

**Project Design Phase-I**  
**Proposed Solution Template**

Date	27 September 2022
Team ID	PNT2022TMID27134
Project Name	Smart Waste Management In Metropolitan Cities Using IOT

**Proposed Solution:**

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The purpose of this project is to reduce the waste overflow from the dumpsters, Recycling with separation of waste and enhance the best route for collecting waste using IOT.
2.	Idea / Solution description	If the waste in the dumpsters reach 3/4 <sup>th</sup> of its level the sensors senses it and transmits data to the garbage trucks to initiate garbage collection.
3.	Novelty / Uniqueness	The system will turn the alert on, automatically reaches the garbage collector trucks, and enhance the best route preventing dump overflow.
4.	Social Impact / Customer Satisfaction	The sensor-enabled solution helps prevent the dump overflow and increases environmental air quality. The IR sensors help detect the level of the dump filled to avoid the waste overflow.
5.	Business Model (Revenue Model)	Waste management is the most essential need in our daily life, it reduces man power and utilize machines of IOT in a useful manner.
6.	Scalability of the Solution	The result of this project is that the sensor detects the level of the waste collected in the dumpsters, before the overflow starts the garbage trucks are meant to collect it. This is an efficient method as the trucks automatically segregates the different wastes so that it can be dumped directly to its corresponding places, ensuring less man power, increased air quality and an efficient waste management.