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METHODS FOR TREATING CONSTRUCTION WASTE AS RESOURCES FROM A SUSTAINABLE DEVELOPMENT PERSPECTIVE

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Abstract

The amount of new construction and demolition activities of building projects has reached an unprecedented level, and the resulting construction waste has a significant impact on the country's society and economy. In this study, a dynamic material flow model of construction waste is proposed. The area estimation method is introduced to calculate the production of three kinds of construction waste. The relationship between construction waste flow and building stock is determined, and the impact of different waste treatment technologies on the environment is quantified by coupling relationship. The results show that the output of waste concrete, brick, wood and steel will reach the maximum in 2049. Acid rain and global warming caused by two treatment methods of construction waste steel and building waste wood are more serious.

Key words: construction waste, dynamic material flow model, output, garbage disposal

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