

# SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES

## PROBLEM STATEMENT

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1.The world population has been quadrupled,and there has been major relocations from rural to urban areas.there is expected to reach 70% by 2050.	The process of collecting and processing materials that would otherwise be thrown away as trash and turning them into new products.
2. Population growth and rapid urbanization lead to huge increase in waste generation ,so the traditional methods of waste collection have become inefficient and costly.	The automatic waste collection system collects four most common types of waste with separate collection point of each type of waste. The first type of waste includes general waste, recyclable cardboard, recyclable paper, and organic waste. The waste collection point is generally located near the society, in the garden, or a separate indoor waste collection room is established.
3. The mode efficient way this extraordinary amount of waste can be solved is through smart waste management with obsolete methods of waste collection.	As populations grow in urban areas, so does the need for waste management solutions that can accommodate increasing amounts of trash. Some cities are taking on this challenge by installing pneumatic waste disposal bins that connect to a series of underground pipes.
4.Traditional waste collection issue are  i)inefficient way to identify the waste collection  ii)Fixed routine for waste collection	Using smart garbage management systems that allows the user to know the fill level of each garbage bin in a locality or city at all times, to give a cost-effective and time-saving route to the truck
5.Management issue are  i)wastage of resources(labor,fuel etc.)  ii)Missed pick-ups,causing unclean environment	Implement automated waste collection system to collect garbage and transport it through an underground vacuum pipes or tubes with a high speed to a nearby collecting station where the waste can be kept sealed and in compacted containers.