

Urban Municipal Solid Waste Management (MSW)

Commercial and Domestic Wastes, Biodegradable Waste

(Municipality Trash or Garbage, Refuse or Rubbish,
Recycling, Composting, Disposal, and Waste-to-energy)

Manufacturing Plant, Detailed Project Report, Profile, Business Plan,
Industry Trends, Market Research, Survey, Manufacturing Process,
Machinery, Raw Materials, Feasibility Study, Investment Opportunities,
Cost and Revenue, Plant Economics, Production Schedule, Working
Capital Requirement, Plant Layout, Process Flow Sheet, Cost of Project,
Projected Balance Sheets, Profitability Ratios, Break Even Analysis



Introduction

Due to rapid increase in the production and consumption processes, societies generate as well as reject solid materials regularly from various sectors – agricultural, commercial, domestic, industrial and institutional. The considerable volume of wastes thus generated and rejected is called solid wastes. In other words, solid wastes are the wastes arising from human and animal activities that are normally solid and are discarded as useless or unwanted.

This inevitably places an enormous strain on natural resources and seriously undermines efficient and sustainable development. One of the ways to salvage the situation is through efficient management of solid wastes. There has been a significant increase in MSW (Municipal Solid Waste) generation in India in the last few decades. This is largely because of rapid population growth and economic development in the country.

Solid waste management has become a major environmental issue in India .The limited revenues earmarked for the municipalities make them ill-equipped to provide for high costs involved in the collection, storage, treatment, and proper disposal of MSW. As a result, a substantial part of the MSW generated remains unattended and grows in the heaps at poorly maintained collection centres.

Waste management market is expected to be worth US\$ 13.62 billion by 2025. Indian municipal solid waste (MSW) management market is expected to grow at a CAGR of 7.14% by 2025 while e-waste management market is expected to grow at a CAGR of 10.03% during the same period.

List of Finished Products of Municipal Solid Waste Management

Municipal solid waste management plant offers following Finished product:

- 1. Compost:** Municipal solid waste is suitable for composting because of the presence of high percentage of biodegradable organic matter, satisfactory moisture content and C/N ratio in the waste. The recycling of organic residues results in the formation of compost which is a highly valued and cost effective organic fertilizer.
- 2. RDF:** MSW Refused derived fuel acts as a best substitute to fossil fuels like coal, wood because of its better emission and burning characteristics at lower cost as compared to other fossil fuels.

- **Better Emission and burning characteristics**
- **Most preferable fuel because of its low cost as compared to other fossil fuels.**
- **High burning Efficiency because of consistent quality.**
- **Uniform combustion compared to coal and wood.**

3. Recyclable Plastics and metal:

Different methods are opted to separate plastics and metal in the Municipal Solid Waste.

Plastics is roughly classified into light and heavy plastic. Light plastic is segregated through an Air Density Separator (ADS) and heavy plastic is segregated manually. Whereas the metal present in the MSW lot is segregated with the help of magnetic separators. Any material that remains after the separation of metals and plastics is further sent for landfilling

Few Indian Major Players are as under

- **A 2 Z Infrastructure Ltd.**
- **A 2 Z Waste Mgmt. (Merrut) Pvt. Ltd.**
- **Andhra Farm Chemicals Corpn. Ltd.**
- **Delhi M S W Solutions Ltd.**
- **K M C Constructions Ltd.**
- **Karnataka Compost Devp. Corpn. Ltd.**

PROJECT AT A GLANCE

PROJECT AT A GLANCE

(Rs. in
lacs)

COST OF PROJECT				MEANS OF FINANCE			
Particulars	Existing	Proposed	Total	Particulars	Existing	Proposed	Total
Land & Site Development Exp.	0.00	29.00	29.00	Capital	0.00	518.93	518.93
Buildings	0.00	30.80	30.80	Share Premium	0.00	0.00	0.00
Plant & Machineries	0.00	1882.55	1882.55	Other Type Share Capital	0.00	0.00	0.00
Motor Vehicles	0.00	10.00	10.00	Reserves & Surplus	0.00	0.00	0.00
Office Automation Equipments	0.00	30.50	30.50	Cash Subsidy	0.00	0.00	0.00
Technical Knowhow Fees & Exp.	0.00	15.00	15.00	Internal Cash Accruals	0.00	0.00	0.00
Franchise & Other Deposits	0.00	0.00	0.00	Long/Medium Term Borrowings	0.00	1556.79	1556.79
Preliminary & Pre-operative Exp	0.00	3.00	3.00	Debentures / Bonds	0.00	0.00	0.00
Provision for Contingencies	0.00	18.00	18.00	Unsecured Loans/Deposits	0.00	0.00	0.00
Margin Money - Working Capital	0.00	56.87	56.87				
TOTAL	0.00	2075.72	2075.72	TOTAL	0.00	2075.72	2075.72



