

## Case Study: Biochar & Power Generation – Malaysia

**Project:** Ankur Biomass Gasifier for Biochar and Power

**Location:** Malaysia

**Scope:** Design, engineering, manufacturing, and supply of biomass gasifier system

### Objective

To install a flexible biomass gasifier enabling maximum biochar production in charcoal mode and higher producer gas output with lower biochar yield in gasification mode.

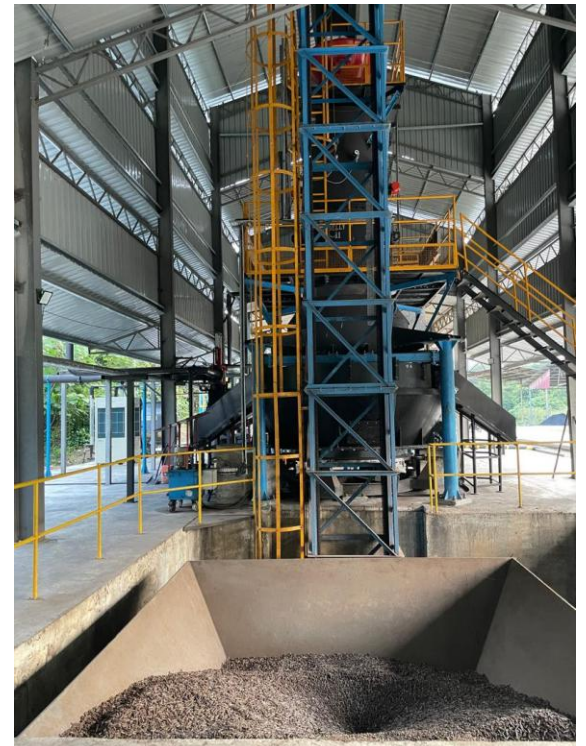
### Overview

Ankur Scientific supplied a Pyro Series Gasifier (Model PG-350) operating in Ultra Clean Gas Mode. The system generates producer gas for power generation in a 100% producer gas engine, while generating biochar as a valuable byproduct.

In charcoal mode, the plant achieves a biochar yield of ~25% along with power generation. In gasification mode, it prioritizes higher producer gas output with lower biochar production, ensuring fully renewable, reliable, and cost-effective energy generation.

### Key Benefits

- 100% renewable fuel-based power generation
- ~25% biochar yield in charcoal mode
- On-site power generation
- Valuable biochar production
- Lower operating costs



**The system installed at the project site**