

Project Design Phase-I Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID03073
Project Name	Project - Smart waste management system for Metropolitan cities
Maximum Marks	2 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"> ❖ Rubbish and waste can cause air and water pollution. ❖ Rotting garbage is also known to produce harmful gases mix with the air and cause breathing problem in people. ❖ Due to improper waste disposal, we may face several problems like unpleasant odour and health problems
2.	Idea / Solution description	<ul style="list-style-type: none"> ❖ To solve this problem of waste management for disposal using a smart refuse bin built with technologies like Sensors, Arduino Yun. ❖ Garbage truck Weighing Mechanisms. ❖ AI Recycling Robots
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> ❖ Identify potential waste streams. ❖ Create a waste management-focused community outreach plane

4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> ❖ Neighbourhood of landfills to communities, breeding of pests and loss in property values. ❖ The IOT solution uses the data and selects optimum routes for waste collection trucks
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ❖ It generates revenue through the provision of various waste management and disposal services. ❖ Recycling solutions to residential,commercial,industrial and municipal clients
6.	Scalability of the Solution	<ul style="list-style-type: none"> ❖ Installing more bins fire collecting recyclables like paper, glass,plastic. ❖ Recycling not only save energy but also prevent the material from going to landfills & Incineration and provides raw materials for new products.