**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID15047 |
| Project Name | Project - Smart Waste Management System For Metropolitan Cities using IOT |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | ❖ 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. |
|  | Idea / Solution description | ❖ 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. |
|  | Novelty / Uniqueness | ❖ Identify potential waste streams.  ❖ Create a waste management-focused community outreach plane. |
|  | Social Impact / Customer Satisfaction | ❖ 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. |
|  | Business Model (Revenue Model) | ❖ It generates revenue through the provision of various waste management and disposal services.  ❖ Recycling solutions to residential,commercial,industrial,and municipal clients |
|  | Scalability of the Solution | ❖ Installing more bins fir collecting recyclables like paper, glass,plastice.  ❖ Recycling not only save energy but also prevent the material from going to landfills & Incineration and provides raw materials for new products |