

# **CleanTech: Transforming Waste Management with Transfer Learning**

## **Ideation Phase - Define the Problem Statements**

**Team ID: LTVIP2025TMID39058]**

Project Name: CleanTech: Transforming Waste Management with Transfer Learning

Maximum Marks: 2 Marks

### **Customer Problem Statement Template**

Customer Problem Statement Template:

A clear customer problem statement helps identify and solve user pain points. In this project, we aim to support communities, municipal services, and recycling companies by providing an efficient waste classification tool.

Reference: <https://miro.com/templates/customer-problem-statement/>

### **Problem Statement 1 (PS-1)**

I am a citizen living in an urban area.

I'm trying to separate my household waste efficiently.

But I often don't know which bin certain waste items go into.

Because waste items are visually confusing or unlabelled.

Which makes me feel uncertain and discouraged from recycling properly.

### **Problem Statement 2 (PS-2)**

I am a municipal waste management officer.

I'm trying to improve waste sorting and recycling rates.

But the manual segregation process is time-consuming and inconsistent.

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Because it relies on human classification with high error rates.

Which makes me feel frustrated and unable to meet sustainability targets.