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Autore	Kioumarsi Mahdi
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Decarbonizing Building Materials for Net Zero Emissions A Feasibility Study in Canada.

Sommario/riassunto

This open access book provides the latest fundamental and practical advances in reducing the built environment's carbon footprint based on a collection of papers presented at the 1st International Conference on Net-Zero Built Environment: Innovations in Materials, Structures, and Management Practices, held June 19-21, 2024, in Oslo, Norway. The volume presents research investigations and case studies spanning five interrelated domains: New materials and material preparation processes for zero (or negative) carbon footprint Robotic construction technologies for minimum formwork and on-site activities Novel structural designs and details for optimal performance with the least material usage Advanced condition assessment and health monitoring methods for the longest service life Innovative life-cycle analysis and policy-making strategies for effective civil infrastructure management.