



Joining Hands with Local Authorities- Public Private Partnership Through IPLA

“IPLA Forum of the Private Sector”

**23 February 2012
Nagoya, Japan.**

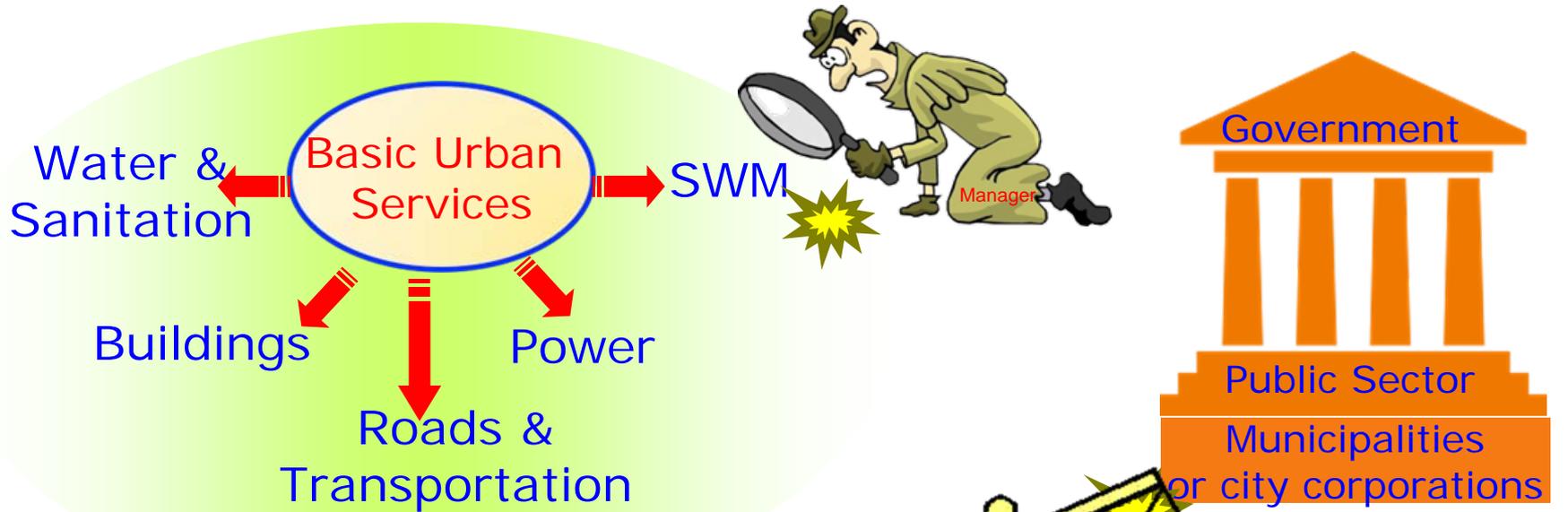


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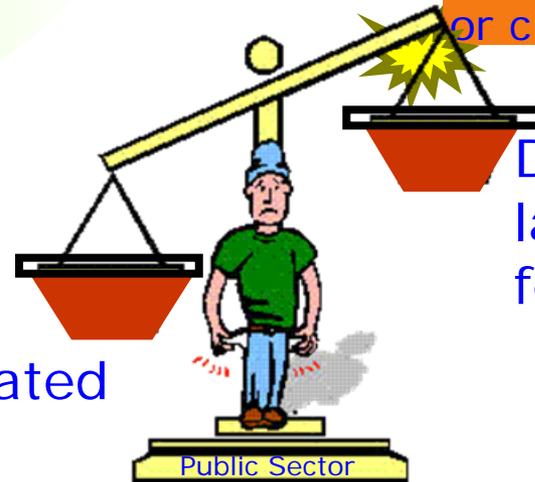
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Conventional SWM Approach



Increased population & waste generated



Decreased land available for disposal

SWM as lowest priority, lower budgetary and technical resources, LAs are over exhausted to the challenge of SWM

Development Drivers of SW Modernization



Emerging Driver 4
Climate change : **PPP by Recycling Industry**



Driver 3
Resource value of waste



Driver 2
Environment



Driver 1
Public Health



Moving from **Waste Management** to **Resources Management**

Waste Economy...

