

10.可再生资源利用与可持续发展

Changing of the coordination of socioeconomic development and the ecological environment as sustainable development progresses

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摘要: The relationship between socioeconomic development and the ecological environment is intimately linked with the level of regional sustainable development. Clarifying the evolution patterns of this relationship during the sustainable development process is crucial for achieving all of the Sustainable Development Goals (SDGs), but less research has focused on this problem. Here, we have utilized statistical and remote sensing data from 290 municipal units in China to analyze the evolution of the coupling coordination between socioeconomic development and the ecological environment along a progression of sustainable development measured by the SDG Index. The results show that as sustainable development progresses, both socioeconomic and ecological environment levels exhibit a nonlinear rise. The coupling coordination between the two demonstrates a pattern of initial increase, followed by a decrease, and then an increase again, which is related to changes in industrial structure. Our study delves deeply into the patterns of evolution in the relationship between socioeconomic and ecological environments, exploring the challenges and opportunities faced by regions at different stages of sustainable development. The findings can deepen our understanding of sustainable development and provide policy suggestions and theoretical support for achieving SDGs.

关键词: Sustainable development goals; Coupling coordination degree; Social-ecological system.