



Tackle climate change with tried and true persuasion techniques

X&Y Partners

October 2012

www.thisisxy.com



Romeu Gaspar
romeu.gaspar@thisisxy.com
+44 (20) 3239 5245

Tackle climate change with tried and true persuasion techniques

“ The greater good is a worthy motive to address climate change, but it's not a particularly effective persuasion technique. Routine, reward and social proof work far better.

Simple actions like switching off the lights or turning down the thermostat can lead to substantial savings: studies suggest that behavioral change alone, without any technology update, can result in 5 to 20% carbon emissions savings. The human mind is however far more complex than any machine, and meaningful behavioral changes in this area have proven difficult.

Our own studies corroborate these findings. For instance, we have recently estimated potential carbon savings purely based on behavioral changes to be 3% for a hospital and 10% for an entire region (Exhibit 1).

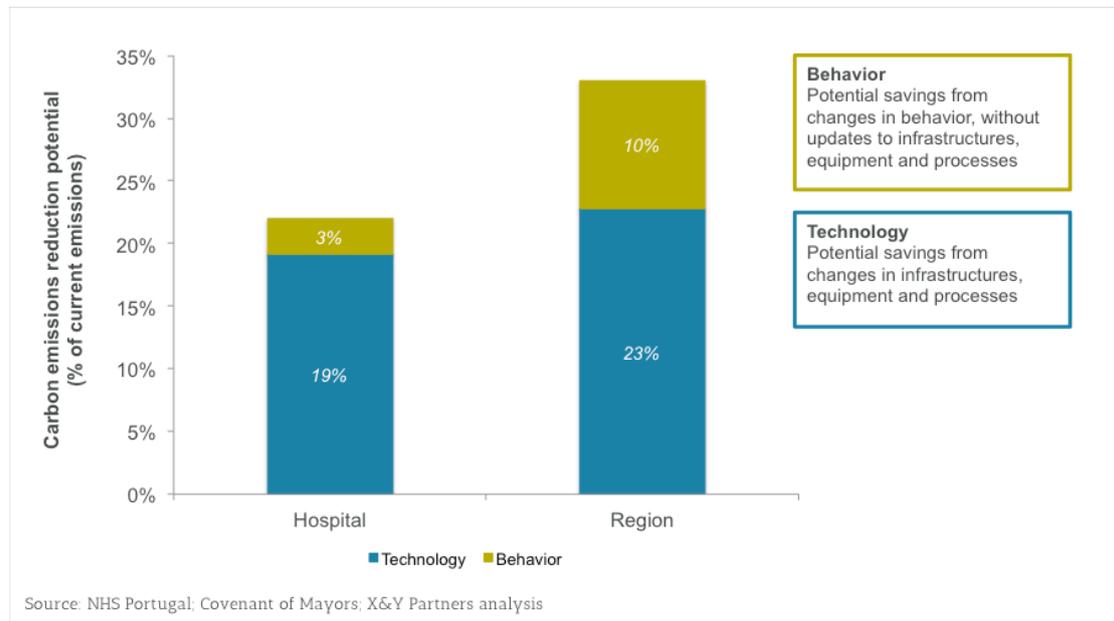


Exhibit 1 - Behavior and technology based carbon emissions savings potential for an illustrative hospital and region

Materializing this potential requires convincing the majority of these employees and citizens to change multiple aspects of their daily lives. The standard approach to achieve this is usually to i) appeal to our sense of altruism by showing that conserving resources and reducing carbon emissions contributes to the greater good; and ii) provide passive information on how to implement the required changes.

There is nothing fundamentally wrong with this approach: long-lasting behavioral changes should be based on sound values and informed decisions. It can however take years or even generations to implement these changes. In this article we explore three complementary time-proven persuasion mechanisms that can lead to faster results: routine, reward and social proof.

Routine

Most of us are creatures of habits. Sticking to a certain degree of routine allows us to plan ahead and provides comfort. Complying to existing routines or suggesting alternative ones can, oddly enough, be a very effective behavioral change mechanism.

Successful weight loss programs often exploit this principle: a recent [study](#) by the US based National Weight Control Registry shows that 4.000 people that maintained a weight loss of at least 30 pounds (approximately 13,6kg) for more than one year shared a similar daily routine (Exhibit 2).

The application of this mechanism to resource conservation is less prevalent but can be equally effective. Durham Water, an Ontario water utilities, conducted an innovative awareness program: trained students approached lawn owners when they were not busy, explaining them how less frequent watering was beneficial for the lawn. The explanation was complemented by a reminder sign, to be hung next to the water tap, and a gauge, to measure the appropriate amount of watering. Lawn owners were also asked to sign a pledge, committing to less frequent watering. The program resulted in a 17% long-term reduction in water consumption for lawn irrigation (Exhibit 2). In parallel, Durham Water ran a control group, where a separate group of lawn owners merely received an informational brochure. Conversely, this group actually increased water consumption, instead of reducing it.

