**Project Design Phase-I**

**Proposed Solution Template**

|  |  |
| --- | --- |
| Date | 19 September 2022 |
| Team ID | PNT2022TMID19493 |
| Project Name | Project – Smart waste management system for metropolitan cities |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | With the existing methods of collecting and disposal it is near impossible to manage such amount of waste in the future as around 30% of waste end up on the roads and public places due to ineffective disposing and collecting methods. |
|  | Idea / Solution description | Make source segregation mandatory. Establish incentives for participation to minimise residual waste. For example, charge less to collect organics and recyclables than residual waste, and provide smaller bins for residual waste. Develop regulations to phase out non-recyclable materials and single-use items in the city. |
|  | Novelty / Uniqueness | The usage of technology in order to be more efficient when it comes to managing waste. This makes it possible to plan more efficient routes for the trash collectors who empty the bins, but also lowers the chance of any bin being full for over a week! |
|  | Social Impact / Customer Satisfaction | From the public perception as worst impacts of present solid waste disposal practices are seen direct social impacts such as neighbourhood of landfills to communities, breeding of pests and loss in property values |
|  | Business Model (Revenue Model) | IMG_256 |
|  | Scalability of the Solution | Recycling not only saves energy but also prevents the materials from going to landfills & incineration, and provides raw materials for new products. Installing more bins for collecting recyclables like paper, glass, plastics, etc., and then recycling them can be a huge step. |