

Our Environmental Stewardship



> Tertiary Effluent Treatment Plant at Sungai Tenegang Mill.

Effluent & Water Discharge

Why It Matters

Effective management of our effluent and water discharge drives regulatory compliance and preserves essential and shared natural resources, bringing benefits to local communities.

Our Approach

Managing Effluent Treatment

Treating POME is a vital part of processing FFB as untreated POME can have severe significant environmental impacts. Stringent internal controls and advances in technology have significantly improved how we manage and monitor the biochemical oxygen demand (“BOD”) of this by-product, ensuring better water quality and minimising environmental impact.

To ensure our effluents are treated to the highest standards before discharge, we have installed advanced Tertiary Effluent Treatment Plants (“TETPs”) at several of our mills. These systems play a key role in maintaining water quality within safe limits. Other mills are in the process of upgrading their systems to meet anticipated stricter regulations from the DOE.

Central to our treatment process is rigorous testing of effluent samples to ensure compliance with regulatory standards. Current laws mandate that BOD levels must not exceed 100 mg/l in West Malaysia, and 20 mg/l in Sarawak and Sabah’s Kinabatangan Basin. By consistently achieving levels well below these limits, we demonstrate responsible environmental stewardship.

In FY2024, we introduced several enhancements to improve how we manage effluents. By the end of the year, all our mills had implemented either ponding systems or advanced tertiary treatment technologies to handle POME. Ponding systems utilise natural biological processes to break down pollutants, while TETPs incorporate advanced technologies to further enhance the quality of treated effluent.

Bukit Lawiang Mill, in particular, has taken a significant step forward by signing a Shareholders’ Agreement with Cenergi RE to develop a biogas plant. This innovative facility is designed to improve the performance of its effluent treatment by capturing methane gas that would otherwise escape into the atmosphere. It will also reduce the BOD of the final effluent water before releasing it into the flatbed system. Construction is currently underway, with the project expected to be completed in 2026.

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BOD Measurements

Over the past three years, we have consistently adhered to BOD limits in both West Malaysia (<100 mg/ℓ) and East Malaysia (<20 mg/ℓ). Notably, our Sungai Tenegang mill in Sabah continues to boast the lowest BOD measurement among our mills.

BOD Measurement (mg/ℓ)

Bukit Lawiang, Johor



Kota Bahagia, Pahang



Sungai Tenegang, Sabah



Mamahat, Sabah



Raja Udang, Sarawak



Gedong, Sarawak



Note:

² Low BOD levels recorded due to scheduled anaerobic pond maintenance, including desludging every two to five years to prevent sludge buildup.

POME Generation

Total POME generated (MT)

