SOLID WASTE MANAGEMENT IN THE PHILIPPINES

- National Solid Waste Management Commission
Outline

- Philippine Solid Waste Management Law;
- Legal Bases on Clustering of LGUs for Common SWM Facility;
- Initiatives on Clustering of LGUs for common disposal facilities in the Philippines
Republic Act No. 9003

- Philippine Law on Solid Waste Management;
- Ecological Solid Waste Management Act of 2000;
- Approved on January 26, 2001;
- Took effect on February 16, 2001 after publication;
- The Implementing Rules and Regulations approved as DENR Administrative Order No. 2001-34.
The ESWM policy is based on the management of waste in the following hierarchy:

1. Source reduction (avoidance) & minimization of waste generated at source;

2. Reuse, recycling & resource recovery of waste at the barangay level.

3. Efficient collection, proper transfer & transport of waste by the city/municipality;

4. Efficient management of residuals & of final disposal sites and/or any other related technologies for the destruction/reuse of residuals
SWM System Prescribed under RA 9003
Institutional Structure

National Solid Waste Management Commission
*(Policy Making)*

DENR-EMB-SWMD
*(NSWMC Secretariat, Technical Support, Monitoring and Enforcement)*

Ecological Solid Waste Management Act of 2000

Local Government Units
*(Implementation)*

Waste Generators /Citizens
*(Compliance)*
Section 16. Local Government Solid Waste Management Plans.
-- The province, city or municipality, through its local solid waste management boards, shall prepare its respective 10-year solid waste management plans consistent with the 19 National Solid Waste Management Framework: Provided, That the waste management plan shall be for the re-use, recycling and composting of wastes generated in their respective jurisdictions: Provided, further, That the solid waste management plan of the LGU shall ensure the efficient management of solid waste generated within its jurisdiction. The plan shall place primary emphasis on implementation of all feasible reuse, recycling, and composting programs while identifying the amount of landfill and transformation capacity that will be needed for solid waste which cannot be re-used, recycled, or composted. The plan shall contain all the components provided in Section 17 of this Act and a timetable for the implementation of the solid waste management program in accordance with the National Framework and pursuant to the provisions of this Act: Provided, finally, That it shall be reviewed and updated every year by the provincial, city or municipal solid waste management board.

......All local government solid waste management plans shall be subjected to the approval of the Commission.
The 10-year SWM Plans for Region IV-A

Batangas
Approved: 22
Submitted: 34
LGUs: 34

Cavite
Approved: 22
Submitted: 23
LGUs: 23

Laguna
Approved: 30
Submitted: 30
LGUs: 30

Quezon
Approved: 5
Submitted: 37
LGUs: 41

Rizal
Approved: 14
Submitted: 14
LGUs: 14
SOLID WASTE MANAGEMENT THROUGH CLUSTERING
Legal Bases

<table>
<thead>
<tr>
<th>The Philippine Constitution (General Provisions)</th>
</tr>
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<tbody>
<tr>
<td>• Section 13. Local government units may group themselves, consolidate or coordinate their efforts, services, and resources for purposes commonly beneficial to them in accordance with law.</td>
</tr>
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</table>
## Legal Bases

<table>
<thead>
<tr>
<th>RA 9003</th>
<th>DAO 2001-34 (IRR of RA 9003)</th>
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<tr>
<td>• Section 11 (12) Role of the Provincial SWM Board to allow for the clustering of LGUs for the solution of common solid waste management problems</td>
<td>• Section 2 (I), Rule VI of the IRR.</td>
</tr>
<tr>
<td>• Section 32 requires the establishment of Materials Recovery Facility in every barangay or cluster of barangays.</td>
<td>• Section 1 Rule XI of the IRR.</td>
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<td>• Section 44 reiterates Section 33 of RA 7160 mandating the role of</td>
<td>• Section 5, Rule VII of the IRR states that technical guidelines,</td>
</tr>
<tr>
<td>provinces, cities, municipalities and barangays, through appropriate</td>
<td>criteria for joint activities and projects, and a set of incentive systems for LGUs opting to</td>
</tr>
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<td>ordinances, to consolidate or coordinate their efforts, services, and</td>
<td>consolidate efforts by jointly planning and implementing a comprehensive SWM program for</td>
</tr>
<tr>
<td>resources for purposes of jointly addressing common SWM problems and/or</td>
<td>their respective areas of jurisdictions shall be specified and regularly updated by the</td>
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<td>establishing common waste disposal facilities.</td>
<td>Department.</td>
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<td></td>
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<tr>
<td>• Section 43 mandates the NSWMC to publish guidelines for the identification of areas which have common SWM problems and are appropriate units for clustered SWM services.</td>
<td>• Section 5, Rule VII of the IRR mandates the Department to publish guidelines for the identification of areas which have common SWM problems and are appropriate units for clustered SWM services.</td>
</tr>
</tbody>
</table>
NOW THEREFORE, BE IT RESOLVED, AS IT IS HEREBY RESOLVED, to adopt the Guidelines for the Clustering of Local Government Units (LGUs) on the Common Ecological Solid Waste Management (ESWM) System.