\$1370 Billion

2008



\$2740 Billion

2020



**Global Market
Volume for
Environmental
Technologies**

\$41 Billion

2008



\$63 Billion

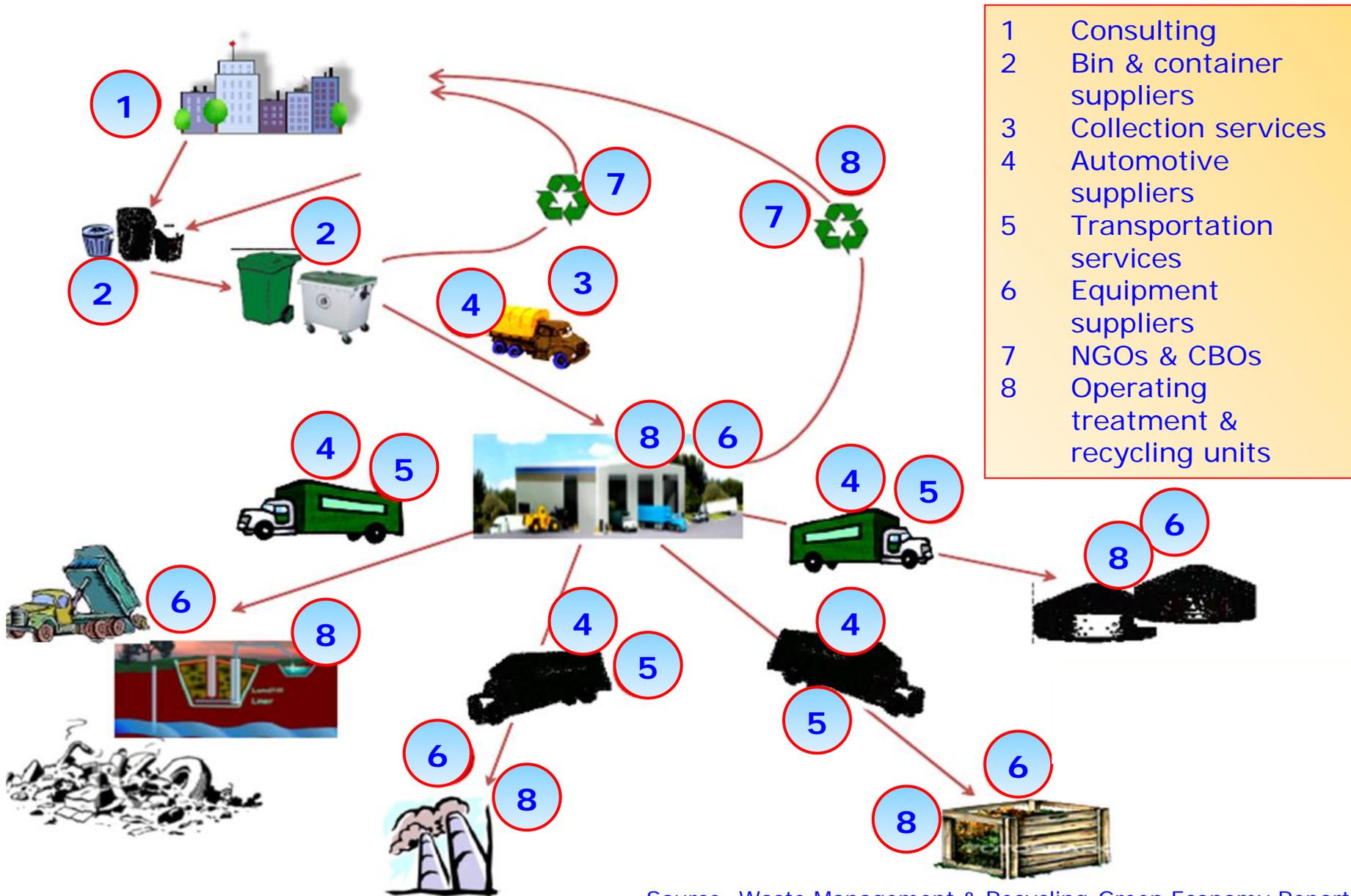
2020



**Share of Waste
Management and
Recycling**

Source: <http://www.rolandberger.com/>

Business Opportunities in SWM



Challenges of LAs for SWM

Reasons

- Lack of Management system
- Lack of appropriate Equipments
- Lack of incentives for sanitary workers
- Lack of control on waste Transportation
- Lack of Capacity of municipalities-finance, resource and technology



Weakness

- Influence of labour unions over whole organization
- Low productivity of staff
- Inadequate supervision
- Unsatisfactory equipment
- Politicians influence on management

Future?



