

EXECUTIVE SUMMARY

Energy is essential to carry out daily activities. Indonesia has been a net importer of fuel as a source of energy since 1997. The Indonesian trade balance has shown a negative value due to oil and gas import. Indonesian government predicted that the source of energy in terms of oil will reach 35% of total national demand in 2025, thus Indonesia needs renewable energy as an alternative to overcome the lack of energy problem.

Indonesia is the largest palm oil-producing country in the world with its products being exported abroad. In 2019, countries in the European Union through the European Commission issued renewable energy guideline II / RED II. The regulation showed an increase in Crude Palm Oil (CPO) import tax duty between 8% - 18%, which caused a decline in CPO price and incline on the domestic supply of Indonesian CPO. This situation forces the absorption of CPO within the country, one of which is by turning it into biofuels. This business plan is to produce biogasoline from Industrial Palm Oil (IPO) as raw material, which is a product of CPO.

The company, PT Gemanusa Bio Energi engaged in the biofuel industry, will be established in Palembang, South Sumatra. The factory will be located in Musi Banyuasin, South Sumatra by considering the supply of raw materials. The company produces biogasoline with octane 120 (G120) drop-in (ready to be mixed with any fuel). The IPO conversion to G120 uses chemical cracking reactions with the help of "Katalis Merah Putih" invented by ITB scientists. Biogasoline is produced along with other products in the form of Green LPG and biodiesel with composition 50%, 45%, and 5% respectively.

The products will be marketed to fuel retailer companies in Sumatra region, particularly in South Sumatra and Jambi. The company produces 42 Million liters which equal to 4.9% of the total South Sumatra & Jambi's demand for gasoline or 1 % of the market share produced in the Sumatra region.

The initial investment needed is 800 Billion Rupiah with land requirement around 1000 m². PT Gemanusa Bio Energi is expected to reach the maximum capacity in the 6th year and pay a dividend starting the 5th year at a minimum 140 Billion Rupiah. PT Gemanusa Bio Energi's IRR rate is 15% with ROE 16.39 % and ROA 14.42 % while it reaches its payback period on 8th year.