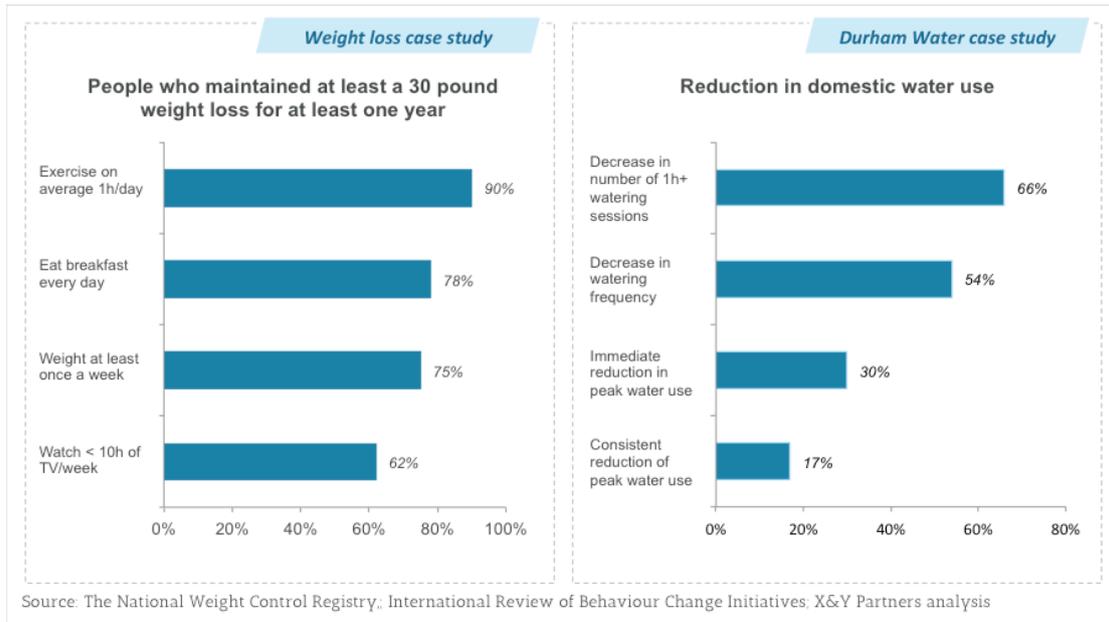


Exhibit 2 - Two examples of leveraging routine: weight loss programs and Durham Water’s social experiment

Reward

Reward, material or not, can also be an effective persuasion mechanism. Most salary packages, particularly those for executives or sales personnel, include some form of pay-for-performance mechanism. The same principle can also be applied to savings, rewarding employees that find ways to save the company money and resources.

This mechanism, called gainsharing, is often used in the healthcare industry. This [study](#) describes how a 375-bed community hospital achieved cost savings of 2.000.000\$ after asking employees to find ways to increase the hospital’s productivity. Employees were rewarded with an average bonus of 5% of their annual salaries, and also reported improved levels of commitment and motivation (Exhibit 3).

[RecycleBank](#) applies the same principle to communities. The company rewards citizens that recycle more: individual and/or neighborhood bins are regularly weighted, and higher recycling rates are rewarded with points that can be redeemed in local businesses. In Hollywood, Florida, 66% of the citizens adhered to the RecycleBank program, improving recycling tonnages by 130% in the first year. The municipality saved 500.000\$ in waste disposal fees and earned 250.000\$ in recycling revenue. RecycleBank is currently testing the same mechanism for walking and cycling rewards.