Shifting the Roles of LAs

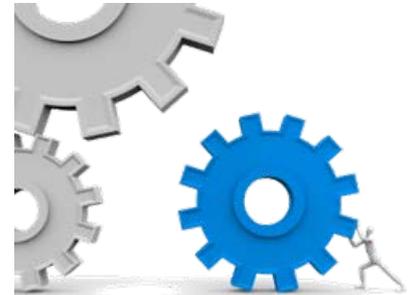
Municipalities from being a **'service provider'** to **'facilitator of service'**, by focusing its activity on planning and management,

While a private company takes up the day to day operation.

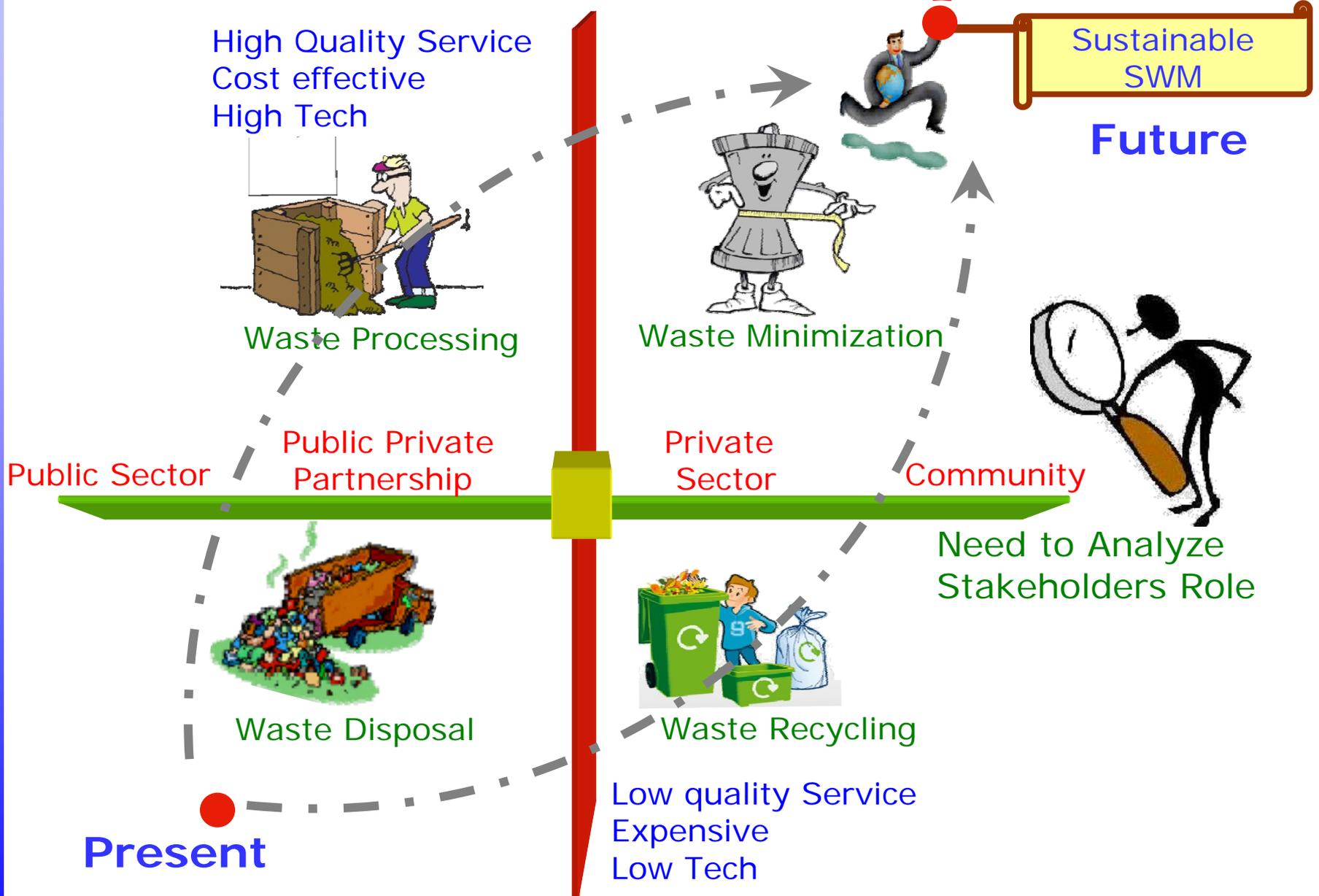
What is Private Sector up to bring in ?

