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Result Analysis on Innovation in Construction Material Management for Enhanced Project Performance

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Abstract: The building sector has a big impact on the environment and the world's resource usage. As a result, novel materials are being used more and more in sustainable construction techniques to lessen their negative effects on the environment, increase energy efficiency, and improve the overall sustainability of infrastructure and buildings. This analysis looks at the most recent developments in cutting-edge materials for sustainable building and how they might completely change the building industry. The review starts off by listing the main issues that the construction sector is dealing with, such as waste production, carbon emissions, and resource depletion. It then looks at how novel materials can help with these issues, stressing how they can be more durable, use less energy, and have less lifespan costs than more conventional materials. A number of cutting-edge materials are covered, such as recycled aggregates, engineered wood products, and materials derived from biotechnology. The utilisation of engineered wood products, including cross-laminated timber, as sustainable substitutes for conventional building materials is on the rise because of its robustness, longevity, and capacity to sequester carbon.

Keywords: Negative Effects, Environment, Increase Energy, Efficiency, Improve Sustainability, Infrastructure, Buildings

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