

# **Techno-Economi Analisis of Coconut Shell Briquettes at PT Panda Coco Charcoal, Sumenep Regency**

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## **ABSTRACT**

*This research aimed to anali the techno-economics of the production of briquettes from coconut shell charcoal at PT Panda Coco Charcoal, Sumenep Regency. Techno-economics is used to analyze the feasibility of the briquette business by analyzing the quality of the briquettes and the cost of each briquette-making process in the business. The quality of the briquettes includes 1.49% ash content, 6.928 cal/g calorific value, 5.05% moisture content and 0.0002 g/s burning rate. In the cost analysis, PT Panda Coco Charcoal requires a cost of Rp. 6,454,705,758 for initial capital with several criteria, namely, Cost of Production (HPP) of Rp. 12,120.15/kg, BEP (Breaking Event Point) of 135,890.8687/ kg and IDR 2,165,306.215, Payback Period (PBP) 1.53, meaning that capital will be returned within 1 year 6 months 4 days, Net present Value (NPV) is IDR 8,672,716,819. a cost ratio (BCR) of 1.6 means that PT Panda Coco Charcoal's coconut briquette business can be achieved because the results are > 1. Based on the calculations that have been made, the selling price is Rp. 20,000. Prices in these companies are much cheaper than market prices.*

*Keywords : briquettes, coconut shell, tapioca flour, techno echonomic analysis*