



Enabling
SUSTAINABLE CHOICES in
everyday life

**12 strategies to promote
behaviour change**

*This project is funded
by the European Union*



AUTHOR

Caroline Petersson
www.caminomagasin.se

GRAPHIC DESIGN

Cecilia Cromnow
www.ceciliacromnow.com

ILLUSTRATIONS

Erik Nylund
www.eriknylund.se



ABOUT THE AUTHOR

Caroline Petersson is one of three founders of the Swedish media cooperative and sustainable lifestyle magazine Camino, established in 2007. Except for publishing their magazine four times per year, Camino arrange events, write external articles and reports and give presentations about current sustainability issues. Since 2010 Caroline has specialised in the psychology of sustainable behaviour, both in her writing and presentations.



This publication has been produced with the assistance of the European Union. The contents of this publication are the sole responsibility of the author and can in no way be taken to reflect the views of the European Union.



Nieuwegein



Welcome!

This book is a product of the Global Awareness in Action (GAIA). GAIA is an international project that brings together multi-stakeholder teams from the cities of Malmö in Sweden, Newcastle in United Kingdom, and Nieuwegein and Utrecht in the Netherlands to try out new working methods and learn from each other. The project seeks to develop innovative examples of how urban areas can respond to the twin challenges of unsustainable development and growing inequalities. The goal of the project is to develop new methods and partnerships in order to achieve behavioral changes in sustainable actions among the citizens in the four European cities. It aims to empower local authorities, NGO's, academic institutions, educators and businesses to engage urban citizens to take actions for tackling global challenges.

We hope that this collection of strategies for working with behavior change will inspire not only the project's city teams and stakeholders, but also many other readers in their future work.

The GAIA project is funded by EuropeAid and runs from 2013-2015. More information about the GAIA-project can be found on our web-site www.malmo.se/gaia.

Towards the end of our project we will collect our experiences from working with these and other strategies. The final output will be a "toolbox" that will be found on our web-site from the beginning of 2016. Feel free to visit us and share our experiences!

Enjoy!

Karin Wallin

*Project Manager for the GAIA project
City of Malmö*

Politics and technology both rely on people’s willingness to accept changes and adopt new behaviours

Contents

4	Welcome	21	Create new habits
6	Background	23	Form teams
STRATEGIES			
9	Green by default	25	Trigger reciprocity
11	Use social norms	27	Engage values
13	Attract attention	29	Connect to nature
15	Give feedback	31	Avoid denial
17	Smart incentives	33	Comparing methods
19	Gain commitments	37	References

Background

THERE IS AN INCREASING understanding that solving the interlinked challenges posed by climate change, and the growing demand on key resources such as energy, water and food requires changes in people’s behaviour and lifestyle. According to the sustainability think tank *Global Footprint Network* 86 per cent of the world’s population now live in countries that demand more from nature than their own ecosystems can renew. Each year they acknowledge Earth Overshoot Day, the date when humanity’s footprint in a given year exceeds what earth can regenerate in that year. Since the year 2000 the day has moved from early October to August 19th in 2014.

Tackling the challenges ahead will most certainly require hard political instruments such as legislation and regulation as well as substantial technological achievements. Politics and technology however, both rely on people’s willingness to accept changes and adopt new behaviours. Moreover, due to research from psychology and other behavioural sciences we now have more knowledge than ever before about the complexity of human behaviour and how this can be used to promote sustainability. This handbook outlines 12 strategies that can be used to promote sustainable behaviours in people’s every day life, drawing on concrete examples that have

been tested, evaluated and proven to work in a specific context and setting. It goes without saying that there are no quick fixes of how to encourage green behaviour. The strategies and examples provided here give some important clues to how humans tend to act and respond to different approaches. Although many of the strategies can be combined to strengthen each other there is some conflict between some of the approaches. Most important is the distinction between the nudge and the think – approach described below.

The nudge-approach

Traditionally, promotion of sustainable behaviour practices has relied heavily on providing people with information and giving people economic incentives. Although sometimes successful it has become evident that these strategies are not enough. According to a report called *MINDSCAPE – influencing behaviour through public policy* written on behalf of the British Cabinet Office in 2009, research has found that as much as 80 per cent of the factors influencing behaviour do not result from knowledge or awareness. Rather it has to do with automatic and unconscious influences on our behaviour such as the impact of social norms, emotions and incentives. Instead of trying to change



To achieve radical behavioural change, we need to shift away from focusing on people's self interest

people's minds it argues that one should focus on the environment within which we make our decisions.

Much of the theory and examples explained in the MINDSCAPE-report are drawn from the book ***Nudge – improving decisions about health, wealth and happiness*** issued by two American experts in behavioural economics in 2008. The book explains that there are two main systems that characterize human thinking. On one hand we have the reflective system in which we consciously think through our options, on the other there is the automatic system that work more or less instinctively without any thinking involved. In contrary to the ideas of classic economic theory this means that people do not always act rationally and according to their self-interest, explaining for example the infamous gap between attitudes and behaviour. Targeting the conditions that shape people's automatic responses can therefore help people to make decisions that are better for themselves, society and the environment. The tools are often referred to as **nudges**, gentle pushes or reminders that lead people in the right direction. During the last few years nudging as a tool has gained popularity among

policy makers, private organizations and NGO's who want to influence people's behaviour. In the UK a behavioural insights team was set up in 2010, generally referred to as the "nudge-unit", and in June 2014 a European Nudging Network was launched during a conference in Copenhagen. Some of the strategies presented in this handbook, such as "green by default", "attract attention" and "use social norms" provide concrete examples of how nudging can be used to promote sustainable behaviour.

The think-approach

Everybody does not embrace the popularity of nudging-strategies. Some point to the risk of governments implementing such tools as a cheap and soft alternative to other policy instruments. Others emphasize that the challenges ahead require radical changes in people's attitudes and values and cannot be achieved without making people aware of the actions required. The book ***Nudge, Nudge, Think, Think: Experimenting with Ways to Change Civic Behaviour*** explains the "think-strategy" which believes that it is both possible and necessary to get citizens to think through challenging issues and that individuals can overcome some aspects of their bounded

rationality when made aware about it. One way to do so is by engaging people's values.

In 2008–2010 the World Wildlife Fund (WWF) in the UK issued a series of reports in collaboration with researchers in social psychology that imposed strong criticism towards current approaches to motivating environmentally friendly behaviour change. The reports eventually culminated in a handbook and a network called **Common Cause** that argues that the environmental movement need to come together and work with engaging people's values. At the base of Common Cause lies the work of social psychologist Shalom H Schwartz who conducted a worldwide study with 60 000 people about human values in the early 90's. Schwartz was able to identify a set of values that seem to be common among all people. However, he also found that some values are strongly related to each other whereas others are unlikely to be prioritised strongly at the same time by the same individual. For instance there is a opposition between values that are related to people's pursuit of personal status, wealth and success (self-enhancement) and values that are concerned with the well being of others, such as equality and protecting the environment (self-transcendence). Several

researchers have found that when engaging one set of values this has a spillover effect on related values whereas those in opposition are weakened. For instance, people who are reminded of generosity have been found to be more likely to support pro-environmental policies than those reminded of financial success and status. To achieve radical behavioural change, it is argued, we need to shift focus away from focusing on people's self interest and instead try to actively engage values that are related to sustainability. Some examples of how to do this are presented in this handbook. Engaging people's values is not the only way to make people think though. Other examples presented in this handbook are to gain people's commitments, form teams and create new habits.

Although some strategies presented in this handbook rely on a clear nudge or think-approach most cannot be divided across this line. Instead there are many examples where a nudge and a think-approach can be combined to strengthen each other. Understanding the underlying theory and the differences, strength and weakness of different approaches helps us to see the bigger picture and avoid unintended effects of our actions. ◀



1. Green by default

► **PURPOSE** To enable behaviour change by making sustainable choices easy and/or by making unsustainable choices difficult.

Why and how it works

Research in behavioural economics have shown that many of the decisions that people make on a day to day basis happen without us making an active choice. One explanation to this is that our brains try to use mental shortcuts when it can in order to save energy for more demanding tasks. As a result we tend to opt for the pre-selected options that are exposed to us. One of the most common examples is the GPS that gives us an example of how to travel between A and B. Although there may be alternative routes that are faster most of us tend to trust and follow the instructions given by the GPS. Unconsciously we are also affected by how the surrounding environment encourages us to behave, which is clearly illustrated by the example on the following page.

