

PUM Mission Manila Bay Sustainable Development Master Plan

Solid Waste

Frans Föllings

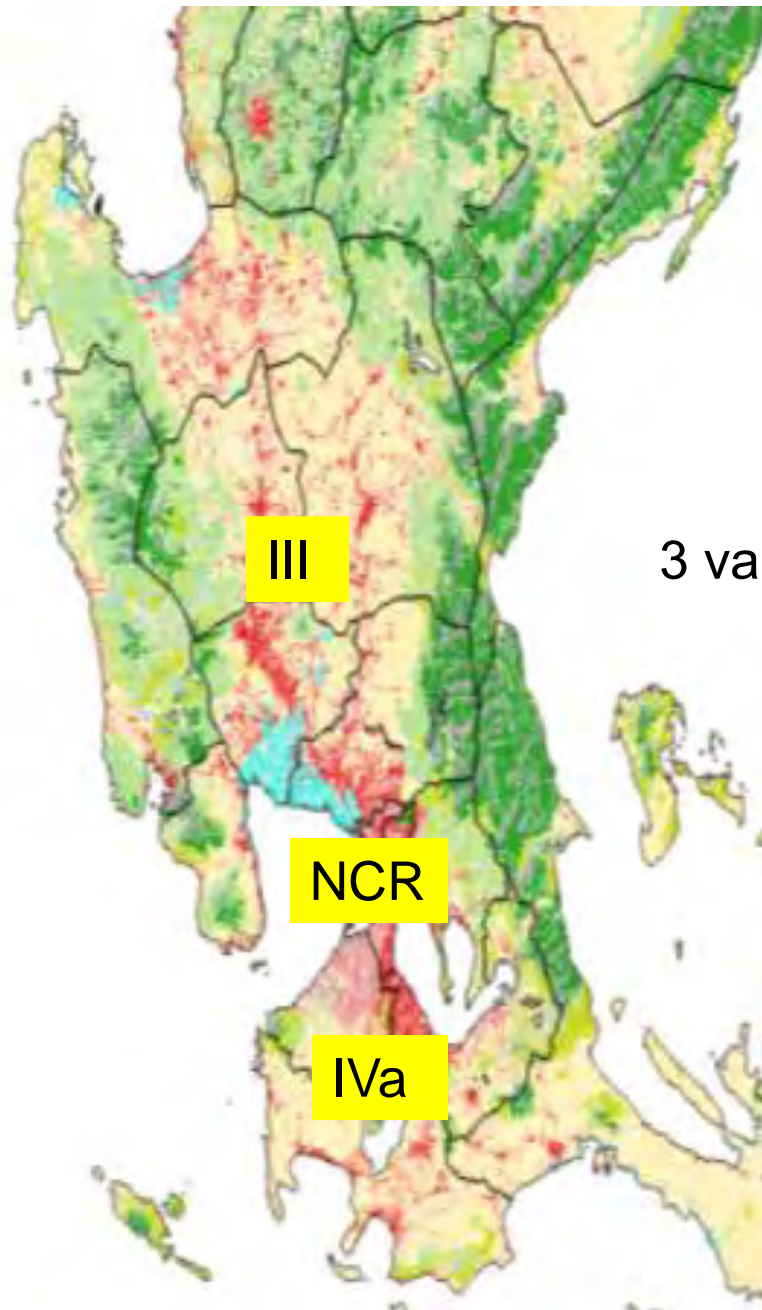
Senior Expert PUM NL

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MBR



3 van de 17 regio's

Waste Volume MBR

Region	ktons/yr	population	kg/inh./yr	connected
	2015	2015	2015	2010
3	1.396	11.218.177	124	53%
4a	1.594	14.414.774	111	65%
NCR	3.307	12.877.253	257	97%
total	6.297	38.510.204	164	73%

Solid Waste Collection MBR

Collection of **residual** household waste by LGU's.

Meanly with open dump or compression trucks.



Collection of **recyclables** by city districts (barangays) brought to:

Materials Recover Facility



Leakage in Waste Chain



Litter causing clogging up of drainage system



Manila Bay and Solid Waste

- Mandamus and solid waste: Litter in - and in the neighbourhood of - rivers and canals
- Contribution of organic waste/litter to BOD in Manila Bay modest
- Waste composition:
 - 52% organic;
 - 28% recyclables;
 - 20% rest

Disposal of Waste

- Five large sanitary landfills in MBR and some 50 (municipal) smaller ones which had/have to be closed (RA 9003)
- Waste volume will almost double the coming 30 years (capacity discussion landfills)



Instruments

- In 2001 RA 9003 the 'Ecological Solid Waste Management Act'
- Each LGU has to submit a 10 year waste management plan to the NSWMC.
- In 2018 around half of 195 LGU's in MBR had an approved plan
- Ten year development plan of the Philippines
 - recycling 48% in 2015 and **80%** in 2022

Measures

- Waste prevention and minimization program's as part of 10 year waste management plan (C&S)
- **Collection without leakage** => means
- Separate collection of organic hh-waste => means
- Closing of non sanitary landfills
- Cooperation between barangays => capacity building staff MRF's / selling of recyclables
- Cooperation between LGU's => collection and disposal!

Legislation

- Development of legislation to support cooperation on municipal level <-> water
- Enabling multi-year collection contracts
- Enforce of enforcement <-> water
- Introducing taxation on landfilling to favour alternatives and create funds to support alternatives <-> water
- Capacity building government(s) - IEC

Investments recycling and disposal

- First priority is large scale treatment of organic waste (composting / digestion)
- WtE (Quezon City WtE plant > 600 kton per year)
- RDF production for rotary kilns
- Program on recycling including pilot projects (on organic hh waste)

Thank you for your attention

