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# **Options for Solid Waste Management for Metro Manila, Philippines**

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**Consolacion Paz-Bergonia  
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## ABSTRACT

The Government of the Philippines has considered the solid waste crisis as an urgent national concern. Since devolution Local Government Units, especially in Metro Manila, have had difficulties in coping with the collection of large volume of solid waste generated in the metropolis. The existing landfills and dumpsites are also rapidly reaching their maximum capacities.

This study examines and evaluates the existing institutional arrangements in Metro Manila and other countries in the ASEAN for the purpose of generating recommendations for the improvement of solid waste management service delivery in Metro Manila.

A framework for evaluation of the institutional arrangements was developed which addresses the following questions: How is solid waste management service treated: is it public or private good/service? What are the roles of the different participants in the solid waste management service delivery chain? What are the operating arrangements in the delivery of solid waste management services? How do the institutional arrangements measure up to the criteria of efficiency, effectiveness, and equity?

This framework was used to assess, by survey, arrangements in case studies in the major metropolitan areas of five ASEAN countries (Singapore, Bangkok, Jakarta, Kuala Lumpur and Metro Manila).

The results of these case studies were used to generate the institutional options for solid waste management for Metro Manila. The research concluded that the appropriate arrangement for Metro Manila is the joint public-private provision of solid waste management services using contracting, franchising, licensing and community arrangements. Contracting and community arrangements have the most advantages in terms of attaining the objectives of efficiency, effectiveness and equity. Franchising and licensing have limited applications because of equity considerations.

This study also generated suggestions for institutional reform for effective solid waste management in Metro Manila: the “do-nothing” or status quo option; individual LGUs to be given collection, recycling, transfer and disposal responsibilities and fiscal autonomy in revenue generation; creation of commissions among LGUs and; creation of a single-purpose Metro Solid Waste Authority. Among the options, the creation of one or more commissions among LGUs appears to be the most feasible option at this point in time as it achieves economies of scale and allows possibilities for building managerial and operational competence among LGUs without loss of local autonomy.

In all arrangements, the role of the public sector is critical in the development, negotiation, management, monitoring and enforcement of public-private agreements, and for equity purposes. Whatever arrangement eventuates, government agencies need to implement training and capacity building in SWM.

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## **List of Abbreviations**

ABC	- Association of Barangay Councils
APT	- Asset Privatisation Trust
ASEAN	- Association of Southeast Asian Nations
BLGD	- Bureau of Local Government Development
BLGS	- Bureau of Local Government Supervision
BMA	- Bangkok Metropolitan Authority
BOT	- Build, Operate, and Transfer
BOO	- Build, Own, and Operate
BOOT	- Build, Own, Operate, and Transfer
BTO	- Build, Transfer, and Operate
CBD	- Central Business District
CBO	- Community-Based Organizations
CBR	- Crude Birth Rate
CDR	- Crude Death Rate
CSD	- Corporate Services Division (Bangkok)
CSD	- Contract Services Division (Petaling Jaya)
DBM	- Department of Budget and Management
DBP	- Development Bank of the Philippines
DECS	- Department of Education, Culture and Sports
DENR	- Department of Environment and Natural Resources
DEPW	- Department of Engineering and Public Works
DES	- Department of Environmental Sciences
DILG	- Department of Interior and Local Government
DOH	- Department of Health
DLG	- Department of Local Government
DPC	- Department of Public Cleansing
DPWH	- Department of Public Works and Highways
DTI	- Department of Trade and Industry
ECC	- Environmental Compliance Certificate
EED	- Environmental Engineering Division
EHD	- Environment Health Department
EIA	- Environmental Impact Assessment
EIS	- Environmental Impact Assessment System

EMB	- Environmental Management Bureau
EPHD	- Environmental Public Health Division
EPMD	- Environmental Policy and Management Division
ESC	- Environmental Sanitation Center
ESD	- Engineering Services Department
GDD	- Garbage Disposal Division
GDP	- Gross Domestic Product
GOCC	- Government-Owned and -Controlled Corporation
GNP	- Gross National Product
HUD	- Housing and Urban Development
IACEP	- Inter-Agency Committee on Environmental Protection
ICMA	- International City Management Association
ILO	- International Labour Organization
INSWMSF	- Integrated National Solid Waste Management System Framework
JICA	- Japan International Cooperation Agency
LDPO	- Local Development Planning Office
LGA	- Local Government Academy
LGU	- Local Government Unit
LLDA	- Laguna Lake Development Authority
MAPSA	- Makati Assistance for Public Safety Authority
MMC	- Metro Manila Commission
MMDA	- Metro Manila Development Authority
MOE	- Ministry of the Environment
NCR	- National Capital Region
NEDA	- National Economic and Development Authority
NEPC	- National Environmental Protection Council
NGO	- Non-Government Organization
NIMBY	- “not in my backyard”
NSCB	- National Statistical Coordination Board
NSWMA	- National Solid Waste Management Association
OECD	- Organization for Economic Cooperation and Development
OPDS	- Office of Project Development Services
PCD	- Pollution Control Department
PCSD	- Public Cleansing Service Division
PIA	- Philippine Information Agency

PNP	- Philippine National Police
PO	- People 's Organization
PMO	- Project Management Office
PMS	- Presidential Management Staff
PSSD	- Philippine Strategy for Sustainable Development
PTFWM	- Presidential Task Force on Waste Management
SOE	- State-Owned Enterprise
SSD	- Support Services Division
SWM	- Solid Waste Management Service Development and Delivery
SWMD	- Solid Waste Management Division
TPD	- Tonnes per day
UMP	- Urban Management Programme
UN	- United Nations
UNDP	- United Nations Development Programme
UNCHS	- United Nations Centre for Human Settlements
USAID	- United States Agency for International Development
WHO	- World Health Organization