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## GREEN BEHAVIOR PERFORMANCE EVALUATION OF PAPER COMPANIES BASED ON ROUGH SET-CLOUD MODEL

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### Abstract

The "greenization" of papermaking enterprise behavior is an important approach to transition towards to environmental protection and green development mode. Aiming at the problem that it is difficult to quantitatively evaluate the green behavior performance of papermaking enterprises, a new model of green behavior performance evaluation of papermaking enterprises is proposed based on rough set and cloud model theory. Firstly, the factors influencing the green behavior performance of papermaking enterprises are identified, and an evaluation index system for the green behavior of papermaking enterprises is established. Secondly, using rough set theory, the weight of each layer in the index system is determined. Subsequently, considering the fuzziness and uncertainty of index evaluation, the cloud model is employed to construct the performance evaluation model of green behavior of papermaking enterprises. The weights are combined with the evaluation model to finally calculate the performance level of green behavior of papermaking enterprises. Finally, a comprehensive evaluation is conducted, taking the green behavior performance of a papermaking enterprise as the research object. The results show that: (1) The green behavior performance level of the papermaking enterprise is in a good level, but there are pollution penalties caused by inadequate management in pollutant discharge management. In terms of energy structure, coal is the main source of energy, and a large amount of oxides are emitted. (2) The calculation results of the evaluation method are basically consistent with the actual situation. It can reflect the actual effect of the green behavior of the enterprise, and verify the reliability, rationality and effectiveness of the model.

*Key words:* cloud model, green behavior, paper company, performance evaluation, rough set

*Received: March, 2023; Revised final: October, 2023; Accepted: February, 2024; Published in final edited form: March, 2024*

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