

EXECUTIVE SUMMARY

Indonesia's demand for black carbon is increasing. This is evidenced by the increase in the number of imports carried out by Indonesia to meet the needs of the domestic market. Likewise with 2 other products that depend on petroleum which will run out and their prices that will always rise every year. Meanwhile, the main raw material for PT. Re-banbeks (used tires) have also increased from year to year which indicates an opportunity to utilize used tires into products with economic value such as black carbon, RCO, crumb rubber, and steel.

There are only 3 companies in the used tire recycling industry in Indonesia, namely PT. SSE, PT Kacima, and CV. Taufan Jaya. Based on the data above, the development of the used tire recycling industry becomes a product that not only has economic value, but is also highly supported by the government. It is also seen that this business market has great opportunities, has promising potential and can reduce environmental pollution. Moreover, because PT. Re-banbeks use a pyrolysis process that does not produce any other environmental pollution during its process.

PT. Re-banbeks uses a low cost focus strategy as the company's competitive strategy because its products are substitute products from used tires with competitive prices and guaranteed quality (according to specifications) that consistently meets specification. In its operational activities, Re-banbeks is able to produce good quality RCO, Black Carbon, Steel, and Crumb Rubber products at the same period of time. Re-banbeks also performs production scheduling for each product and ensures that there is no idle capacity, thus creating efficient operating activities and lower cost of production. In maintaining product efficiency, quality, and accuracy, PT. Rebanbeks employs employees according to the required skills and expertise, and conducts scheduled special training for all employees. In its marketing activities, PT. Re-banbeks is trying to retain long term customers. These implementations of a cost focus strategy in the company's activities allows PT. Rebanbeks to offer competitive prices to target consumers.

Based on our interview with Mr. Bernardus from PT. SSE, it is found that the demand for black carbon, RCO, and rubber powder products, can be assumed as such: each of its annual demand is 50% of consumer needs per year. Hence, for black carbon there is a demand of 160,000 tons/year at a price of 10,000/kg which reaches Rp. 1.6 trillion for its annual demand. For RCO there is a demand of 2.4 billion liters / year at a

price of 5,200 / liter which amounts to IDR 12.5 trillion per year. The demand for steel wire is assumed to be equal to the amount of scrap metal needed per year in Indonesia -based on the secondary data from BPS and IISIA-. Thus, for steel wire, it is assumed that there is a demand of 5 million tons/year at a price of 500/kg which amounts to Rp. 2.5 trillion as its annual demand. For crumb rubber/rubber powder there is a demand of 294,500 tons/year at a price of 4,350/kg which amounts to Rp. 1.28 trillion per year.

PT. Re-banbeks requires an initial investment of IDR 20,000,000,000.00. The sales revenue target for the first year is Rp. 16,388,750,000.00 and is expected to reach Rp. 92,577,810,000.00 in the fifth year with an average sales growth of 54.18% per year. The payback period is expected to be reached in the 6th month of year 4, with a positive NPV value of Rp.112,304,381,808.00. The company will also generate an IRR value of 12.72% and an ROE value of 88.37% at the end of year 5.

