

TEMPERATURE AND PRECIPITATION EFFECTS ON RURAL ELECTRICITY CONSUMPTION: EVIDENCE FROM 330 COUNTIES IN CHINA FROM 2010-2015

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Human activities lead to the climate change and in turn the climate change affects the household economic activity. This paper tries to examine the effects of climate change on rural household electricity consumption. Using the economic, meteorological and remote sensing data of 330 counties during 2010-2015 in China, the paper controls the rural household disposable income per capita, rural area night-light luminosity, distant that the county from the city, year and region effect. First, the preferred estimates indicated that 1% annual temperature increase will lead to a rise of 0.071% on rural household electricity consumption at the significant level of 5%. Second, the 1% annual precipitation increased would lead to a rise of 0.08% on rural household electricity consumption. Third, the analysis indicated that there is considerable heterogeneity in the effect across the counties.

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