

Knowing your neighbor cares about the environment encourages people to use less energy

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Giving people information about how much gas or electricity their neighbours use encourages them to use less energy, research shows.

People are also more motivated to use less gas or electricity if they think



those who live near them <u>care</u> about <u>saving</u> the environment. The findings of the study could prove useful to <u>energy</u> providers and policymakers as they work to help customers and citizens save energy.

Dr. Oliver Hauser of the University of Exeter Business School, one of the two lead authors of the study, said: "Many of us generally agree that reducing energy consumption is needed to help the environment and save our planet—but we have found to make it happen, we need to believe that others care about it too. People believe, rightly or wrongly, that a majority of those around them know what's right—and they are afraid that they might be told off if they behave in a different way."

Jon Jachimowicz of Columbia Business School, the other lead author of the study, said: "We found that when people believe their <u>neighbours</u> cared about energy conservation, they were more likely to subsequently save energy. This shows it is not only what most other people are doing that matters to us, but also whether we believe they care about this particular behaviour."

The US firm Opower sends over 60 million households around the world energy bills that show their own energy consumption in relation to how much energy their neighbours consume. Providing this <u>information</u> has led to customers decreasing their energy consumption—to date, this intervention has saved more than \$2 billion USD in energy usage.

However, not all energy bills that contain this information have led to the same amount of <u>energy savings</u>. The new study, published in *Nature Human Behaviour*, analysed data from over 16 million households across the United States over seven years across the 27 U.S. states in which Opower operates, and found that the same "descriptive social norm" information on <u>energy bills</u> produced a 2.55 per cent reduction in energy savings in some states, but only led to a 0.81 per cent reduction in others.



Mr Jachimowicz said: "We were intrigued to see the same bill produce different effects on energy savings across the United States. Why did households in Minnesota respond more strongly to descriptive social norms than households in Indiana? We decided to investigate this by conducting an additional survey that elicited people's beliefs and attitudes about energy savings and the environment."

The researchers surveyed more than 2,000 individuals in the same 27 U.S. states where Opower operates and found in states where respondents indicated that their neighbours cared about saving energy, providing information about the energy use of neighbours was much more effective in changing behaviour. Another controlled experiment run by the academics as part of the same study provided more evidence which showed people are strongly influenced by what they believe their neighbours care about.

Dr. Hauser said: "In US <u>states</u> where people thought that their neighbours cared a lot about <u>energy conservation</u>, Opower's information about neighbours' <u>energy consumption</u> is associated with greater energy savings. In places where people thought that their neighbours did not care, it was associated with much lower energy savings."

"The behaviour of others can be used to encourage people to be more efficient in their energy use—both to save money and protect the environment. This is particularly true in places where people care what their neighbours think of them. We believe these findings could be extremely valuable for energy companies as they work to help customers save money and protect the environment."

The Critical Role of Second-Order Normative Beliefs in Predicting Energy Conservation is published in the journal *Nature Human Behaviour*.



More information: The critical role of second-order normative beliefs in predicting energy conservation, *Nature Human Behaviour* (2018). DOI: 10.1038/s41562-018-0434-0,

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