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A REVIEW ON GREEN ROOF BENEFITS, OPPORTUNITIES AND CHALLENGES

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ABSTRACT

Over the last decade, research on green roofs has progressed quickly. Green roofs have been suggested as a long-term solution for mitigating the negative impacts of urbanization. The history of the green roof, green roof components, and various advantages (environmental, social, and economic) connected with green roof technology are all covered in this review article. This article also discusses how green roofs function in many areas, including its effectiveness in lowering storm water and energy costs, as well as enhancing air and environmental quality. The advantages of a green roof demonstrate that it may help cities become safer, more sustainable, and more robust to climate change. As a result, several nations provide financial incentives to homeowners who install green roofs. The major difficulties connected with the use of green roofs are the initial high construction costs, high maintenance expenses, and roof leakage concerns. These obstacles may be addressed with the development of a revolutionary low-cost green roof design that can function more effectively and efficiently in any location. This article also covers advanced modifications and green roof application trends. The article also discusses the green roof's research difficulties and research gaps. Finally, several suggestions are made in order to improve the performance of green roofs.

KEYWORDS: *Advanced modification, Evolution Retrofitting, Green Roof, Promotional Policies, Roofs.*

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