

The role of income in household energy consumption patterns in China

Topic: Environmental input-output modeling I

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China's households have experienced rapid lifestyle changes during the current decade. From 2000 to 2010, per capita disposal income has rose 152% for urban residents and 97% for rural residents. However, there were huge income disparities among different income groups. In 2010, the income Engel Coefficient was 35.7% for urban residents and 41.1% for rural residents. Thus, lifestyle varies among different income groups. Compared to the household cohort with the lowest 10% income, their counterpart with the highest 10% income cohort spent almost five times more expenditure in 2010. Also, they spend less proportion of their total expenditure on 'Food', 'Residence', and 'Health Care and Medicare Services' while higher proportion on other consumption activities.

This paper adopts Consumer Lifestyle Approach to explore the energy consumption of different income groups of both rural and urban households. The energy and carbon intensities of each consumption activities are calculated based on the analysis of I-O tables of year 2000, 2002, 2005, 2007, and 2010. This article examines the changing trend of lifestyles as well as their induced energy consumption of different income groups in China from 2000 to 2010. This article will also explore how energy consumption would change when households move up income ladders and the future changing trend of household energy consumption in the recent future.