Peningkatan Desain Green Building Untuk Mewujudkan Healthy Building dengan Mempertimbangkan Nilai Ekonomi Bangunan = Improvement of Green Building Designs to Actualize Healthy Buildings by Considering the Economic Value of Buildings

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Abstrak

Konsep Healthy Building merupakan generasi selanjutnya dari Green Building, dimana konsep yang tidak hanya mencakup tanggung jawab terhadap dampak lingkungan, namun juga kesehatan dan kinerja penghuninya. Namun, konsep ini masih belum banyak diterapkan terutama di Indonesia karena persepsi bahwa terdapat peningkatan biaya yang lebih besar jika dibandingkan dengan bangunan konvensional ataupun Green Building. Penelitian ini bertujuan untuk meningkatkan desain eksisting berupa rancangan Green Building untuk mewujudkan konsep Healthy Building dengan mempertimbangkan nilai ekonomi bangunan. Studi kasus, analisis life-cycle-cost dan analisis benefit-cost ratio dilakukan untuk mencapai tujuan penelitian. Hasil penelitian menunjukkan bahwa peningkatan Green Building ke Healthy Building dapat dilakuakan dengan peningkatan desain kualitas udara dalam ruang, kelembaban udara dan penerapan pengendalian hama terpadu. Healthy Building membutuhkan tambahan biaya investasi sebesar 1,44% dari Green Building dan 9,02% dari bangunan konvensional. Namun dapat memberikan nilai B/C ratio sebesar 4,29 dari bangunan konvensional dan 7,08 dari Green Building.

.....The Healthy Building concept is the next generation of Green Building, where the concept includes not only responsibility for environmental impacts, but also the health and performance of its occupants. However, this concept is still not widely applied, especially in Indonesia due to the perception that there is a greater increase in costs when compared to conventional buildings or Green Buildings. This study aims to improve the existing design in the form of a Green Building design to actualize the Healthy Building concept by considering the economic value of the building. Case studies, life-cycle-cost analysis and benefit-cost ratio analysis were carried out to achieve the research objectives. The results showed that the improvement of Green Building to Healthy Building can be done by improving the design of indoor air quality, air humidity and the application of integrated pest management. Healthy Building requires additional investment costs of 1.44% of Green Buildings and 9.02% of conventional buildings. However, it can provide a B/C ratio value of 4.29 from conventional buildings and 7.08 from Green Building.