Through Public private partnership (PPP)

- Technical & Management Expertise in SWM
- Improve Operating Efficiencies in the system
- Large Scale Financial Capital Injection



Calls for a Partnership...



LAs on the Look out for the Partnership with Private Sector

Some of the Indian Municipalities adopting PPP basis of Integrated solid waste Management

- Asansol Durgapur
- West Bengal Coimbatore City Municipal Corporation
- Guwahati Municipal Corporation
- Hyderabad Municipal Corporation
- Mudurai Municipal Corporation





C&DS
CONSTRUCTION & DESIGN SERVICES
U.P. JAL NIGAM

CONSTRUCTION & DESIGN SERVICES
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 Lucknow, Tel : 91-0522-2237768, 2237801, 2235573 Fax : 0522-2239088,
 Email : director@cdsupjn.org. Visit us at : www.cdsupjn.org

No. 218/G-02-07/132 **Date : 19th June 2009**

Expression of Interest

C &DS, U.P. JAL NIGAM has been given responsibility for award and execution of MSW projects on BOT (PPP) basis

These projects are grouped into following three packages which is integral part and referred as one package.

1- Collection & Transport 2-Processing and Treatment of Solid waste
 3-Operation & Maintenance of Processing plant and SLF

These projects will be set up under various ULB's of Uttar Pradesh as follows:-

Sl. No.	Place	T.P.D.	Estt. cost in Lacs	Sl. No.	Place	T.P.D.	Estt. cost in Lacs
1.	Ballia	40	373.70	3.	Sambhal (Moradabad)	75	521.69
2.	Badaun	55	488.60	4.	Basti	40	390.98

The above mentioned Local Bodies are collecting, transporting and disposing off MSW at various spots. These Local Bodies are actively considering the proposals for Scientific Processing and Development of Sanitary Land Fill at an appropriate site. In order to reduce burden on the SLF and in accordance with MSW Rules 2000, it is proposed to set up an Integrated MSW Processing facility with Private-Public- Partnership under UIDSSMT programme on BOT basis. Details Terms, Conditions & eligibility criteria is available on our website www.cdsupjn.org **Director**

Private Sector on the Look out for Partnership with LAs

- **Unilever's Sustainable Living Plan** launched in 2010, " working in partnership with industry, governments and NGOs to increase recycling and recovery rates on average by 5% by 2015, and by 15% by 2020 in our top 14 countries."
- In August 2011, under the same plan Unilever looked for partnership arrangement with a local authority by offering financial support for mixed plastics recycling collections (pots, tubs and trays)



Source: [edie newsroom www.edie.net/news/news_story.asp?id=20553](http://www.edie.net/news/news_story.asp?id=20553)

Presence of Private Sector – Industry Initiatives



**Tetrapak-
Leading
beverage
carton
manufacturer**

New line of
business



**Recycling beverage
cartons – Enhances
profitability and
image of company**



Apple

+

**Li Tong
Group**

**Take-back
program for
end-of-life
products**

**Recycling activities
to generate
secondary raw
materials**



Presence of Private Sector – Industry Initiatives



Fluorescent Tube Recycling Philips Electronics (Thailand) Ltd.

