

Harnessing Blue-Green Infrastructure - A Catalyst for Sustainable Campus Development

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Abstract: *The integration of blue-green infrastructure (BGI) in campus planning has emerged as a promising approach to promote sustainability, resilience, and environmental stewardship in higher education institutions. This research paper provides a comprehensive review of the theoretical foundations, principles, applications, and benefits of blue-green infrastructure in the context of campus development. Drawing upon a synthesis of existing literature, case studies, and best practices, this paper highlights the multifaceted role of BGI in managing stormwater, enhancing biodiversity, improving microclimate, promoting social well-being, and fostering innovation on university campuses. Furthermore, this paper identifies key research gaps, challenges, and opportunities for future research to advance our understanding of blue-green infrastructure and its potential to transform campuses into sustainable living laboratories..*

Keywords: Blue-green infrastructure, sustainability, campus development, stormwater management, biodiversity, social well-being.