Limitations

This strategy is about getting people to act green more or less unconsciously.

Larger behavioural changes such as encouraging people to use public transport or biking instead of taking their car is hard to do by default. Since the strategy deals with unconscious acts it is unlikely that the changes will have a spillover effect on other behaviour.

Recommendations for implementation

There are many ways in which organisations, municipalities and companies can make sure that environmentally friendly choices are promoted and encouraged as the pre-selected option. Two simple examples are to encourage vegetarian food by making it the standard option at an event or in a restaurant and to make sure that printers in the office are automatically programmed to print double-sided sheets. Default-strategies can also have a great effect on people's choices. Research from Germany shows that promoting green energy as the default option can have a large impact even when it's more costly. ◀

Example

Reducing food waste by using smaller plates

Background

A chef working at one of the Nordic Choice Hotels in Sweden was concerned about the amount of food waste resulting from customers taking more food than they could eat. He thought using smaller plates might help, and found indications that food waste was reduced by as much as half. The example inspired the newly founded Norwegian foundation, GreeNudge, initiated by Dr Gunhild Stordalen, the wife of the owner of Nordic Choice Hotels, to conduct a greater study among the hotels to see what effect reducing plate sizes could have on food waste.

Method

The research project was conducted in collaboration with the Norwegian climate research agency CICERO. 90 hotels were initially selected and divided into three different groups where one were given smaller plates (21 cm compared to 24 cm), a second group was provided with information about food waste placed by the buffet and the third acted

as a control group. During the first month of the trial all participating hotels reported on their daily food waste. The experiment with smaller plates and information was then introduced and run during an additional period of 1.5 month. 51 of the hotels delivered data that could be used in the final analysis. 7 of these hotels had introduced smaller plates, 6 had placed information about food waste on the buffet and the remaining 38 acted as a control group.

Results

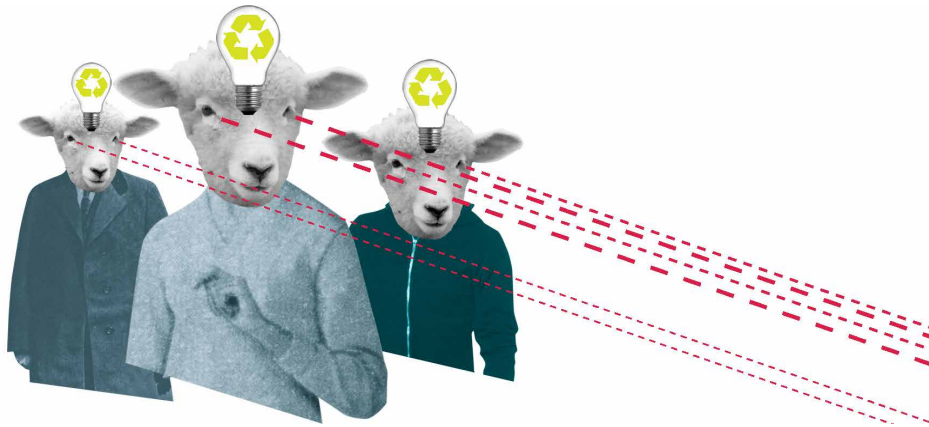
The result showed that the hotels that were given smaller plates reduced their food waste with 19.5 per cent during the experiment, which proved to be a statistically significant change. Compared to the control group, where no change was made the reduction was equivalent to 15 per cent. The research also showed that food waste was in general lower at those hotels in the control group that from the start of the experiment had smaller plate sizes that

the others, giving further support to the findings and their long term effect. It was calculated that if smaller plates was to be introduced at all current 170 hotels, Nordic Choice Hotels could save up to 613 tonnes of food waste equivalent to 1166 tonnes of CO². It should be noted that also the hotels using information signs reduced their food waste with 20 per cent during the experiment but the variations among the hotels were greater and the effect seemed to diminish at the end of the trial. ◀



LEARN MORE

- [GreeNudge plate size experiment](#)
- [Article about the potential for green default by Cass R Sustein, co-author of the Nudge-book](#)
- [Green energy defaults in Germany](#)



2. Use social norms

► **PURPOSE** To encourage sustainable behaviour by informing people about the action of others.

Why and how it works

The effect that social and cultural norms have on people's behaviour is well studied and documented. Going back in time, being able to cooperate and adapt to our group of hunters and gatherers was key to survival. Also in today's individualized society being socially excluded cause a real threat to human health. Clearly, behaving different to others around us can result in such exclusion. One barrier when promoting sustainability is that we tend to underestimate the extent to which other people recycle, save energy and so on. In such a situation it can have a big effect merely to inform people that many people actually carry out the desired behaviour. As shown by the example to the right, we are more influenced by people that we identify with and feel more similar to.

Limitations

The impacts of social norms don't only work to encourage sustainable behaviour. If most people in a group we want to influence carry out an undesirable behaviour,

informing them about the problem can reinforce and strengthen that very same behaviour. An American study has shown that giving households information about the energy consumption of their neighbours can lead those with a lower than average consumption to actually increase their consumption as a result (more information about this study is found on page 16)

Recommendations for implementation

This strategy can be used to strengthen sustainable behaviour in situations where most people already practice and/or agree with a desirable behaviour. Social norm campaigns have been used successfully to motivate people to recycle and to encourage lower energy consumption. It can be a particularly successful when working with smaller groups in which people feel a strong connection to one another. Being aware of the impact of social norms is also important in order to avoid strengthening unwanted behaviour in society. As always, testing and evaluation is the key to make sure it works in practice. ◀

Example

Using social norms to motivate environmental conservation in hotels

Background

It has become common practice among hotels across the world to encourage their guests to reuse their towels during their stay. Robert Cialdini, a famous American professor of psychology and his research colleagues came across evidence that 75 per cent of the guests staying at hotels with signs about towel-reuse in the US actually reused their towel at least once during their stay. Accordingly they wanted to test whether informing people about this could increase the motivation for more people to participate.

Method

Cialdini and his team selected a midsized and midpriced hotel in the Southwest that was part of a large hotel chain, to conduct two experiments. In the first experiment they compared the use of two different signs. The first sign used a standard message focusing on the importance of environment

protection. The second informed the customers that the majority of guests actually reused their towels at some part of their stay. The experiment was carried out during a period of 80 days and collected data from 1058 instances of potential towel reuses in 190 rooms.

In the second experiment the research team added three signs to test the importance of group identification. One focused on guest staying at the same room, another used the word citizens instead of hotel guest and the third emphasized the gender identity. This experiment was carried out during 53 days, gathering data from 1595 instances of potential towel reuse. The hotel's room attendants were carefully informed and trained about how to collect data during both experiments.

Result

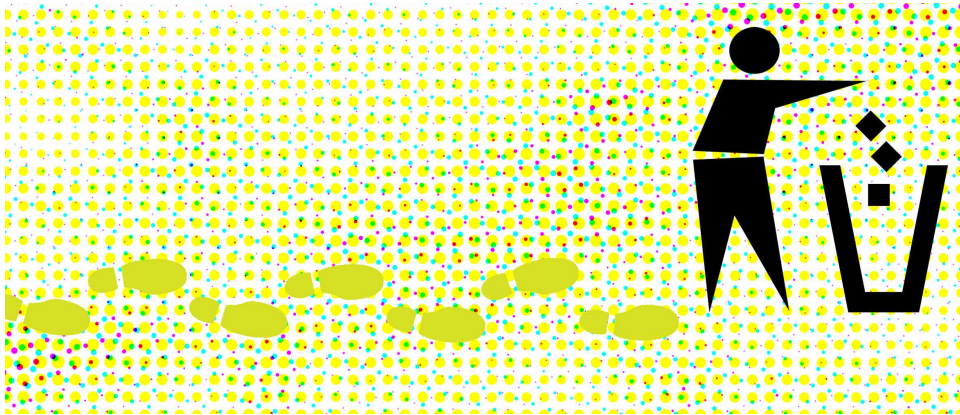
The first experiment showed that informing people about the common practice of others yielded

a significantly higher towel reuse rate. Whereas only 35 per cent of the guests exposed to the information sign reused their towel, 44 per cent exposed to the social norm message did the same. The second experiment showed that informing people about the behaviour of previous guests staying in the same hotel room raised the number of people who reused their towel to 49 per cent. The other norm-related messages all raised towel reuse to the same extent as informing about the behaviour of hotel guests in general. ◀



LEARN MORE

- **Towel reuse experiment at hotels**
- **Article by Robert Cialdini of how activating social norms can backfire**



3. Attract attention

► **PURPOSE** To use new smart/inventive ways to attract attention and remind people of the behaviour that is desired.