PROJECT AT A GLANCE

Year	Annualised		Book Value	Debt	Dividend	Retained Earnings		Payout	Probable Market Price	P/E Ratio	Yield Price/ Book Value
	EPS	CEPS	Per Share		Per Share	Per Share				No.of Times	
	Rs	Rs	Rs	Rs	Rs	%	Rs	%	Rs		%
1-2	5.33	11.01	15.33	24.00	0.00	100.00	5.33	0.00	5.33	1.00	0.00
2-3	7.80	12.64	23.13	18.00	0.00	100.00	7.80	0.00	7.80	1.00	0.00
3-4	10.31	14.43	33.45	12.00	0.00	100.00	10.31	0.00	10.31	1.00	0.00
4-5	12.81	16.32	46.26	6.00	0.00	100.00	12.81	0.00	12.81	1.00	0.00
5-6	15.27	18.27	61.53	0.00	0.00	100.00	15.27	0.00	15.27	1.00	0.00

PROJECT AT A GLANCE

Year	D. S. C. R.			Debt / - Depos its Debt	Equity as- Equity	Total Net Worth	Retu rn on Net Wort h	Profitability Ratio					Assets Turnov er Ratio	Curre nt Ratio
	Individ ual	Cumula tive	Over all					GPM	PBT	PAT	Net Contri bution	P/V Ratio		
	(Number of times)			(Number of times)		%	%	%	%	%		%		
Initi al				3.00	3.00									
1- 2	1.54	1.54		1.57	1.57	1.88		22.29 %	12.13%	10.29 %	1342. 11	49.91 %	1.18	1.01
2-3	1.77	1.65		0.78	0.78	1.02		26.17 %	18.27%	12.90 %	1565. 76	49.91 %	1.30	1.58
3-4	2.07	1.78	2.08	0.36	0.36	0.55		28.79 %	22.60%	14.92 %	1789. 44	49.91 %	1.34	2.23
4-5	2.44	1.92		0.13	0.13	0.28		30.59 %	25.69%	16.48 %	2013. 12	49.91 %	1.31	2.95
5-6	2.90	2.08		0.00	0.00	0.13		31.81 %	27.94%	17.69 %	2236. 80	49.91 %	1.25	6.60

BEP	
BEP - Maximum Utilisation Year	5
Cash BEP (% of Installed Capacity)	37.07%
Total BEP (% of Installed Capacity)	44.01%
IRR, PAYBACK and FACR	
Internal Rate of Return .. (In %age)	28.69%
Payback Period of the Project is (In Years)	2 Years 4 Months
Fixed Assets Coverage Ratio (No. of times)	4.521

Major Queries/Questions Answered in the Report?

- 1. What is Municipal Solid Waste Management industry?**
- 2. How has the Municipal Solid Waste Management industry performed so far and how will it perform in the coming years?**
- 3. What is the Project Feasibility of a Municipal Solid Waste Management Plant?**
- 4. What are the requirements of Working Capital for setting up a Municipal Solid Waste Management plant?**
- 5. What is the structure of the Municipal Solid Waste Management Business and who are the key/major players?**

- 6. What is the total project cost for setting up a Municipal Solid Waste Management plant?**
- 7. What are the operating costs for setting up a Municipal Solid Waste Management plant?**
- 8. What are the machinery and equipment requirements for setting up a Municipal Solid Waste Management plant?**
- 9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up a Municipal Solid Waste Management plant?**
- 10. What are the requirements of raw material for setting up a Municipal Solid Waste Management plant?**

- 11. Who are the Suppliers and Manufacturers of Raw materials for setting up a Municipal Solid Waste Management plant?**
- 12. What is the Manufacturing Process and Formulations of a Municipal Solid Waste Management plant?**
- 13. What is the total size of land required for setting up a Municipal Solid Waste Management plant?**
- 14. What will be the income and expenditures for a Municipal Solid Waste Management plant?**
- 15. What are the Projected Balance Sheets of a Municipal Solid Waste Management plant?**

- 16. What are the requirement of utilities and overheads for setting up a Municipal Solid Waste Management plant?**
- 17. What is the Built up Area Requirement and cost for setting up a Municipal Solid Waste Management Business?**
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- 19. What are Statistics of Import & Export for Municipal Solid Waste Management ?**
- 20. What is the time required to break-even?**

- 21. What is the Break-Even Analysis of a Municipal Solid Waste Management plant?**
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- 23. What are the Profitability Ratios of a Municipal Solid Waste Management plant?**
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- *We use authentic & reliable sources to ensure business precision*



Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

Sectors We Cover Cont...

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

Sectors We Cover Cont...

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*



Sectors We Cover Cont...

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*

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