**Ideation Phase**

**Define the Problem Statements**

|  |  |
| --- | --- |
| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID35316 |
| Project Name | Clean Teach: Transforming Waste Management with Transfer Learning |
| Maximum Marks | 2 Marks |

## 📝 ****Customer Problem Statement Template****

This template helps us understand the user’s core challenges by framing them from their perspective, driving human-centered design.

| **Problem Statement** | **I am (Customer)** | **I’m trying to** | **But** | **Because** | **Which makes me feel** |
| --- | --- | --- | --- | --- | --- |
| **PS-1** | a municipal waste worker | sort and classify waste correctly and efficiently | the process is manual, slow, and often inaccurate | there’s no intelligent system to support or automate the process | frustrated, overworked, and inefficient |
| **PS-2** | an environmental officer in a smart city project | ensure that waste is categorized and managed properly | many public and industrial bins don’t support automatic waste detection | they lack AI-based waste classification systems | concerned about non-compliance and sustainability setbacks |

## 🔍 ****Insights Drawn:****

* Both **operational staff** and **policy enforcers** are struggling due to **lack of automation** in waste classification.
* There is a demand for **reliable, real-time, intelligent solutions** that can assist in ensuring **accuracy**, **efficiency**, and **compliance**.
* These problems create emotional responses like **frustration**, **exhaustion**, and **concern**, which highlight the **urgency and relevance** of CleanTech.