Why and how it works

In modern society people is bombarded with messages that try to influence them in different ways. In order to cope with this we tend to unconsciously filter out some information and select what is relevant for us. Typically we are drawn to messages that are easy to understand, correlate with our consisting values and beliefs and that are presented to us in an attractive way. Furthermore, we are significantly more likely to react to a message when given to us at the right time. **The Green Footprints** example illustrates the power of using a visual and easy to understand reminder of throwing the trash where it belongs.

Limitations

To attract attention to sustainable behaviour clearly has its limits, not the least due to the strong competition from commercial actors whose budgets generally speaking are much larger. Furthermore, since people tend to avoid messages that challenge their current beliefs there is also

a limit to what can be achieved, no matter how clear we try to be or attractive the message is.

Recommendations for implementation

The experiment with green footsteps is fairly easy to replicate in other towns and communities. The same principle could be used to remind people of other green choices such as guiding people to organic products in a food store and to prompt the green alternatives on a food menu. The strategy is more likely to be effective in situations where the attitudes towards the behaviour are positive in the first place, as they then may work as a reminder of the social norm. Another area where the potential is huge is to develop and implement smart design that reminds people of their energy consumption. **The Interactive Institute** in Sweden and its Energy Design department has developed several concrete examples of products that visualize energy use, such as the award winning Flower Lamp and the Energy AWARE Clock. ◀

Example

Nudging litter into the bin using green footprints

Background

Copenhagen, the capital of Denmark, is considered to be one of the cleanest in the world. Nevertheless, the town has long been faced with a problem of littering. Studies have showed that one third of the Danes occasionally leave trash on the streets and in parks. Danish behavioural researcher Pelle Hansen and his students at Roskilde festival wanted to test whether a small and simple reminder given at the right time could affect the littering behaviour.

Method

Pelle and his team came up with the idea of painting green footsteps on the ground guiding people to the bins. The team started of the experiment by handing out free candy wrapped up in paper to pedestrians passing by in a street. The

students then counted the number of candy-wrappers that ended up on the street, in the garbage can and in bicycle baskets. The experiment was repeated a second time after painting the footsteps on the ground.

Result

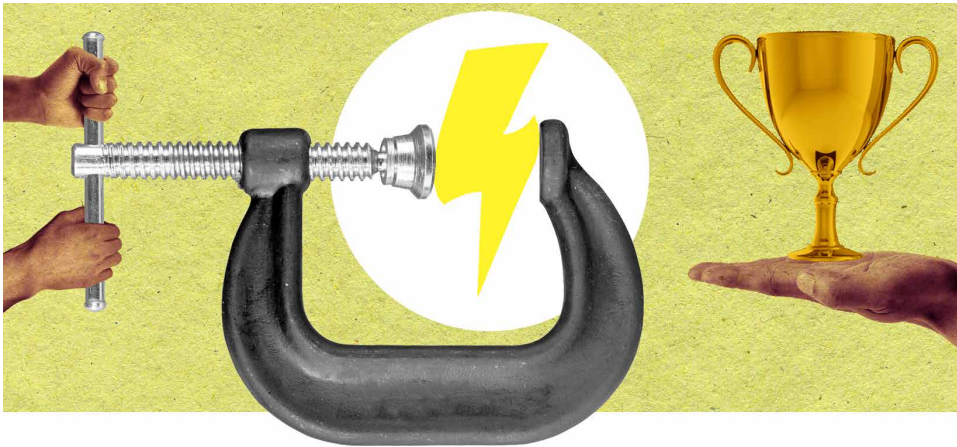
The experiment showed that the amount of litter that ended up on the street was reduced by as much as 46 per cent after having painted green footsteps on the ground. Due to this strong result, the municipality of Copenhagen decided to implement the experiment in practice, guiding people to the bins with green footsteps all across the town, as part of its program "Clean Love for Copenhagen". There is evidence to suggest that the Danish example proved successful,

because of strong positive attitude towards keeping the street cleans in Copenhagen. The example has inspired the market town of Sutton-in-Ashfield in England to test the footprint nudge in three different locations around the town, including a public park. ◀



LEARN MORE

- **Green Footprints experiment**
- **Interactive Institute, Energy Design studio**



4. Give feedback

► **PURPOSE** To explore new and creative ways to reward people and show them why their actions matter.

Why and how it works

Two of the greatest barriers stopping people to embrace a more sustainable lifestyle is that they rarely feel they get something back for doing so and that it is extremely hard to see improvements in the environment due to individual actions. Both barriers are related to the lack of feedback, which in turn is essential to make people feel motivated to adopt and sticking with a new behaviour. In comparison making changes in our diets and starting to exercise generally pays off quite rapidly. The example to the right illustrates how something as simple as a happy face can motivate more people to act green.

Limitations

The extent to which people experience positive feedback is strongly related to social norms. If having and driving a car is considered to be the norm in a community, trying to change this behaviour by giving people feedback can be outweighed by

losses in social status and appreciation from the community and family members.

Recommendations for implementation

The fact that something as simple as a happy face can act as a strong motivation for people to uphold a green behaviour opens up for many simple and relatively cheap activities that can be carried out, both in small and large scale and in many different settings. Furthermore, providing feedback does not only involve rewards. It can also be information that helps people to grasp the effect of their individual and collective choices. *The One Tonne Life*-project carried out in Sweden during 2012 is a concrete example of how to give such feedback to a single family. The project has inspired a municipal real state company in the city of Uppsala, Sweden, to develop a large-scale project called Klimatsmart together with one of the biggest grocery stores in Sweden. ◀

Example

Using a happy face to encourage low energy consumption

Background

In a series of studies about the impact of social norms carried out by American psychologist Robert Cialdini and colleagues, one involved testing people's energy consumption can be affected by information about how their neighbours perform. The experiments showed that when people get detailed information about how they perform compared to their neighbourhood people tend to adjust, also when they have the lowest energy consumption. Cialdini and his crew wanted to see whether giving people positive feedback could eliminate this negative effect.

Method

In 2005 several hundred households in the City of San Marcos in the US were monitored for four weeks during which they received two door hangers delivered one week apart. Each hanger displayed information about how much energy, in kWh/day, the household had used in the previous week, information about the average energy consumption in the

neighbourhood during the same period and some suggestions of how to reduce their energy use. In the first trial, all households were given the same signs. In the second trial the households were divided in four groups. Half of the households with lower than average energy use received a hanger with a happy face. Similarly, half of those with the highest energy consumption got a sad face on their second hanger.

Result

Three weeks after receiving the second door hanger, the households with the lowest energy consumption who did not receive a happy face had increased their energy use with ten per cent. Among those who got the simple feedback, however, the increase was only 1 per cent. Furthermore it was shown that the households with the highest energy consumption and who got a sad face on their hanger decreased their energy consumption more than those who did not get this negative feedback.

In 2008 the City of Sacramento started sending

monthly home electricity reports to 35 000 randomly selected residential customers where comparison to similar households were given and positive feedback was given by either one or two smileys to those that performed better than average. Six months after the pilot began it was shown that the targeted households had reduced their electricity use by two per cent more than the control group (60 000 customers). As a result of this study a new company called Opower was formed. Their idea is to cooperate with energy companies to give all their customers this type of regular feedback together with the energy bills. ◀



LEARN MORE

- *The energy household experiment*
- *Opower: American company giving energy feedback*
- *One Tonne Life project*



5. Smart incentives

► **PURPOSE** To understand why and when incentives can be an effective way to make people start acting green.

Why and how it works

To use incentives of different kinds is one of the most common ways of trying to change people's behaviour. Research, however, shows that the effect to which incentives work vary highly depending on numerous factors such as the time, magnitude and the timing. For instance, it has been showed that people strongly try to avoid losses and that it can have a larger effect to emphasize the money people may lose from not taking action rather than focusing on the gains. The example with the **Food Dudes programme** illustrates how one can work with early rewards that are gradually phased out.

