

Households significantly reduce electricity use when prices rise

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A new study in the *RAND Journal of Economics* examined how quickly households change their electricity use when prices rise and fall rapidly. Results show that when electricity prices increase, the average household rapidly reduces its electricity use. However, when electricity prices then decrease, household energy use returns to previous levels.

Matthew White and Peter C. Reiss examined how thousands of households in California changed their energy use before and after California's electricity crisis. These households experienced unprecedented price increases in 2000. As opposed to self-reports, researchers used metered energy consumption for 70,000 households.

When electricity prices doubled, the average household reduced its electricity use by about 13 percent within 60 days. More than one third of all households reduced their monthly electricity use by over 20 percent.

When electricity prices later decreased, energy use rebounded to nearly previous levels within about a month.

Households also conserve energy in response to public informational campaigns about how to lower one's electric bill. The researchers found that publicly-funded programs delivered changes in home energy use that could add up to a big difference in total electricity use across a city or state.

Overall, these informational programs were remarkably effective, reducing average household energy use by about 7 percent.

Source: Wiley

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