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## **THE GAME OF INTERESTS IN CHINA'S UNIFIED CARBON MARKET: A PERSPECTIVE OF SUSTAINABILITY**

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### **Abstract**

China is currently promoting the construction of a nationwide unified carbon trading market. Theoretically, a unified carbon trading market can play a role in improving the efficiency of carbon trading. However, in the process of transformation from decentralized and pilot carbon trading platforms to a unified national one, the individual differentiation of market participant's increases and risks are different. It is the core issue to ensure more sustainable and healthier development for the unified carbon market to make fair and reasonable income distribution for market participants with differences. The paper uses the Shapley value method to allocate the cooperative benefits in the carbon trade market and then introduces the diversified risk factors borne by participants in the carbon trade market to revise the results of income distributing. The results show that the allocation mechanism considering multiple risk factors is more fair and reasonable. The research results can provide reference for policy making about how to improve the enthusiasm of market participants in the national unified carbon market and promote the sustainable development of the carbon trading market.

**Key words:** Carbon trading market, income distribution, multiple risk factors

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