

Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID40268
Project Name	Project – Smart waste management using iot
Maximum Marks	2 Marks

Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	This project addresses the issue of waste management in smart cities with inefficient garbage collection systems. With the help of this initiative, the enterprises may get the intelligent garbage management solutions they require. This technology enables the authorised person to provide truck drivers with a time- and cost-efficient route by always knowing the level of fill in each garbage can in a neighbourhood or city.
2.	Idea / Solution description	The following are the main research goals: <ul style="list-style-type: none"> • The proposed system would be able to use IOT to control the complete collection process and automate the solid waste monitoring procedure (Internet of Things). • The circuit at the garbage bin, which communicates it to the receiver at the desired location in the area or spot, is placed at the waste bin in the proposed system to acknowledge whenever the waste bin is filled. • In the suggested system, the signal received from the monitoring and control system indicates the status of the waste bin.
3.	Novelty / Uniqueness	Working on it...
4.	Social Impact / Customer Satisfaction	According to popular perception, the direct social effects of current solid waste disposal procedures, such as the proximity of landfills to neighbourhoods, the development of pests, and the decline in property values, are the worst effects.
5.	Business Model (Revenue Model)	Solid Waste, which includes the Company's waste collection, transfer, recycling, and resource recovery, as well as its resource recovery and disposal services, are run and managed locally by the Company's various subsidiaries, which concentrate on specific geographic areas. Corporate and Other, which includes the Company's other activities, such as

		the development and operation of landfill gas-to-energy facilities
6.	Scalability of the Solution	In order to address this issue, smart city design is being researched and discussed more and more globally. Following this methodology, this article proposed a powerful IoT-based, real-time trash management model with an emphasis on citizens to enhance urban living conditions. The proposed method makes use of sensor and communication technologies, collecting garbage information from the smart bin in real-time and sending it to an internet site that city residents may access to see whether the compartments are still available.