Address: 515 Moo.4 8D,
Pattana 3 Road, Bangpoo
Industrial Estate,
Preakasa, Maung,
Samutprakarn, 10280,
Thailand

Technology Provider: Royal
Philips Electronics, The
Netherlands

In 2006, the Pollution Control Department (PCD) of Thailand initiated a partnership project with Philips and Toshiba to collect and recycle fluorescent lamp wastes from various establishments. It initiated a household hazardous waste management scheme with large municipalities

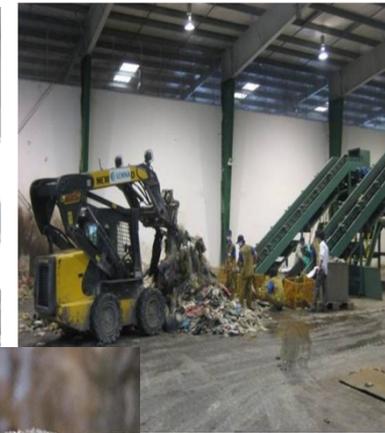
Presence of Private Sector –Business Opportunities



- **Veolia Environmental services** is present globally in 31 countries, and in developed Asian countries- China, Singapore, South Korea, Taiwan offering its municipal waste management services.

- 1) Household waste collection in the district of Wong Tai Sin, **Hong Kong**. Since May 1, 2006, total turnover of €4 million Euros over the 5 year period.
- 2) Operations and maintenance contract (O&M*) for a **Waste-to-Energy** plant for non-hazardous waste in Ilan County, **Taiwan**. Since January 2006, a cumulative turnover estimated at €44 million Euros over a 20 year period.

Presence of Private Sector – Business Opportunity



Windrow Composting
Vietstar Joint Stock Company
Address: Municipal Solid Waste Treatment Complex, Cu Chi District, Ho Chi Minh City, Vietnam
Technology Provider: Lemna International, Inc., U.S.A.

National policies of Vietnam is favorable for FDI. It also has a strong policy on promotion of 3R and is set to achieve a recycling rate of 70% from the total municipal solid wastes by the year 2015.

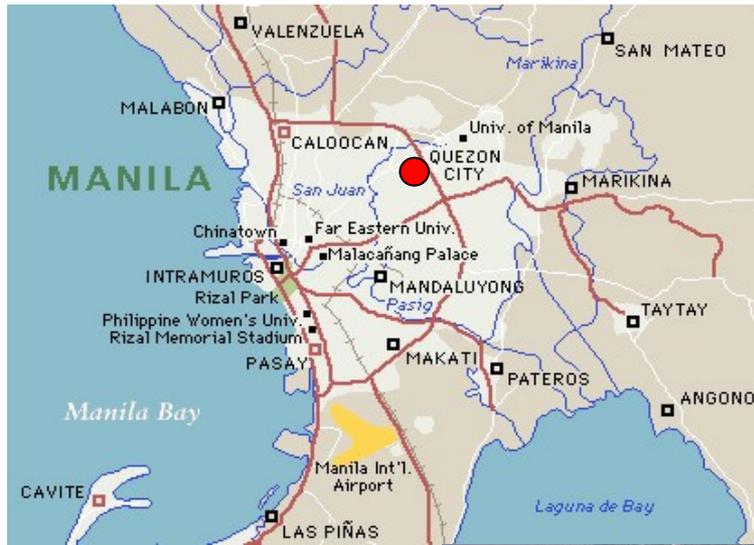
Presence of Private Sector –Business Opportunity



Non-infectious waste incinerator facility (WMS-DOWA) in Bangpoo Industrial Estate, Thailand

- Funded by NEDO Japan to the Industrial Estate Authority of Thailand via Green Partnership Plan (GPP)
- Waste Management Siam (WMS) owned by DOWA Eco Systems Co. Ltd., Japan took up the operation of this incineration plant for 20 years from 2009.

PPP in Philippines



Methane gas recovery project with Italian company in Payatas landfill in Quezon City, Metro Manila

Example of PPP- MSW in Chennai, India

Chennai

- Municipal Solid Waste (MSW) generation increased from 600 to 3500 tons per day within 20 years
- Per capita generation rate 0.6 kg/day



