

Ideation Phase

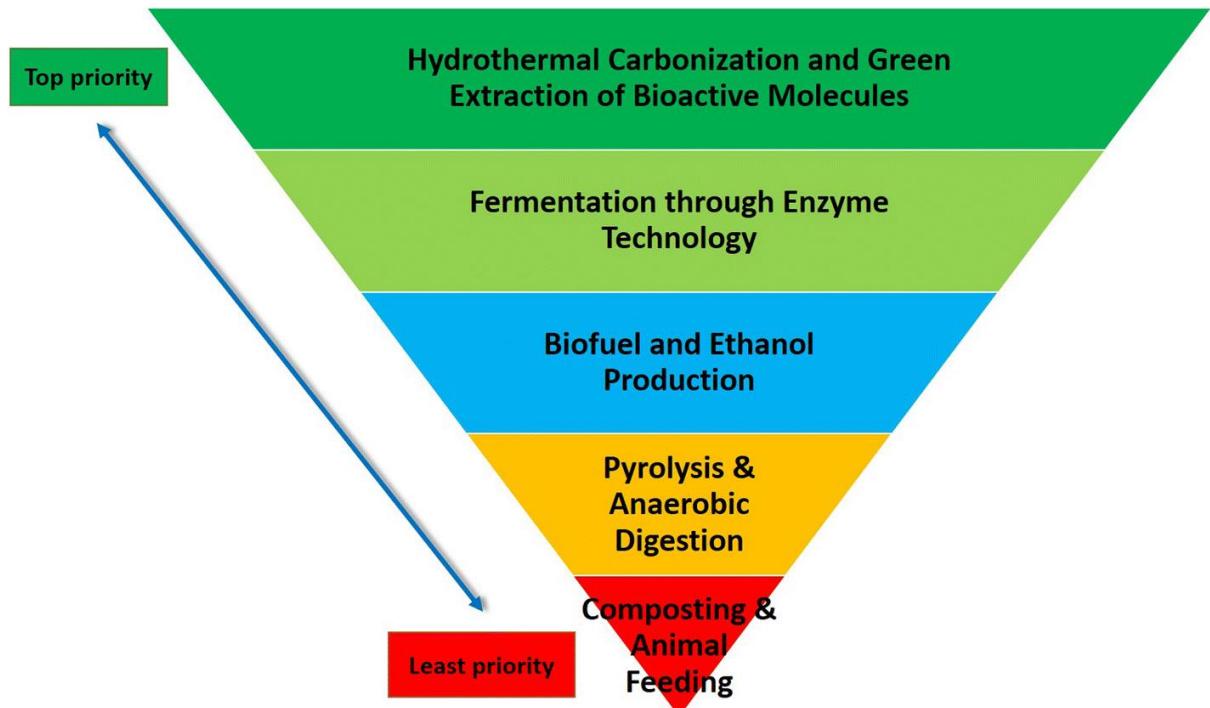
Define the Problem Statement

Date	03 November 2025
Team ID	NM2025TMID01374
Project Name	To Supply Leftover Food to Poor
Maximum Marks	2 Marks

Utilizing Leftover Food Waste for Sustainable Power Generation

In many urban and rural areas, large quantities of leftover food from households, restaurants, and institutions are discarded daily, leading to serious environmental issues such as methane emissions, bad odors, and unhygienic waste disposal. At the same time, communities face increasing energy shortages and dependence on non-renewable power sources.

There is currently no efficient, accessible, and eco-friendly system that converts leftover food waste into usable energy at a community or household level. This gap creates both environmental and energy challenges. Therefore, there is a need to develop a sustainable solution that can effectively process leftover food waste and generate renewable power, reducing both food waste and energy dependency.



Example:

Problem Statement(PS)	I am as	I'm trying to	But	Become	Which makes me feel
PS-1	Homes	Environmental Focus	Every day, a large amount of leftover food from homes and restaurants is thrown away and dumped in landfills	there is no proper system to turn food waste into energy	There is no proper system to turn food waste into energy, which makes me feel worried about how much we waste and how it affects our planet.
PS-2	Resource	Energy Sustainability Focus	There is not enough clean energy	while energy sources are becoming limited and expensive	This makes me feel concerned about how much we waste every day and how we depend on non-renewable energy

□ Problem Statement 1 – Environmental Focus

A large amount of leftover food from homes, restaurants, and institutions is discarded daily and ends up in landfills, where it decomposes and releases harmful greenhouse gases such as methane. At the same time, there is an increasing demand for clean and renewable energy sources. The lack of an efficient system to convert food waste into usable energy results in both environmental pollution and energy scarcity.

⚡ Problem Statement 2 – Energy Sustainability Focus

Non-renewable energy resources are depleting rapidly, and energy costs are rising. Meanwhile, a significant portion of biodegradable food waste remains underutilized. There is a pressing need for an innovative approach to transform leftover food into a reliable source of renewable power to support sustainable energy systems and reduce dependency on fossil fuels.