

## **The Effect of Educational Status on Household Energy Consumption in Urban and Rural China**

Topic: Regional IO analysis (Chair: Shigemi Kagawa, Kyushu University)

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Education is an important proxy for social development and has complex but understudied impacts on household energy consumption (HEC). Using China's household survey data and an energy input-output (EIO) model, this paper estimates the influences of education on direct and indirect HEC in urban and rural China in 2017. We thereby distinguish four different educational groups in both areas. The empirical results show that education affects direct and indirect HEC in different ways. We hypothesize that households with more education have (1) higher levels of income which provides them access to various energy sources, and (2) a larger awareness of environmental issues. This hypothesis is corroborated by our findings. Considerable gaps in direct HEC per capita can be observed between the least educated households on the one hand and the other three groups on the other hand. This holds both in rural and in urban China. Our results also show that the least educated households have the smallest amount of direct HEC per capita. Households with more education have a more environmentally friendly energy consumption structure and spend a smaller share of their direct HEC on coal. On the other hand, we find that education positively influences the indirect HEC per capita. This is because households with a higher educational status consume more indirect HEC due to their different consumption patterns. More attention should be focused on the role of education and on emphasizing energy awareness.