Limitations

Economic incentives can be a very costly way of changing people's behaviour, especially if they don't end up giving a positive

outcome in the long run. Furthermore when people are given an economic incentive to change behaviour the likelihood increase that they will demand similar incentives to do other changes in their lives.

Recommendation for implementation

Using incentives can be an efficient way to get people to try new habits that after some time can become inherently rewarding to pursue. In April 2014 a new project called **Testcyklisterna** was introduced in the city of Gothenburg, Sweden in which 35 people were given a free bike suited for their individual needs. In return they promised to replace a car journey by biking at least three times a week during seven months. In the UK the government has introduced a "cycle to work" – scheme for employers, which offers people tax free bikes. ◀

Example

Getting children to eat fruit and vegetables by using early rewards

Background

The UK has one of the lowest fruit and vegetable intakes in Europe. In 1992 a new research unit, **Bangor Food and Activity Research Unit (BFARU)**, was set up at the School of Psychology in Wales with the aim to research the psychological factors that influence children's food choice and how to encourage them to eat more fruits and vegetables. Three key insights from the research was that children are motivated by praise, recognition and rewards, that positive role models have a powerful influence on children and that repeating trying new things can change learned conceptualisations about what food children like.

Method

Based on the academic research a small-scale pilot was developed involving three groups of children between 2–6 years old in North Wales. The pilot included a DVD presenting children with role models

enjoying a wide range of fruit and vegetables (food dudes) and small rewards, such as stickers and pencils who were given to children to encourage them to test new foods. Following the pilot BFARU developed a package for primary schools targeting children aged between 4 and 11 years as well as teachers, parents, carers and relatives. An important aspect to prevent dropout was to gradually phase out the early rewards and replace them with longer-lasting incentives of enjoying the taste of the foods. The programme was piloted in two primary schools during a two-year period started in 2005 and was then extended to 150 schools over a 3-year period.

Result

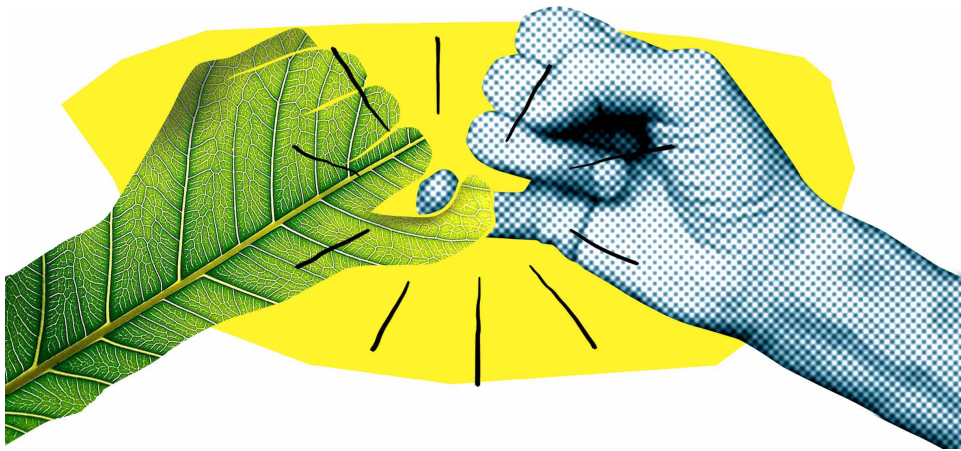
The initial pilot showed that children's consumption of targeted fruit rose from 4 per cent to 100 per cent and of targeted vegetables from 1 per cent to 83 per cent and that the

effect still remained strong six months later. In 2007 the Irish government made the programme available to all primary schools in Ireland and in 2009 implementation started in England. In 2.5 years after the programme was introduced in Ireland an analysis showed that children's fruit and vegetable consumption at home had increased by 24 per cent. ◀



LEARN MORE

- **Evaluation of the Food Dudes Programme**
- **Testcyklisterna – bike-project in the city of Gothenburg, Sweden**
- **Ok cyclescheme**



6. Gain commitments

► **PURPOSE** To seek ways that encourage people to make a promise about changing their behaviour.

Why and how it works

All conscious behavioural change starts with a commitment of some kind. There is a lot of research that shows that people are more likely to actually complete a change in their lives if this commitment is made formally and/or in public. The reason is strongly related to the power of social norms. Breaking a commitment could cause a bad reputation or in other ways have a negative impact on our image. Also on an individual level setting up goals for one self can be an efficient way of motivation as it makes us feel good about ourselves when we achieve a new goal. The Durham Water example from Canada is an example of how getting people to sign a pledge can boost behavioural change.

Limitations

The main limitation with this strategy is to get people to make a promise or sign a pledge in the first place. Achieving this clearly needs a combination of other strategies such as attracting interest or

using some sort of incentive, making it hard to evaluate the effect of the actual pledge. In the Durham Water example using a door to door method with educated employees for instance may have been more important than the actual pledge that was used.

Recommendations for implementation

Public commitments and pledges can be used as an add-on strategy to activities that target a specific behaviour change. With modern day technology such as Facebook it is also a lot easier to get people to commit to specific campaigns and thereby indirectly influencing many more. In 2011 *The Swedish Society for Nature Conservation* developed a campaign called *Anti Scampi* targeting individuals, grocery stores and sushi restaurants in order to get them to commit to stop eating, selling and serving giant prawns. The campaign turned out to be a great success resulting in all main Swedish grocery stores removing giant prawns from the shelves. ◀

Example

Using a pledge to reduce water consumption of house holds

Background

In 1995 the Regional Municipality of Durham in Canada realised that the growing population and people's water habits was a threat to the water supply. In particular it was becoming a problem on dry summer days, mainly because people were watering their lawns. Since no technological fix was available to increase supply they realised that the only way forward was to try to convince the residents to reduce their water consumption by getting people to water their lawns less.

Method

In 1997 Durham committed a trial with 200 households in the town of Ajax which aimed to compare different methods of targeting people. The trial showed that the most efficient way of reaching people was to use trained employed students with good communication skills to make

home visits. In 1998 the programme was expanded to target 900 households in six communities using six trained student employees. This time the students were asked not only to give information and advice but to convince the homeowners to sign a written commitment form to water their lawn a maximum of one inch per week. During the years to come the programme has been further developed trying more tools and covering even more households. Using the commitment form has been used repeatedly as part of the strategy.

Result

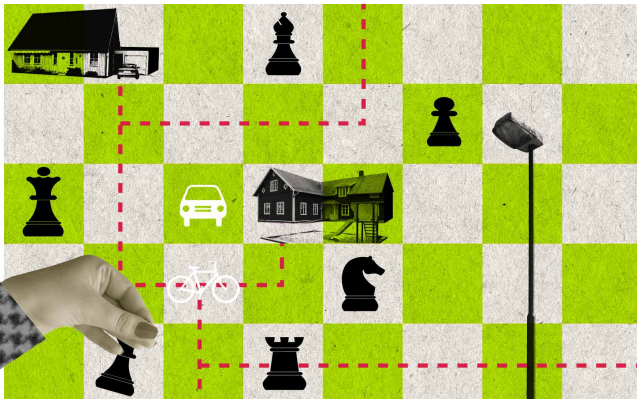
The result of the first trial in 1997 showed that using trained student employees who made repeated home visits to people reduced lawn watering by 26 per cent compared with the control group. During the 1998 when the pledge was used, students managed

to get 88 per cent of the households to sign the pledge and managed to replicate the 26 per cent reduction in water use, despite covering a larger area. In 2000, students managed to reduce water use with 32 per cent developing their strategies even further, for instance by avoiding a coercive and lecturing approach when getting people to sign the pledge. ◀



LEARN MORE

- *Water Efficient Durham*
- *Anti Scampi – campaign*



7. Create new habits

► **PURPOSE** To help people change their habits by breaking them down in smaller parts and to plan how, when and where to make changes.

How and why it works

As explained in the strategy *green by default*, most decisions and actions practiced by people on a day-to-day basis happen without conscious awareness. A lot of this is due to the habitual behaviours that we develop in our lives in order to save time and energy. Looking more closely at what actually constitutes a habit often reveal that it consists of several smaller decisions. Starting to cycle to work instead of driving a car, for instance, can depend on changing other habits such as when to buy groceries and what clothes to put on in the morning. Helping people to realise what habits they actually practice and how they relate to each other has proven an efficient strategy to help bridge the infamous gap between good intentions and actual outcomes. In the following example a technique called implementation intentions was used to help people reach their goals.

