

Science for Environment Policy

Do information campaigns about energy use really help to reduce consumption?

Informing consumers about their energy use and giving advice on how it can be improved can result in lower public energy consumption, new research suggests. However, if such information campaigns are based solely on monetary savings they are not effective, the study concludes.

Energy use worldwide accounts for 40% of greenhouse gas emissions and therefore increased efficiency could result in significant environmental benefits. In response to this pressing issue, the EU is aiming to reduce energy consumption by 20% by 2020¹, and an important part of achieving this objective is encouraging consumers to use energy more efficiently.

Campaigns to [inform consumers](#) of the benefits of conserving energy come in many different forms, including information on past energy use, energy saving tips, monetary savings and the energy usage by peer groups, for example, people in the same neighbourhood. However, research into these approaches has produced mixed results, with no overall consensus as to whether such campaigns have significant effects on energy use.

This study investigated whether there is an underlying consensus in the research literature, and to identify the most effective approaches. They analysed the results of 156 information campaign experiments involving 525,479 participants in 59 peer-reviewed studies, dating from 1975 to 2012.

Overall, information campaigns were effective, and participants reduced their energy use by an average of 7.4%. Comparing different strategies, the researchers showed that energy audits and consultation, when individuals are informed about their own energy use and given advice on how to lower their consumption, were the most effective. Under this strategy, consumers reduced their energy use by 13.5% on average. The next best approach was providing individuals with comparisons with their peers' energy use; this reduced consumption by 11.5%.

Surprisingly, strategies that provided information on money savings or provided monetary incentives (e.g. payments for reduced energy usage) actually resulted, on average, in an increase in energy usage by the participants. The researchers suggest that this may be because, if other altruistic reasons (such as environmental concerns) are not considered, many participants may find the potential savings or remunerations too small, and not a big enough reason to conserve energy.

The researchers also noted that rates of energy usage slowly increased under longer studies. This is worrying as it suggests that information campaigns may not have a sustained effect, and the researchers call for further research into the possibilities of repeated bursts of campaigning.

The authors of this study conclude that information campaigns *not* based on monetary savings could play an important role, alongside new, energy-efficient technologies, in achieving energy use reductions. To reduce the cost of providing energy-use information, the researchers suggest that newly developed 'smart meters' could be used, which might also help improve the reliability of the information provided.



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1. http://ec.europa.eu/energy/efficiency/index_en.htm