

***LIFE CYCLE COST ANALYSIS ON BUILDING
CONSTRUCTION, RUSUNAWA POLYTEKNIK NEGERI
BENGKALIS***

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ABSTRACT

In a good building construction, planning of the building life cycle cost is very necessary because these costs will affect the estimated cost required for the future of the building itself, which consists of initial costs, operational costs and maintenance and replacement costs.

Rusunawa is one of the infrastructure facilities that operate every day. So this study aims to calculate the Life Cycle Cost in a simple rental flat at the Bengkalis State Polytechnic and analyze the feasibility of building investment against the rental price.

Based on the results of the study, it was found that the four components used in the preparation of the Life Cycle Cost that occurred from the planning of the Rusunawa building to the economic life of the building for 50 years amounted to Rp. 90,726,533,237.88 with details of the initial fee in the amount of Rp. 11,350,226,158,67, operating costs of Rp. 8,658,302,713.94, maintenance and replacement costs of Rp. Rp.63,745,211,220.60 and the cost of dismantling carried out in the 51st year spent Rp.6,972,793,144.67. As well as the analysis of the investment in the flats on the rental fee set by the manager of Rp.130,000 which is declared unfeasible with an NPV value of <0 , the IRR value, $<3\%$, and is declared feasible if the rental fee is set to be Rp. 200,000 so that the NPV value > 0 is Rp.781 .706.423.89.and IRR = $3.2\% > MARR 3\%$.

Keywords : *Life Cycle Cost (LCC), Investment Analysis, NPV, IRR*