Question Raised on Public Sector Services

- Efficiency
- Quality of services
- Resources required for waste collection



- 4th largest metropolitan city in India
- Divided into 10 zones of 155 wards

MSWM in Chennai...Past

Organization Involved
in MSWM

Operating under framework of
MSW rules, 2000

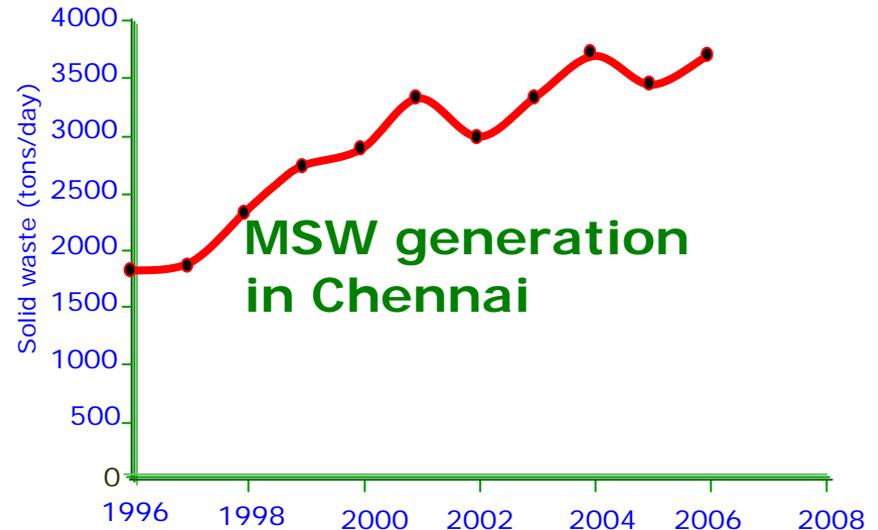


Public Sector
Corporation of
Chennai (CoC)

Public Sector
Local
Municipalities

Community
Some
NGOs/CBOs

City was divided into
10 zones



Source: www.chennaicorporation.com

MSWM in Chennai...Present

Organizations Involved
in MSWM

Operating under framework
of MSW rules, 2000



7 Zones

3 Zones- 6, 8 & 10
30% total area of the City

2000 tons/day
Solid Waste

1100 tons/day
Solid Waste

Collected & Treated

Open dumpsites at
Perungudi & Kodungaiyur

Chennai city – First in India
to establish PPP

Public Sector Services- Chennai



Awareness Campaign



Bin for Source Segregation

MSWM by
CoC

10,000 Employees 

7 Zones



Door-to-door waste
collection



Waste Transportation

Private Sector Services

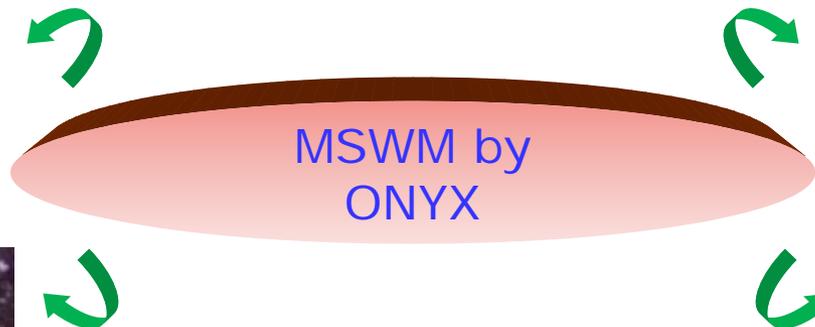


Manual Sweeping

Chennai is the first city in India to contract out MSWM services to a foreign private agency "ONYX" a Singapore based company



Mechanical Sweeper



Mechanized waste Collection vehicle

- ✓ Since March 2000, it is responsible for zones 6, 8 & 10
- ✓ 2,000 employees 



Transfer Station

PPP Recognized For?

- **Improved performance of public sector:** by employing innovative operation & maintenance methods
- **Reduced & stabilized costs of services:** by ensuring work is performed by the most productive & cost effective means
- **Improved environmental protection:** by dedicating highly skilled personnel to ensure efficient operation & compliance with environmental requirements
- **Access to private capital for infrastructure investment:** by broadening & deepening supply of domestic & international capital

But PPP is not a Cakewalk

- Waste Management is considered as business of Central Government & Municipalities only
- No specific regard is given to the role of citizens, businesses & industries
- Role of formal, informal private sector, communities, waste generators & waste pickers are not recognized
- Lack of incentives & rewards for the supplemental contribution made for reducing burden of municipalities & central government
- Municipalities become prime beneficiaries from the efforts of private sector in terms of reducing burden & saved resources

But PPP is not a Cakewalk...

