

5.1.1 Solid Waste Management

Market Overview and Current Activities

In Delhi, about 1500 tonnes of solid waste (representing 30 percent of waste generated) is left uncollected every day. Solid waste in India consists of over 90 percent organic matter which cannot be incinerated. Sanitary landfilling exists near the capital, but it is not of a high standard. Ground water protection measures for the sites are inadequate with no distinction made between clay and silt liners. Regular testing of underground water at landfill sites is not carried out, increasing the threat of water-borne diseases. Technologies for composting, pelletization and waste-to-energy technologies using anaerobic digestion are ideal applications for solid waste disposal in India.

India's municipal leaders are beginning to take action.

Indian Solid Waste Initiatives

- Bombay generates approximately 4500-6000 tons per day of solid waste, of which not all is collected. During the plague scare last fall, the Bombay Municipal Corporation (BMC) implemented extra shifts for garbage pickup and fumigated dumping grounds and garbage heaps in residential areas but discontinued once the plague receded from headlines. Given the large volumes of waste generated, and lack of government funds, personnel, and infrastructure, the BMC is actively considering the privatization of waste disposal. This would open this sector to a wide range of equipment, technology, and services. Interested companies should tie-up with Indian recycling and disposal companies.
- Calcutta's garbage will be recycled into fertilizer when a plant for bio-conversion of the city's solid waste goes into production by the end of this year. Executed with technology from Excel Industries of Bombay, the plant and the technology will be replicated gradually in other municipalities of West Bengal.
- The World Bank made capital available to finance a plastic recycling plant that now recycles 2 percent of the nation's polyethylene.
- Rama Newsprint and Papers Ltd. is the *first* company to produce newsprint from old newspapers and magazines.

Technology Opportunities

These innovations merely scratch the surface of India's pent-up solid waste management requirements. India's cities and governments need waste management know-how, technology and capital. Specific business opportunities for foreign solid waste management companies include: