

# Real-time feedback makes hotel guests slash shower power

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Providing hotel guests real-time feedback on the power they use in the

shower sharply curbs the amount of energy consumed even though they do not pay for it, according to new research released Monday.

The team behind the study, based on the installation of smart meters in showers at six hotels in Switzerland, said it showed that [financial incentives](#) alone don't dictate how much [energy](#) we use.

"Real-time feedback technologies can successfully foster behaviour change and large resource conservation effects even in contexts where people have zero financial incentive to conserve energy," Verena Tiefenbeck, senior research associate at ETH Zurich university, told AFP.

Over the course of nearly 20,000 showers, guests whose bathrooms were fitted with real-time displays consumed an average of 11.4 percent less energy than those without energy use feedback.

The meters measured the amount of electricity used to heat and pump the water, in kilowatt hours (kWh).

Authors of the study, published in *Nature Energy*, predicted based on user behaviour that the new meters would save enough energy to pay for themselves within two years.

Tiefenbeck said the energy use meters served a similar function to cards left in hotel bathrooms asking guests to reuse their towel to help the environment.

"The hotel can signal that they make efforts for the environment and likewise, though the guest does not financially benefit from reusing the towel," she said.

"The difference is that with the smart shower meters we are able to

quantify the savings."

Data was not provided however on comparable amounts of water consumption.

Tiefenbeck said the findings could be applied to any effort to lower energy consumption, not in just those scenarios—such as [hotel](#) room showers—where customers don't have to pay for the power they use.

"Environmental campaigns do not need to focus on financial benefits, which may disproportionately put pressure on [poor people](#) or may even backfire, as many people might say 'I don't care, I can afford it'," she added.

**More information:** Verena Tiefenbeck et al. Real-time feedback promotes energy conservation in the absence of volunteer selection bias and monetary incentives, *Nature Energy* (2018). [DOI: 10.1038/s41560-018-0282-1](#)

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