

CALTEX BUSINESS SOLUTIONS HALVES LUBRICANT OPERATING COSTS WITH CALTEX HDAX 6500 LFG

Two Innio Jenbacher Type 420 gas engines with 1.4MW capacity achieve 250% increase in drain intervals





THE ISSUE

Thai Biogas Energy Company owns and operates seven sites across Thailand and Laos, with their Tha Chang site using biogas from a local rubber and palm oil factory to power their gas engines.

The highly corrosive and variable quality of biogas was resulting in higher operating expense due to shorter oil drain intervals. The customer was only able to operate their engines at around 500-hour oil life, and was having difficulty extending the oil drain.

COMPANY:

Thai Biogas Energy Company (TBEC)

LOCATION:

Tha Chang, Surat Thani, Thailand

APPLICATION:

Biogas gas engines

EOUIPMENT:

INNIO Jenbacher 420 with 1.4MW output

SOLUTION:

Caltex HDAX 6500 LFG Gas Engine Oil SAE 40









THE SOLUTION

This is where Caltex Business Solutions came in and the team recommended Caltex HDAX 6500 LFG Gas Engine Oil SAE 40 to handle the corrosive gas. Formulated with advanced ashless dispersants and proprietary additive technology, HDAX 6500 LFG is designed to protect key components in the harshest of operating conditions.

When operating in these conditions and running on highly corrosive biogas fuels, this advanced product was the clear choice to optimize plant performance and extend oil drain intervals.



THE RESULTS

The Caltex Advisory recommendations were first implemented in 2016, and over the years, TBEC has been able to increase power output capacity, reduce carbon emissions by 80,000 tons/year – the equivalent of charging 9.2 billion smartphones – and extend drain intervals by 250% to 1,250 hours.

With a lubricant cost reduction of over 50%, the Tha Chang site has managed to reduce overall operating costs by over 30% and deliver maximum power generation capacity for the local service area.



"Before using HDAX® 6500 LFG, we were using about 1,000 litres of lubricant and the drain interval was about 500hrs. After we switched to HDAX® 6500 LFG, we still use the same amount of lubricant but the drain interval has was achievable at 1,250 hrs. As a result, our lubricant cost has reduced by more than 50%, productivity has increased, with cost savings of 31% and the burden on the maintainance department have been reduced by half. Tha Chang site is able to operate with optimal uptime assurance".



Sornpong Nurat

Production and Customer Service Manager of Tha Chang Site, Thai Biogas Energy Co. Ltd



1,250 HOURS OIL DRAIN INTERVALS ACHIEVED IN BIOGAS ENGINES – A 250% INCREASE



SOLUTIONS DEPLOYED

Caltex HDAX 6500 LFG Gas Engine Oil SAE 40

Caltex HDAX 6500 LFG Gas Engine Oil is a premium quality, high performance low ash, dispersant/detergent type gas engine oil formulated especially for four stroke landfill gas, biogas, digester gas and sour gas applications, providing exceptional protection and maximized oil drain intervals even in the presence of the most aggressive landfill gases.

Caltex LubeWatch (previously known as In-Service Oil Analysis)

As you optimize your lubrication program for peak protection and performance, attentive monitoring helps you continue to achieve the benefits.

Caltex LubeWatch oil analysis helps you detect potential problems and fine-tune your maintenance practices to extend drain intervals, minimize failures and reduce costs.

