ENERGY AND EMISSION COMPETITION NETWORK BETWEEN INDUSTRIES IN BEIJING

An Qier, China university of Geosciences, Beijing. Email: qier514@163.com

An Haizhong, China university of Geosciences, Beijing. Email: ahz369@163.com

Overview

Beijing is facing increasing threaten of environmental problems. Energy utilization and emission by industries contributes a lot to these problems. This paper constructs an energy and emission competition network of Beijing by the method of 2-mode complex network to show the competition relationship between industries from the view of energy utilization and emission. By this study we aim to find the answers of following questions: Firstly, which industries are big energy consumer and share big fractions of emission. Secondly, what industries have a close relationship with each other because of the similar energy demand and emission. Thirdly, how many industry groups does Beijing have. Based on these results, we can find a clue about which industries should not be supported in Beijing any more, and which industries are quite similar in energy utilization and emission so that they should not located closely.

Methods

2-mode complex network

Results

We are trying to find out four things: Firstly, which industries are big energy consumer and share big fractions of emission. Secondly, what industries have a close relationship with each other because of the similar energy demand and emission will be showed. Thirdly, how many industry groups Beijing has.

Conclusions

Based on these results, we can find a clue about which industries should not be supported in Beijing any more, and which industries are quite similar in energy utilization and emission so that they should not located closely.

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