

The Grey System Analysis of Energy Consumption Structure Change in Xinjiang in the Context of Low-Carbon Economy

Wang Yue* Ke Han

Xinjiang Autonomous Region Bureau of Statistics, Urumqi, Xinjiang, China
830002

Email: 398575647@qq.com

Abstract: Combing through the research on the issue of energy consumption at home and abroad, the author finds that many scholars are using Granger Causality Test and Co-Integration Test Methods to study the long-run equilibrium relationship between energy consumption and economic growth, but not meeting the prerequisite methods and assumptions to some extent. However the conclusion is not very reliable while the method does not meet the prerequisites and assumptions. As the energy consumption structure is an overall uncertainty, the author uses the Grey Component Data System to simulate and predict changes in energy consumption structure in Xinjiang, aims to provide a new idea for the study of the structure of energy consumption.

Key words: Grey System; Component data; Energy Consumption Structure; Xinjiang