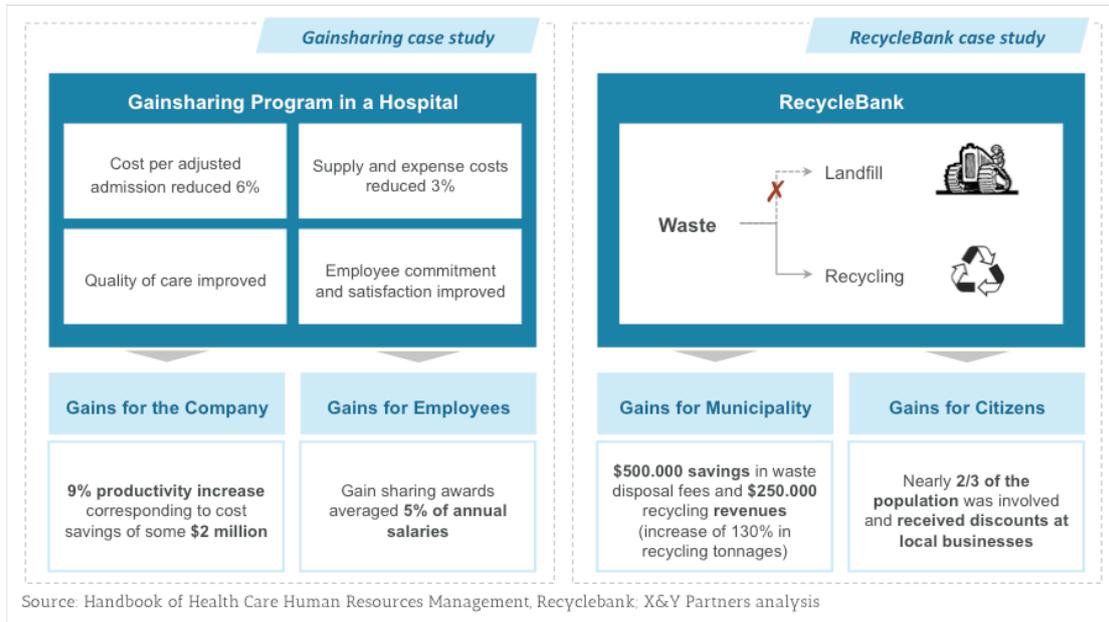


Exhibit 3 - Two examples of leveraging reward: Gainsharing and RecycleBank

Social Proof

People tend to mimic the actions of others, particularly of those they perceive as being more knowledgeable about a certain topic. This conformity trait is one of the cornerstones of social media, the digital version of the venerable word-of-mouth.

A recent [study](#) from U.C. Berkeley shows the influence of Yelp, an online consumer review website, on the success of local restaurants: A step change of half-star in a restaurant's overall rating (the website rounds off ratings to the nearest half-star, so a restaurant that has improved slightly from an average rating of 3.24 to an average rating of 3.26 will be promoted from 3 stars to 3.5 stars) results in a decrease of 8 to 25% in table availability (Exhibit 4). A parallel [study](#) from Harvard Business School concluded that a one-star increase in Yelp rating leads to a 5 to 9% increase in the restaurant's revenue.

[Opower](#) brings the technique of social proofing to energy savings. The company partners with electric utilities to offer customers additional insight about their energy bills, including a comparison with more efficiency households from the same neighborhood, complete with personalized tips on how to achieve similar results. Opower reports average savings of 1.5 to 3.5%, with a better cost-effectiveness than some of the more traditional energy efficiency initiatives (Exhibit 4).