How far the private sector is willing to take certain level of **"Risks?"**



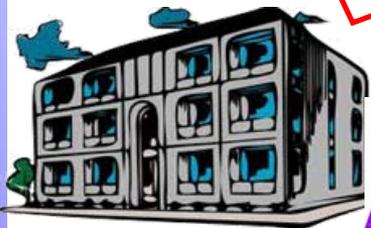
What are the "Safety Net" required by businesses & industries ?

IPLA Facilitates the Partnership...

Information
Technology
Finance



Where to
Invest



Local Authority

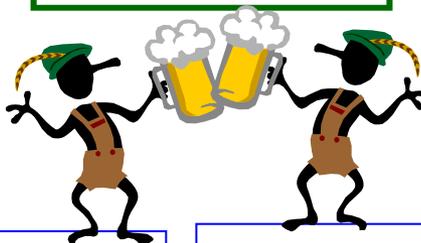
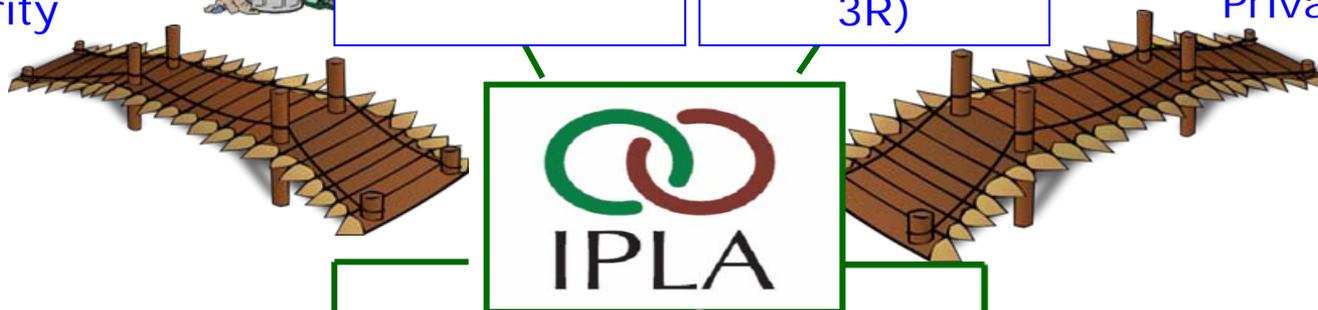


**Database of
Technology/
Service
Provider**

**Knowledge
Products
(Solid Waste
Management-
3R)**



Private Sector



Capacity Building

- Training Workshops
- Pilot Projects

Funding Opportunities

- Call for Proposal/ EOI
- International Funding Mechanisms

IPLA

- IPLA was the outcome of the 19th "CSD Intersessional Conference on Building Partnerships for moving towards zero waste" officially launched in New York in May 2011.



Why IPLA?

- Conventional SWM by centralized local authorities are not enough for zero waste goal
- **There is a scope for private companies to invest in SWM-Green Economy**
- A mediator to link among public private sectors and other research and financing institutions is required
- One-stop solution:
 - For strengthening LAs capabilities in SWM
 - Business opportunities for private sector
 - Knowledge generation and R&D



List of Private Sector IPLA Members

South America

- Gestion Organica GEO SAS (Colombia)
- Ibicol Ltda (Colombia)
- Plasticochem Ltd (Colombia)
- Asomuña (Colombia)
- Utilities SAS (Colombia)
- Gestion Organica GEO SAS (Colombia)
- Ibicol Ltda (Colombia)
- Ciudad Limpia Bogota (Colombia)
- Camara de Integracion Economica Venezolano-Colombiana (CAVECOL) (Venezuela)
- Environmental Management Centre (EMC)

Asia

- Infrastructure Leasing & Financial Services Limited (IL&FS) (India)
- Blocon, Inc. (Republic of Korea)
- Bionersis (Thailand)
- Al Boucai Group (Jordan)

List of Private Sector IPLA Members cont.