Limitations

This strategy is limited to changes that people are more or less committed to do

already, but for some reason find difficult to succeed with.

Recommendations for implementation

There are several examples of successful projects focusing on changing habits, especially in the transport sector. One of the most commonly quoted is *TravelSmart*, a project adopted by the Australian government in order to get more people to use public transport. Key to its success has been the adoption of individualised travel plans that help people to change their habits.

A British charity called *Sustrans* has adopted a similar strategy to reduce car use across the country. A general recommendation when influencing habits is to target people at points in life when they already are making changes in their lives. Providing someone with free public transport during the first months in a new town is a concrete example of how to combine this strategy with giving an attractive incentive. Another example is the Food Dudes programmes explained earlier. ◀

Example

Encouraging recycle behaviour at work with implementation intentions

Background

A telecom company in Holland wanted to increase recycling of old paper and plastic cups at its offices. The company had already installed boxes on each department building and a special team repeatedly informed and instructed employees on different occasions about the boxes and emphasized the importance of using them. Despite this, the amount of paper and plastic cups that ended up in the personal wastebaskets was not reduced. Two researchers in social- and organizational psychology decided to conduct a field-experiment that conscious planning, referred to as implementation intentions, is an efficient strategy to change people's habits.

Method

The experiment involved 109 employees at six different departments of the company with more or less equal working conditions. After a five day pre-measure

of the recycling behaviour, departments of the company were randomly assigned to different conditions: Two groups acted as control groups and two other received a personal recycling box for old paperwork, which was noticeably placed near each participant's desk. The last two groups received instructions to visualize and write an implementation intention plan. Participants in these groups were asked to plan when, where and how to recycle their old paper and used recycle cups. In one of the groups a personal recycling box for paper was also installed near their desk a day after they had completed their plan. Recycling behaviour was measured by the actual presence of paper and cups in each participant's dustbin, observed at the end of a working day during a period of 10 working days. To test the long term effect, behaviour was also measured two months after the experiment was conducted.

Results

The experiment showed that asking people to plan how, when and where to recycle reduced the amount of paper and plastic cups that ended up in the normal waste with 75-80 per cent and that the behaviour change was stable over time. Also the personal recycling box improved recycling. However, there was no significant difference between those who got both a personal recycling box and had to plan and those that had to plan only, showing that the effect of the implementation intention works just as well in itself. ◀



LEARN MORE

- *Recycling experiment at the telecom office*
- *TravelSmart Australia*
- *Personalised travel planning by Sustrans, UK*



8. Form teams

► **PURPOSE** To motivate people to change behaviour by working together with others towards a common goal.

Why and how it works

This strategy combines many of the other strategies mentioned in this handbook. Making people work together towards a common goal uses social norms to reinforce behaviour, gives people stronger feedback from collective actions as well as from the group, is based on people making a commitment and can act as an incentive to get people involved. **The Energy-Neighbourhoods** is a good example of a large project that has managed to attract attention in media and in the communities in which teams have been formed.

Limitations

To involve someone in a team-activity generally requires a lot of interest and a willingness to change in the first place. Furthermore it is time-consuming, tends to exclude people who don't like working in

groups as well as people who don't speak the local language.

Recommendations for implementation

There are many examples where forming teams can be a key element in promoting sustainable behaviour change. In Sweden several municipalities have worked with pilot households who receive green lifestyle challenges and are given expert information. **One Tonne Life** is a successful project in which a single family worked together to reduce its climate footprint with the help of smart technology and coaches. Another large-scale project focusing on team motivation is the international EcoTeams-project run by the organisation Global Action Plan for the Earth (GAP), since the early 90's. In this programme neighbours form teams to work and coach each other through a workbook with concrete activities. ◀

Example

Working in teams to reduce energy consumption

Background

In 2003 the Flemish government of the Dutch-speaking region of Belgium called Flanders initiated the project **Klimaatwijken** in which citizens were asked to form teams and participate in a challenge to reduce the energy consumption of the participating households. Due to positive results the project was expanded to nine more countries financed by the EU in 2007. Since then two more challenges have been carried out between December 2011 and March 2012 and, most lately, between December 2012 and March 2013, involving a total of 22420 people from 16 countries across Europe.

Method

The basis of the challenge was to form teams of 5-12 households who were prepared to challenge themselves to reduce their energy consumption and to compete with other teams. Each team selected an Energy Master who got special training to coordinate and support

the team to achieve its goals. Each participating country had at least one partner organization to run the national/regional competitions, providing the participants with materials, specific challenges and regular events. At the end of the project each country selected a national winner who got to participate in an award-winning Gala in Brussels. An online calculation tool was developed to help participants visualize their current energy use and how it changed, which has been key for evaluation.

Results

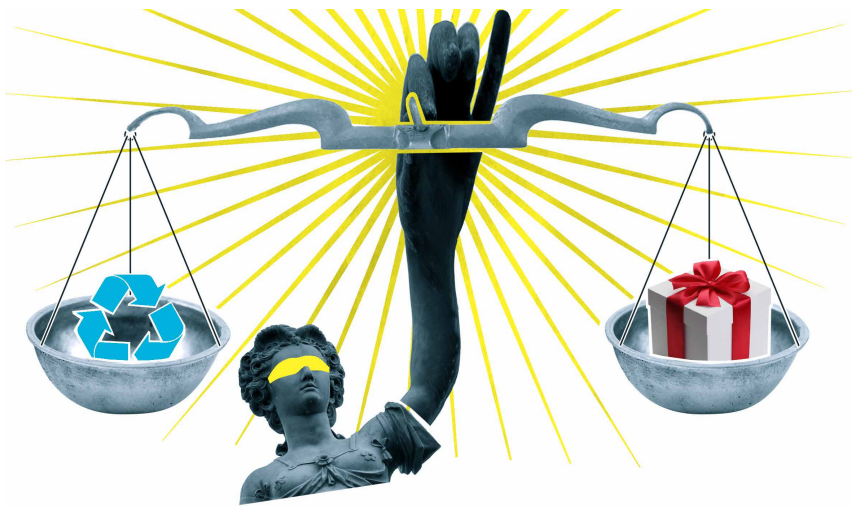
The last two challenges generated average household energy savings of 10 per cent. The overall winning team of the two last challenges was a team from Greece who managed to reduce with as much as 65 per cent. On a national level savings varied between 3 and 27 per cent. Interesting to note is that all savings made were done by simple changes in people's habits such as to turn all things off standby, reduce the use

of tumble dryers and to turn off lights when not in use. The evaluation of the project has showed that the social aspect of working together as a group and the commitment of the Energy Master have been key factors for the success. Another important factor was that relevant energy advice was given. In particular this was clear in Greece where the amount of information given during the project strongly correlated with how much energy was saved. ◀



LEARN MORE

- **Final report of the Energy Neighbourhoods Challenge**
- **Global Action Plan Ecoteams (UK)**
- **One Tonne Life project**



9. Trigger reciprocity

► **PURPOSE** To encourage pro-social and environmental acts and commitments by giving people something unexpected.

Why and how it works

People in general have a strong desire for fairness. Brain researchers have found that being exposed to unjust behaviour causes a reaction in the most primitive parts of the human brain. If we are given a present by someone or invited for dinner most people feel obliged to reciprocate that act one way or another. In restaurants it is a common practice to give people something extra at the end of the meal as it increases the amount of tip that people are willing to give. Similarly it is considered an effective marketing tool to give potential new customers free samples. As shown by the experiment from the UK giving someone a small candy can increase his or her willingness to donate more money to charity.

Limitations

This strategy is limited to work in situations that aim to encourage immediate

decisions and acts that don't require further actions. It is therefore unlikely to have a "" effect on long-term behaviour. To give maximum effect it should be combined with other strategies, such as using the power of social norms.

Recommendations for implementation

Giving people a small gift or a favour of some kind is a simple strategy to use in situations where you want to encourage people to perform an immediate action of some kind, for instance signing a petition, participate in a green challenge or donating money to an environmental organization. Moreover it can be part of a feedback strategy to further motivate people to continue carry out a green behaviour such as cycling and choosing the climate friendly choice on the menu in the restaurant.