APPROVED on this 13th day of December, 2013.

[Signature]
Ramon Paje
Secretary, Department of Environment and Natural Resources (DENR) and Chairman, National Solid Waste Management Commission (NSWMC)

ATTESTED BY:

[Signature]
Emelita C. Aguilando
OIC-Executive Director, NSWMC

Waste No More! Waste No Time!
Clustered LGUs for SLF

Sample Clusters formed on SWM

<table>
<thead>
<tr>
<th>REGION</th>
<th>Name of Cluster/Facility</th>
<th>Type of Partnership</th>
<th>Partners</th>
<th>Type of Facility/Location</th>
<th>Legal Instrument/Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCR</td>
<td>Navotas Sanitary Landfill</td>
<td>Private Enterprise utilized by LGUs</td>
<td>MMDA-LGU Navotas-LGU Manila</td>
<td>SLF/Navotas, MM.</td>
<td>Memorandum of Agreement (MOA)/2005</td>
<td>Operational</td>
</tr>
<tr>
<td>I</td>
<td>Urdaneta City SLF</td>
<td>Inter-Government Executive Agreement</td>
<td>Urdaneta City Municipalety of Sta. Barbara</td>
<td>SLF/ Urdaneta City Pagasian</td>
<td>Inter-Government Executive Agreement / 2011</td>
<td>operational</td>
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Source: EMB Regional Offices
## Sample Clusters formed on SWM

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<tbody>
<tr>
<td>III</td>
<td>Clark SLF</td>
<td>Private Enterprise utilized by LGUs</td>
<td>Lubao, Guagua, Apalit, San Fernando City Pampanga, Mabalacat, Angeles, Moncada, Cabanatuan City</td>
<td>SLF with MRF</td>
<td>MOA</td>
<td>operational</td>
</tr>
<tr>
<td>IVA</td>
<td>Pilotage SLF, San Pedro Laguna</td>
<td>Private Enterprise utilized by LGUs</td>
<td>San Pedro, Sta. Rosa, Los Banos and Carmona</td>
<td>SLF with MRF</td>
<td>Contract</td>
<td>Operational</td>
</tr>
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Source: EMB Regional Offices
# Advantages and Benefits of Clustering

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<th>Benefits to LGUs</th>
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<tr>
<td>Preservation of Common Heritage and Identity</td>
<td>Scarce resources to implement projects will be supplemented by other members’ shares</td>
</tr>
<tr>
<td>Development needs easier to identify and address</td>
<td>High possibility of funding assistance and approval of proposals from donor agencies/financial institutions</td>
</tr>
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<td>Serves as a tool in establishing growth centers in the Province/Region</td>
<td>Equipment needed for infrastructure development and waste management will be supplemented by other members</td>
</tr>
<tr>
<td>Ensures greater benefits thru equitable sharing</td>
<td>Wider market for services will be established</td>
</tr>
<tr>
<td>Allows wider area jurisdiction to achieve desired economies of scale</td>
<td>Increase in employment opportunities for constituents</td>
</tr>
</tbody>
</table>

Source: Preliminary Report USAID Philippine EcoGov2 Project
Sustainable Solid Waste Management through Clustering

“Ingredients”
✓ Strong Political Will;
✓ Legal Instruments;
✓ Plans and programs
✓ Social acceptability and open mindedness;
✓ Willingness to share resources;
✓ Concern for the environment;
✓ Willingness to comply with the agreement;
✓ Program ownership among the stakeholders;
✓ PERMANENT CHAMPIONS
EFFORTS ON WASTE TO ENERGY (WTE)
Resolution No. 669, series of 2016

Adopting the guidelines governing the establishment and operation of waste to energy technologies for municipal solid waste.
DEPARTMENT ADMINISTRATIVE ORDER ON WASTE TO ENERGY GUIDELINE

(A draft on DENR Administrative Order on WTE is now being routed to the different Divisions of the Department of Environment and Natural Resources now on Version no.44)
Physical efforts on WTE

- Existence of small scale bio-mass energy recovery facility;
- Bigger scales also exist in the provinces of Bulacan, Cebu City (bio-methane for power) Pampanga and one under construction in Dagupan City (15 tons/day) but only Biodegradable wastes are being processed.
- Collection: Mixed wastes
CHALLENGES:

- Collection and delivery of biodegradable wastes to processing facilities
- Institutionalization of a technically acceptable and environmentally sound Food Waste Management systems in hotels and food establishments.
- Future plans for a bigger scale WTE facility
- The policy on segregation of waste at source and segregated collection.
- Decontamination of residuals
LOCATION MAP

Proposed Site: Barangay Mabato, Calamba City, Laguna

Distance from the nearest cities (Approximation):
- Santa Rosa City: 14.02 km
- Santa Cruz City: 43.33 km
- Dasmariñas City: 15.96 km
- Imus City: 27.76 km
- Cavite City: 36.95 km