Africa

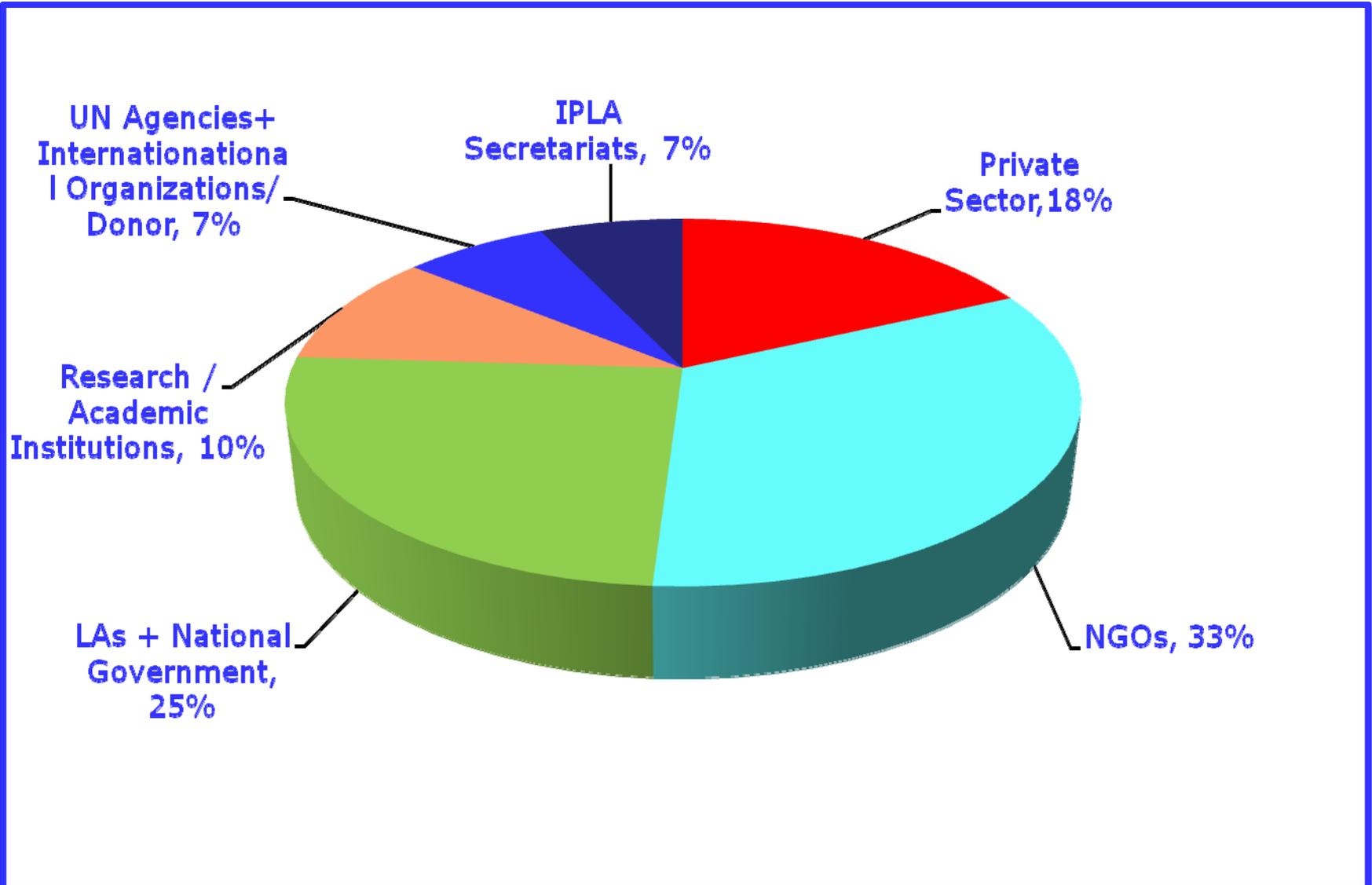
- Environ-Waste Nigeria Limited (Nigeria)
- Richbol Environmental Services (Nigeria)
- Green Page Integrated Services Ltd. (Nigeria)
- Zoomlion Ghana Limited (Ghana)
- Malians Waste Management (Mali)
- Malians Waste Management (Mali)

Europe

- 3R Environmental Technology Group (Hungary)
- Tega SA (Romania)



IPLA Membership



Thank You