Example

Encouraging voluntary donation by using a "thank-you-gift"

Background

In 2010 the UK government decided to set up a Behavioural Insights Team (BIT) within the Cabinet Office. The main purpose was to save the government money by applying insights from behavioural research to public policies. The team has conducted several trials aimed at increasing tax payments, increasing energy efficient behaviour and promote voluntary work and donations to charity. In 2013 BIT conducted five trials together with **Charities Aid Foundation** to test different ways of increasing people's generosity. One of these tested the effect of small "thank you" gifts to encourage giving.

Method

BIT conducted a trial together with the fundraising team of Deutsche Banks in their London offices. The purpose was to increase the number of employees who were willing to give a day

of their salary to charity. Employees at the offices were randomly selected to receive either a standard email from the CEO addressed with their name or with "dear colleague". Some of the employees were also greeted in the morning with a poster advertising the campaign, volunteers with flyers or volunteers who gave them sweets.

Result

11 per cent of the people that were greeted with sweets in the morning agreed to donate money to the charity compared to only five per cent of those in the control group. The sweets proved as effective as receiving a personalised e-mail from the CEO. The most effective strategy turned out to be combining the personalised e-mail with giving sweets. Under that condition the percentage of staff agreeing to donate rose to 17 per cent.



LEARN MORE

- **Behavioural Insight Team (BIT) website**
- **BIT-report: Applying behavioural insights to charitable giving**



10. Engage values

► **PURPOSE** To strengthen values that have shown to correlate with sustainable attitudes and behaviour.

Why and how it works

This strategy draws primarily on research on the field of social psychology and in particular on the work of Shalom Schwartz during the early 90's, explained further in the introduction of this handbook. Schwartz and several other researchers have shown that engaging a specific value has a spillover effect on related values and weakens those that are in opposition. Reminding people of values such as money, status and power has shown to have a negative impact on people's willingness to donate money to charity, recycling behavior etc. The example from **People United** described on the following page illustrates how celebrating acts of kindness can influence long-term attitudes and behaviour of children.

Limitations

Working with people's values challenges many of the other strategies put forward

in this handbook. Rather than focusing primarily on the outcome, the behaviour, it takes in to account what motivates people in the first place. Common critic towards this strategy is that it is too time-consuming and that trying to change people's values is an unethical practice. Another strong limitation is that the value approach requires a strong cooperation between many actors in order to have an effect.

Recommendations for implementation

The case for working with values is strongly promoted by The Common Cause network initially launched with the support of WWF in the UK, now involving enthusiasts and organizations all over the world. The network has launched a handbook describing why and how to work with values and organizes events and courses. Learning more and teaming up with others is a good starting point. ◀

Example

Increasing pro-social attitudes by promoting acts of kindness

Background

People United is a UK based charity founded in 2006, that aims to make the world a better place by getting people involved in the arts. One of their key projects is called **We all do good things** and aims to celebrate, share and encourage the good things people do, highlight the potential of good in all of us and to demonstrate the power of arts to make a difference. The first phase of the project involved 1800 pupils at three primary schools as well as 100 staff, 19 artists and 2000 parents and members of the community in Kent and Halifax.

Method

People United teamed up with psychologists at the University of Kent to develop the methodology of the project and design a way of evaluation. To put theory into practice professional arts practitioners were brought in to work with all pupil and member of staff over the course of a year. Key in the project was to celebrate acts of kindness, courage, dedication, humour and love in

creative ways. For instance the children were involved in making kindness badges and get-well-soon cards, got to interview residents from a local care home and made smoothies for the local emergency service. To evaluate the result the research team at the University of Kent compared children in the three schools taking part with children from two other similar schools that were not part of the projects. This was done through interviews with the children before, during and at the end of the project. The questions asked were related to their willingness to care for, share with and help other individuals and to their feelings about members of other groups.

Results

The research showed a significant increase in pro-social attitudes among children participating in the project, compared to the control group. During the time of the project children in the participating schools also developed more positive feelings towards children from other schools.

Interviews conducted five months after the project finished also showed that children from the project schools remained significantly more likely to hold these positive attitudes than those from similar schools that hadn't taken part. Other positive effects of the projects were that it helped children develop self-confidence, enhanced the learning environment and helped the schools to build links with the community. Following the positive results People United have developed a programme targeting a whole town with 35000 inhabitants in east Kent. People United has also produced a guidebook with kindness-activities that can be practiced in schools. ◀



LEARN MORE

- **We all do good things: school project**
- **Kindness handbook for primary schools**
- **Common cause – the case for working with values and frames**



11. Connect to nature

► **PURPOSE** To increase people's motivation to act and live sustainable by strengthening their connection to nature.

Why and how it works

This strategy is strongly related to working with people's values. Giving people a strong personal and emotional experience in which they get to discover the beauty, power and vulnerability of nature makes it more relevant and important for people to care about protecting it, and harder to ignore. Being in a natural environment also provides a perfect opportunity to teach people about sustainability in a way that can be understood. Involving people in activities that protect and improve the environment in a concrete and visible way can increase the impact further. This active involvement is one of the key elements of the example described on the next page.

Limitations

This strategy requires quite a lot of time and effort on a regular basis. It is an overall problem in the modern urbanized life that

people, particularly the young, spend less and less time experiencing and learning about nature. Furthermore it requires engagement and professional educators who can make sure the experience is strong enough to have an impact on the individuals participating.

Recommendations for implementation

Schools have an important role and opportunity to give children positive experiences from natural environments that are combined with learning in an inspirational and creative way. Schools can also team up with organizations that have something concrete and memorable to offer children. At a community level, engaging people in activities such as urban farming, guerrilla gardening and cleaning the beaches from rubbish is a good way to attract people's attention and reach out with a broader message of sustainability.

Example

Environmental learning at the Outward Bound Trust

Background

The **Outward Bound Trust** is a UK-based educational charity that focuses on young people's personal development by enabling them to experience adventures in a natural environment. A key element of all their courses is to learn about sustainability. In order to do so they have teamed up with the **John Muir Trust** to work with their environmental award scheme in which participants need to meet four challenges; to discover, explore, conserve and share their experiences of a wild place.

Method

During 2013 the Outward Bound Trust recorded and evaluated how the John Muir Award contributed to the delivery of environmental education of their courses. In addition they summarized research that has been conducted across a range of their courses in order to evaluate the long-term impact that they have on young people's attitudes

and behaviour in regard to the environment. Specific evidence was drawn from two five-day courses that were delivered in 2010/2011 and 2011/2012 respectively. Both had a specific focus on raising awareness about sustainability. After the course in 2011/2012, 182 participants were asked what they thought they would do differently in their day to day life at school or at home because of what they had learned about climate change and the environment. The course delivered in 2010/2011 was followed up with a survey that was completed by 69 participants 3 to 10 months after they had attended the course.

Results

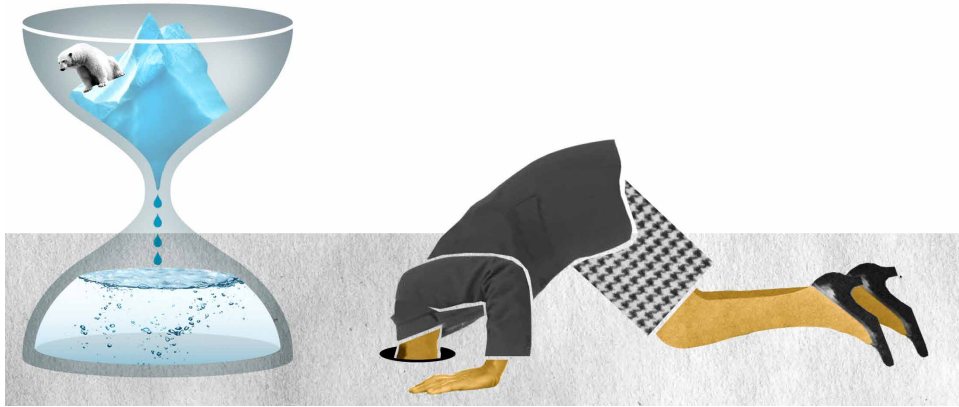
Around 13 per cent of the young people who were involved with the Outward Bound Trust received the John Muir Award during 2013. The evaluation from the five-day course from 2011/2012 showed that 86 per cent of the young people identified at least one

way in which they intended to live their lives in a more environmentally conscious and responsible way after the course. In the follow-up survey of the 2010/2011 course 90 per cent of the respondents indicated that they use public transport more commonly and turn off electrical appliances more often and 38 per cent said that they or their families had changed their consumption pattern for the better in one way or another.



