Climate Change and Non-Residential Electricity Consumption in Colombia

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Abstract

More than two thirds of electricity consumption in the world is for commercial and industrial use. In this paper I estimate the relationship between non-residential electricity consumption and short-term weather fluctuations. I use a panel of daily mean temperatures and electricity consumption by large non-residential users in Colombia. I show that electricity usage is most sensitive to temperature for service sector users in warmer regions. I then use these results to describe the potential effect of climate change on non-residential electricity consumption in Colombia.

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