

# PROJECT DESIGN PHASE 1

## PROPOSED SOLUTION TEMPLATE

Date	October 2022
Team ID	PNT2022TMID38320
Project Name	Smart Waste Management System For Metropolitan Cities
Maximum Marks	2 Marks

### PROPOSED SOLUTION TEMPLATE:

S.NO	PARAMETER	DESCRIPTION
1.	Problem statement	<p>One of the major problem in metropolitan cities are collection, manage and disposal of waste. The trash we generate which produce more emission that affect us for long term.</p> <p>The purposes of using IOT in waste management are route optimization, collection and recycling of waste.</p> <p>The advent of Internet of Things (IOT) technologies facilitates the progress of clean atmosphere and to lead a healthy life style</p>
2.	Idea / solution description	<p>If the bins which reach the maximum level, then sensors sense and alert the authority. The trash collectors collect the waste and dispose waste properly.</p>

3.	Novelty / Uniqueness	<p>Separate bins should be kept to collect bio-degradable and non bio-degradable waste in the metropolitan cities. The trash collecting vehicles can be tracked where it coming and notify the location to the civilians</p> <p>Eliminating unnecessary garbage truck trips lower carbon emission and reduces the transportation cost. Smart waste container minimize overflow, creating a cleaner and safer environment.</p>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>➤ Real-time waste monitoring.</li> <li>➤ Predictions for bin fullness.</li> <li>➤ Detailed database of bins and stands.</li> <li>➤ Interactive bin map including Street view.</li> <li>➤ Route planning for waste collection.</li> <li>➤ Overview of scheduled and executed routes.</li> <li>➤ Database of citizen reports.</li> <li>➤ Fire and tilt alarm</li> </ul>
5.	Business Model	<p>Waste Management generates revenue by providing residential, commercial, industrial, and municipal clients with a variety of disposal services and recycling solutions.</p>