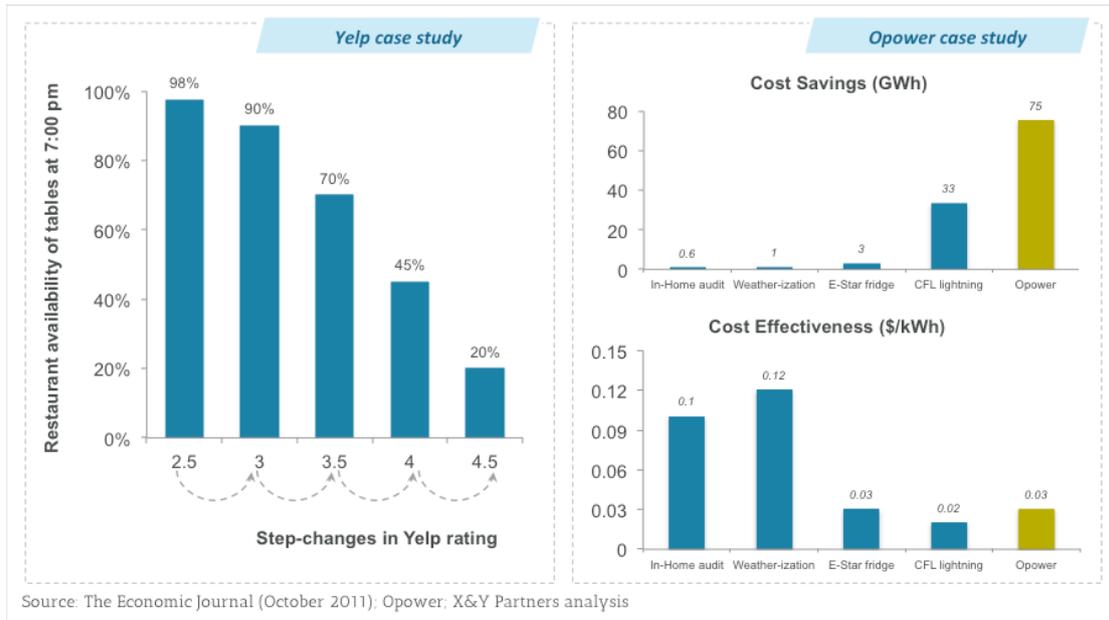
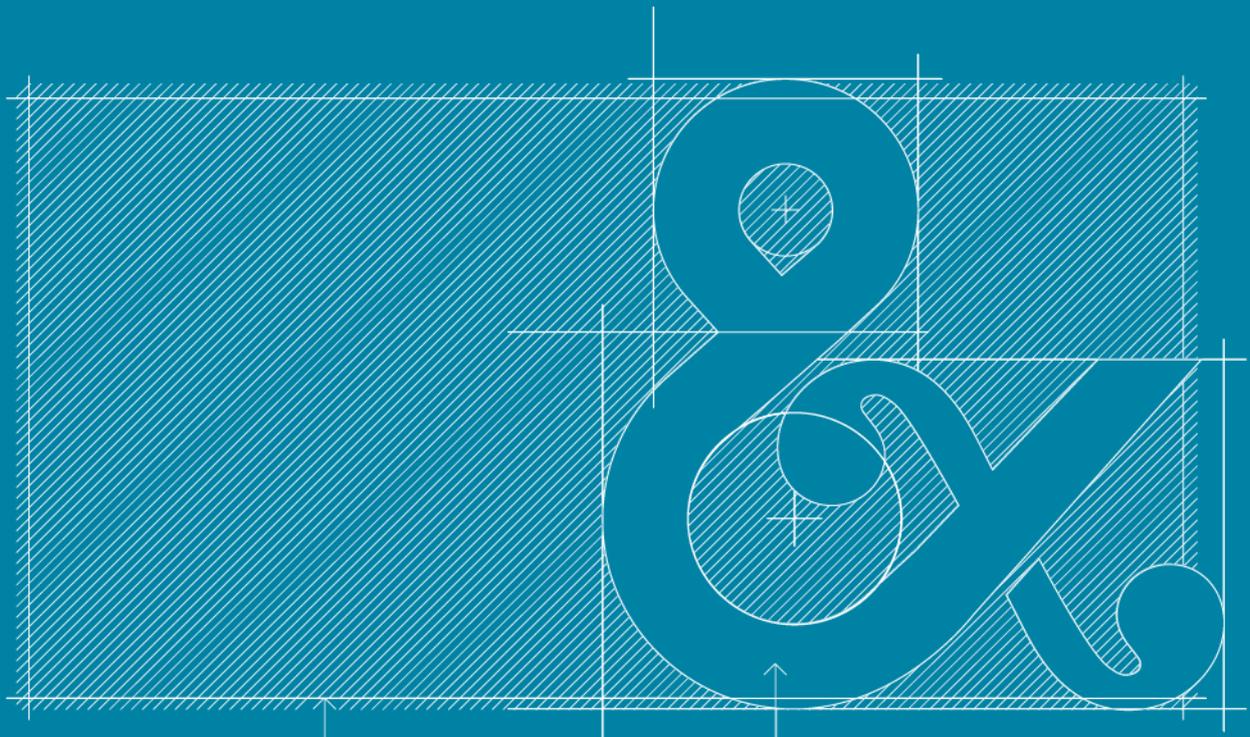


Exhibit 4 - Two examples of leveraging social proof: Yelp and Opower

You will notice that most of these examples leverage more than one of these persuasion techniques. Opower, for instance, complies with customer routines by coupling its service to existing monthly energy bills. In addition it offers a tangible reward: reduced energy costs. RecycleBank's service likewise does not require any substantial change in routines, as customers continue to use existing recycle bins. It has also added a social proofing aspect to its business model, prompting neighborhoods to work together and leveraging social media for word-of-mouth.

In conclusion, routine, rewarded and social proof have proven to be effective behavioral change mechanisms in a variety of areas. Applying them to areas such as climate change and sustainable development, which traditionally rely on an appeal to the greater good and on passively providing information, can help to provide more immediate results.



X&Y PARTNERS

straight answers

for emerging issues

X&Y is an expert advisory firm, providing multi-disciplinary, structured and quantified answers in emerging areas such as energy, climate change and advanced technologies. We work with both the private and public sectors, either individually or together with other professional service companies, such as investment, legal and engineering firms.

Our assignments can range from a single expert call to multi-year projects.

To get to know us better, please contact us or browse the content we publish regularly on a wide range of topics.

www.thisisxy.com