LEARN MORE

- **Outward Bound Trust and their research projects**
- **John Muir Trust and the environmental award scheme**
- **Common cause for nature – a practical guide to values and frames in conservation**



12. Avoid denial

► **PURPOSE** To avoid spreading information that triggers negative attitudes towards sustainability.

Why and how it works

It is a common practice that informational campaigns about environmental issues include messages and strong images about the negative consequences that our actions or lack of actions will result in. Unless these messages contain constructive advice about how the individual can contribute, they can generate feelings of fear. Although fear and guilt can be efficient strategies to gain attention to a problem there is a lot of evidence that feelings of fear also triggers defence mechanisms such as denial or feelings of apathy. Similarly, a message that challenges someone's sense of identity can trigger similar reactions. The example that follows shows how a message about climate change that challenges and contradicts with a common belief about the world can create less belief that climate change actually is a problem.

Limitations

Although people have a lot in common it is important to understand the local and cultural contexts in which one operates.

Recommendations for implementations

This handbook has given several examples of activities and messages that may reinforce unsustainable practices. Using incentives that emphasize self interest for instance may strengthen values that have a negative spillover effect on other behaviour and informing people that many act in unsustainable ways tells people that is the normal way of being and acting. This strategy reminds us of the importance of careful planning and testing our activities in order to avoid the negative counter effects.

Example

Dire messages reduce belief in global warming

Background

Despite growing scientific evidence for the existence of global warming, the belief among the general public in the US and elsewhere has stagnated or even decreased in recent years. Two psychologists in the US wanted to test whether there was a relationship between how people view the world and how they respond to different messages about climate change. The starting point of their hypotheses was that a lot of people in the US have a strong need to perceive the world as fair and predictable in a sense that people are awarded or punished according to how they behave. Climate change poses a threat to this idea, especially the common message that emphasize the harm it will do for children and coming generations who bear no responsibility at all.

Method

Two experiments were conducted to test the hypotheses. The first study targeted 97 undergraduate students and measured the extent to which individuals who

hold “just world beliefs” respond more negatively to a dire message of global warming than people who don't hold this worldview. A survey was conducted to evaluate their beliefs about the world. Three to four weeks later they were randomly assigned to read one of two articles in which one focused on the devastating consequences and the other on the potential solutions. Finally they were asked to respond to a survey about their attitudes towards global warming. The second study involved 45 participants recruited via an advertisement. The participants were presented to what seemed to be a simple language test in which they were asked to unscramble the order of words to form sentences. Some of the participants got sentences that described the world as highly fair, stable and predictable whereas the others got opposite messages. After the language test both groups got to watch short movies, which strongly focused on innocent children as main victims of global warming. Last but not least participants

were asked to complete a survey about their attitudes towards global warming.

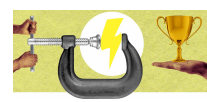
Results

The results of the first study showed that the more participants believed in a just world the more sceptical they became about global warming when exposed to the more negative message. The positive message, on the other hand, led to an overall decrease in scepticism among all participants. The second study showed that participants who were primed with statements of the world being just and predictable were more likely to be sceptical towards global warming after having been exposed to the dire message of global warming effecting innocent children.



LEARN MORE

► **Study of just world beliefs and attitudes towards global warming**



GREEN BY DEFAULT

USE SOCIAL NORMS

ATTRACT ATTENTION

GIVE FEEDBACK

SMART INCENTIVES

GAIN COMMITMENTS

Themes

- ▶ Reducing waste
- ▶ Green energy
- ▶ Energy efficiency

- ▶ Environmental conservation
- ▶ Energy efficient behaviour
- ▶ Reduce waste
- ▶ Voluntary donations

- ▶ Reduce waste
- ▶ Energy efficient behaviour
- ▶ Sustainable consumption

- ▶ Energy efficient behaviour
- ▶ Sustainable consumption

- ▶ Green eating habits
- ▶ Sustainable transportation

- ▶ Environmental conservation
- ▶ Sustainable transportation

Target groups

- ▶ Restaurant customers
- ▶ Workplaces
- ▶ Conference guests
- ▶ Energy customers

- ▶ Local community
- ▶ Energy customers
- ▶ Workplaces
- ▶ Schools
- ▶ Clubs/organisations

- ▶ General public
- ▶ Workplaces
- ▶ Households
- ▶ Consumers

- ▶ Energy customers
- ▶ Tenants/house owners
- ▶ Consumers

- ▶ Schools
- ▶ Motorists
- ▶ Workplaces

- ▶ Local community
- ▶ Workplaces
- ▶ General public

Strengths

- ▶ Generally cheap and easy to implement. Once implemented and proven to work it can replace current standards/practices
- ▶ Easy to evaluate

- ▶ Very costeffective when/if it works.

- ▶ There is a lot of knowledge in society about creative ways to attract people's attention.
- ▶ Some methods are cheap and easy to adopt.

- ▶ Attracts attention.
- ▶ Can be cheap and easy to implement.
- ▶ Fun and awarding.

- ▶ Attracts attention.
- ▶ Motivates people to try new things.

- ▶ Makes people think, and thus could have positive spillover effects.

Limitations

- ▶ Unlikely to have positive spillover effect on other behaviour.
- ▶ Short-term effect

- ▶ Requires knowledge about attitudes and common practices.
- ▶ May backfire if people feel offended/excluded.
- ▶ Unlikely to have spillover effect on other behaviour.

- ▶ Fierce competition from other messengers trying to attract people's attention.
- ▶ People avoid information that challenge their current beliefs.

- ▶ Can be outweighed by strong social norms.
- ▶ Can be expensive if it requires the use of modern technology.

- ▶ Can be expensive to implement.
- ▶ May have negative spillover effect on other behaviour.

- ▶ Targets people who are already interested and motivated to change.

Recommendations

- ▶ Use this strategy as a starting point in any effort/project to influence people's behaviour.

- ▶ Especially relevant to use when a strong support already exists and many people already practice the intended behaviour.

- ▶ Team up with experts in technology/IT and marketers to come up with new creative ways to attract people's attention.

- ▶ Use this strategy as a general rule. Positive feedback never harms and there is a great need for more.

- ▶ Use this strategy to encourage people to adopt new habits, that are likely to become inherently awarding to pursue in the long run.

- ▶ Use this strategy as an add-on technique to activities that targeting specific behaviours. Good to combine with social norm-campaigns and group activities/challenges.

Tested examples

- ▶ Reducing plate size (SWE/NOR)
- ▶ Green energy defaults (GER)
- ▶ Energy efficient light bulb (US)

- ▶ Towel re-use at hotel chains (US)
- ▶ Energy consumption among households (US)
- ▶ Using peer effect to encourage giving (UK)

- ▶ Green Footprints campaign (DEN)
- ▶ Energy design Interactive institute (SWE)

- ▶ Energy consumption among households (US)
- ▶ One Tonne Life-project (SWE)

- ▶ Food Dudes Programme (UK)
- ▶ Cyclescheme (UK)
- ▶ Testcyklisterna (SWE)

- ▶ Water Efficient Durham (CAN)
- ▶ Clean air commuting (CAN)



