementation of sorting and transportation of waste in the household

Sub-District

1. Coordinate waste management institutions at the community level
2. Supervise the orderly implementation of waste transportation at the community level
3. Providing temporary disposal sites in community level
4. Propose the need for waste management facilities and infrastructure to the District.

Citizens Association

1. Coordinate waste management institutions at the neighborhood level
2. Propose the need for waste management facilities and infrastructure to the District

Padang City Garbage Management System

Garbage Sources



Packaging, Sorting dan Processing

Time to put garbage :
05.00 PM – 05.00 AM
Garbage temporary landfill

WASTE BANK



Economic Value

Processing of garbage with economic value

MOTOR RICKSHAW



Non Economic Value

Buildup/collect



Garbage temporary landfill /Container
05.00 PM – 05.00 AM

Active Heavy Equipment:
2 Excavator
1 Dozer

Garbage Handling at Air Dingin Landfill



Transport

From Container to Aie Dingin landfill
Start from 05.00 AM



Waste Characteristic

Total Garbage: 550-600 ton/day



Food Waste

± 61,24%



Plastic

± 12,4%



**Leaves and
Wood**

± 8,4%



Paper

± 6,1%



Textile

± 2,9%



**(glass, rubber,
metal. Etc)**

± 8,9%

Action Plan on Integrated Solid Waste Management in Padang City (2023-2030)

01

Enhance waste separation to achieve a 30% waste reduction at source

02

Increase organic waste reduction to 10%

03

Increase an-organic waste recycling and recovery to 20%

04

Reduce unmaged waste to 10%

05

Enhance institutional capacity for better SWM with the focus on monitoring and evaluation (M&E) and collaboration with other partners

Refuse Derived Fuel (RDF)

Memorandum of Understanding (MoU)

PT. Semen Padang will be off-taker RDF Product

Feasibility study (FS) RDF

Based on the FS results RDF seems to be implemented in the Padang City



Project Location

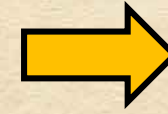
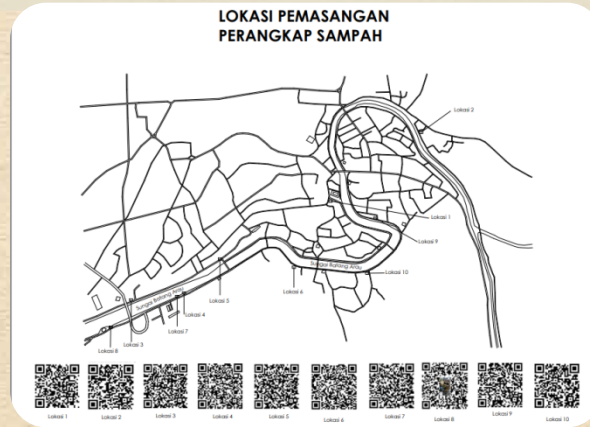
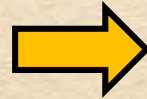
Aie Dingin landfill have $\pm 4,1$ Hectare Area for construction of RDF facility

Verification of ministry of Public Work and Public Housing

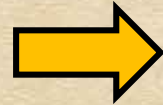
- Padang city is the only one in Sumatera that has passed the field verification stage
- As the result of the assessment, Padang City received the highest score out of all districts/cities who verified by ministry of public work

Marine Plastic Waste Program

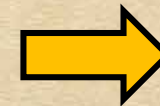
Open Channel Garbage Trap:
10 Garbage Trap Already



Garbage Trap Boats



1 Floating Cube
At Banda Bakali



Total \pm 65 Meters

2023 Plan :
2 Floating Cube Installed

- Batang Arau River
- Lubuk Begalung Subdistrict

CURRENT PROGRAMS

Plastic waste caught by fishermen

Can be a gold savings in the pawn shop



PROGRAM PLAN FROM THE MINISTRY OF MARITIME AFFAIRS AND FISHERIES:

The waste caught by the fishermen will be reimbursed for the lowest fish price
(per kilo of waste caught)



THANK YOU

