Evaluating the Cost-Effectiveness of Rebate Programs for Residential Energy Efficiency Retrofits

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Abstract

This paper is among the first cost-effectiveness evaluations of energy efficiency retrofits with household-level data. I use monthly residential electricity billing data, combined with data on observable characteristics of each residence, to assess nine separate retrofit rebate programs. The study takes place in Gainesville, Florida, and compares changes in energy use within a residence before and after an energy saving retrofit intervention (treatment group) with changes in energy use within a similar residence that did not receive improvements (control group). Results indicate that cost-effectiveness of retrofit rebate programs vary widely across retrofit types, and that engineering estimates of energy savings are reasonably accurate.

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A preliminary draft is available upon request. Please click the following link for an updated version of this paper: http://www.terpconnect.umd.edu/~jmaher5/MaherRetrofitASSA2014.pdf **,** *or email the author at jmaher@arec.umd.edu*