	CREATE NEW HABITS	FORM TEAMS	TRIGGER RECIPROCITY	ENGAGE VALUES	CONNECT TO NATURE	AVOID DENIAL
Themes	<ul style="list-style-type: none"> ▶ Recycling ▶ Sustainable transportation ▶ Green eating habits. 	<ul style="list-style-type: none"> ▶ Energy efficient behaviour ▶ Sustainable consumption ▶ Environmental conservation 	<ul style="list-style-type: none"> ▶ Voluntary contributions ▶ Signing competitions 	<ul style="list-style-type: none"> ▶ Pro-social attitudes and behaviour ▶ Environmental conservation 	<ul style="list-style-type: none"> ▶ Environmental conservation 	<ul style="list-style-type: none"> ▶ Pro environmental attitudes
Target groups	<ul style="list-style-type: none"> ▶ Workplaces ▶ Motorists ▶ Schools ▶ Local community 	<ul style="list-style-type: none"> ▶ Local community ▶ Workplaces ▶ Organizations/clubs ▶ Schools 	<ul style="list-style-type: none"> ▶ Workplaces ▶ General public 	<ul style="list-style-type: none"> ▶ Schools ▶ Local community ▶ Workplaces ▶ General public 	<ul style="list-style-type: none"> ▶ Schools ▶ Organizations/clubs ▶ Local community ▶ Workplaces ▶ General public 	<ul style="list-style-type: none"> ▶ General public
Strengths	<ul style="list-style-type: none"> ▶ Makes people think, and thus can have positive spillover effects. 	<ul style="list-style-type: none"> ▶ Motivates people to get engaged, gives stronger feedback to the individual and makes people think. 	<ul style="list-style-type: none"> ▶ May temporarily engage self transcendent values and thus have positive spillover effect on other proenvironmental behaviour. 	<ul style="list-style-type: none"> ▶ Proponents argue that engaging values is the only way forward if we take the challenges seriously. ▶ Aims at having a spill-over effect on all actions. 	<ul style="list-style-type: none"> ▶ Concrete way to attract people's attention /interest. ▶ Engages with people's values in a personal way. 	<ul style="list-style-type: none"> ▶ Important if one want to avoid negative countereffect of an information campaign
Limitations	<ul style="list-style-type: none"> ▶ Targets people who are already committed to make a change. 	<ul style="list-style-type: none"> ▶ Targets people who are already interested to some extent. ▶ Excludes people who don't like working in groups. 	<ul style="list-style-type: none"> ▶ Work on immediate decisions and acts. ▶ Short-term effect 	<ul style="list-style-type: none"> ▶ Time-consuming, and hard to evaluate the impacts. ▶ Requires strong cooperation between many actors in order to have long-term effect. 	<ul style="list-style-type: none"> ▶ Can be time-consuming and expensive. ▶ Requires highly skilled educators. ▶ Nature may not be accessible. 	<ul style="list-style-type: none"> ▶ Requires in depth knowledge about local and cultural contexts and dominant beliefs.
Recommendations	<ul style="list-style-type: none"> ▶ Good to consider in projects targeting a group of people already committed to make a change. Target people at points in life when they already are making changes. 	<ul style="list-style-type: none"> ▶ Can be a good way to encourage people to get actively involved. One way to encourage participation is to use a competition or engaging social activities as incentives. 	<ul style="list-style-type: none"> ▶ Use in situations where you want to encourage people to perform an immediate action of some kind. 	<ul style="list-style-type: none"> ▶ Using this strategy requires a holistic approach in what you do and how you communicate. Learn more and team up with others. 	<ul style="list-style-type: none"> ▶ There is a lot of potential for local governments, schools and NGO's to work together and provide people with positive and memorable experiences in natural environments. 	<ul style="list-style-type: none"> ▶ This strategy reminds us of the importance of careful planning and testing of our activities.
Tested examples	<ul style="list-style-type: none"> ▶ Recycling at the office (NED) ▶ TravelSmart (AUS) ▶ Personalised travel plans (UK) ▶ Food Dudes Programme (UK) 	<ul style="list-style-type: none"> ▶ Energy Neighbourhoods Challenge (Europe) ▶ EcoTeams (UK) ▶ One Tonne Life (SWE) 	<ul style="list-style-type: none"> ▶ Charitable giving (UK) 	<ul style="list-style-type: none"> ▶ Kindness school project (UK) ▶ Common Cause case studies (UK) 	<ul style="list-style-type: none"> ▶ Outward Bound Trust (UK) ▶ John Muir Trust (UK) 	<ul style="list-style-type: none"> ▶ Global warming contradicts just world beliefs (US)

References

BACKGROUND

Dolan, P. Hallsworth, M. Halpern, D. (2010) **MINDSCAPE – influencing behaviour through public policy**, Cabinet office, Institute for Government UK, available at www.instituteforgovernment.org.uk

Thaler, R. Sustein, C (2008), **Nudge: improving decisions about health, wealth and happiness**, Yale: Yale University Press

John, P et al. (2011), **Nudge, Nudge, Think, Think: Experimenting with Ways to Change Civic Behaviour**, Bloomsbury publishing, available free online at www.bloomsbury.com

Schwartz, S. H. (1992). **Universals in the content and structure of values: Theory and empirical tests in 20 countries**, Academic Press.

Crompton, T. (2010) **Common Cause: The Case for Working with Our Cultural Values** (WWF UK), available at www.valuesandframes.com

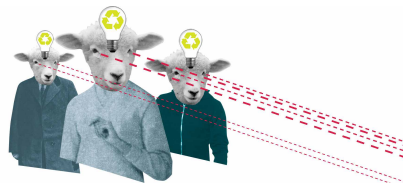
GREEN BY DEFAULT

Kallbekken, S. Sælen, H. (2012) **Redusert matavfall: Resultater fra eksperimentet**. GreeNudge, available at www.greenudge.no
Sunstein, C. and Reisch, L. (2014).

Automatically green: Behavioural economics and environmental protection, Harvard Environmental Law Review

Pichert, D. Katsikopoulos, K. (2007) **Green defaults: Information presentation and pro-environmental behaviour**, Journal of Environmental Psychology, available at www.greenudge.no/media

Dinner, I. Goldstein, D. Johnson, E. Liu, K. (2011) **Partitioning Default Effects: Why People Choose Not to Choose**, Journal of Experimental Psychology, available at www.dangoldstein.com



USE SOCIAL NORMS

Cialdini, R. Goldstein, N. Griskevicius, V. (2008) **A Room with a Viewpoint: Using Social Norms to Motivate Environmental Conservation in Hotels**, Journal of Consumer Research

Cialdini, R. (2003) **Crafting normative messages to protect the environment**, Current Directions in Psychological Science

Applying behavioural insights to charitable giving (2013) Cabinet Office, Behavioural Insights Team and Charities Aid Foundation, available at www.gov.uk/government/organisations/behavioural-insights-team

ATTRACT ATTENTION

Hansen, P. (2011) **Nudging litter into the bin**, Roskilde University, information available at www.inudgeyou.com

Energy Design Studio, Interactive Institute Eskilstuna, www.tii.se/groups/energydesign

GIVE FEEDBACK

Cialdini, R. Schultz, W. (2004). **Understanding and motivating energy conservation via social norms**, William and Flora Hewlett Foundation, available at www.opower.com

Schultz, P. Nolan, J. Cialdini, R. Goldstein, N. (2007). **The constructive, destructive and reconstructive power of social norms**. Psychological Science

SMART INCENTIVES

Lowe, F. Horne, J (2009) **Food Dudes': Increasing Children's Fruit and Vegetable Consumption**, Show case: Social Marketing Case studies, Cases Journal/NSMC



GAIN COMMITMENTS

Water-Efficient Durham, Tools of Change, case study, available at <http://www.toolsofchange.com/English/CaseStudies/?ID=156>

CREATE NEW HABITS

Holland, R. Aarts, H. Langendam, D (2006), **Breaking and creating habits on the working floor: A field-experiment on the power of implementation intentions**. Journal of Environmental Psychology

Evaluation of Australian TravelSmart Projects in the ACT, South Australia, Queensland, Victoria and Western Australia 2001–2005 (2005) TravelSmart Australia, Australian Greenhouse Office, Department of Environment and Heritage, available at www.travelsmart.gov.au/resources

Sustrans' Personalised travel plans (PTP), information available at www.sustrans.org.uk/our-services/what-we-do/personalised-travel-planning

FORM TEAMS

How behavioural change can boost energy savings in private households, the story of Energy Neighbourhoods (2013), available at www.energynighbourhoods.eu

One Tonne Life, final report (2013), available at www.onetonnelife.com

TRIGGER RECIPROCITY

Applying behavioural insights to charitable giving (2013) Cabinet Office, Behavioural Insights Team and Charities Aid Foundation, available at www.gov.uk/government/organisations/behavioural-insights-team

ENGAGE VALUES

Kind Schools Impact Summary, We All Do Good Things: Schools, available at www.peopleunited.org.uk

CONNECT TO NATURE

Environmental learning at the Outward Bound Trust: a focus on the John Muir Award and the outcomes achieved (2013), available at www.outwardbound.org.uk/impact-and-evaluation/research-and-reports

Common Cause For Nature: A practical guide to values and frames in conservation (2013), Public Interest Research Group, available at <http://valuesandframes.org/downloads>

AVOID DENIAL

Feinberg, M. (2011), **Apocalypse soon? Dire messages reduce belief in global warming by contradicting just world beliefs**, Psychological Science

