Energy
National Research Programmes 70 and 71

Project

Sustainable lifestyles and energy consumption

Guide to behavioural changes

Guide to behavioural changes

When it comes to frugality, simple slogans are not enough to win people over. Knowing the target group and what appeals to these people is a good start.



With the appropriate information, this man could be convinced of the benefits of long-term usage of a bicycle: seasonal e-bike rental is available. *Source:* Shutterstock

At a glance

- Individuals can be divided into four phases, based on their current behaviour.
- By addressing socio-psychological influencing factors, it is possible to positively influence people in terms of their resource conservation behaviour.
- Picking up people with the appropriate influencing factors is what makes campaigns for the economical use of energy resources successful.

Human beings are neither simple recipients of orders nor robots. But the successful implementation of the Energy Strategy 2050 ultimately depends on how individuals can be won over for energy-efficient lifestyles. The objectives for increased climate protection and reduction in energy consumption can only be achieved by implementing long-term changes in people's behaviour.

Social psychology and sociology have laid the foundations for this. Both sciences seek to characterise people according to their behaviour.

How do people change their behaviour?

Timo Ohnmacht from the Lucerne University of Applied Sciences and Arts (HSLU) and his team were able to show that individually tailored measures can influence different target groups in terms of an energy-efficient lifestyle.

Ohnmacht, a sociologist specialising in transportation, combined two social science approaches: on the one hand so-called phase models to describe behavioural change, and on the other hand socio-psychological influencing factors which support behavioural change.

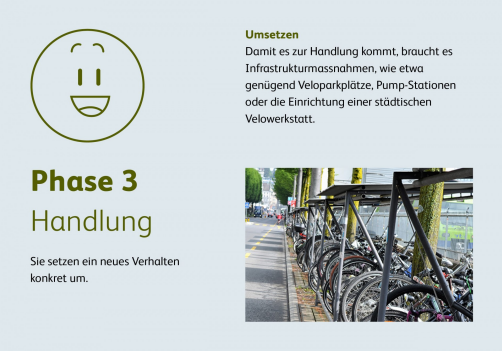
"Is this road too steep for me?"

Using cycling by way of example, different phases can be defined:

- **Phase 1:** A given person has not yet considered cycling. The goal is to develop in this person the desire for a behavioural change; in our example, the desire to ride a bicycle.
- **Phase 2:** After expression of the wish, implementation is the main consideration. The person weighs the advantages ("cycling is good for my health") against the disadvantages ("isn't the road to work too steep for me?").
- **Phase 3:** There is now a genuine desire to implement the plan. First attempts are made and resolutions are formulated: "From next week on, I will cycle to work every day".
- **Phase 4:** The person has achieved long-term implementation of his or her wish. In this last phase, he or she faces the challenge of fixing the behavioural change and not relapsing into earlier phases.









Questionnaires sent to 7000 people

Whether an individual behaves in an environmentally friendly manner is largely determined by socio-psychological factors. The researchers at the Lucerne University of Applied Sciences and Arts have listed nine such factors in their study. These are, for example, social norms, i.e. the expectations of important others, or emotions experienced in the context of resource-efficient behaviour.

So much for the theory. The Lucerne School of Business then developed a questionnaire to determine in which phase the interviewees see themselves in six areas of conduct, all relating to energy-efficient behaviour: 1) cycling, 2) prolonged use of old mobile phones, 3) choice of an energy-efficient house, 4) reduction of meat consumption, 5) use of public transport, 6) purchase of second-hand items.

Where is the nearest mobile phone repair shop?

This questionnaire was sent to 3500 people each in Lucerne and Biel. The response rate was high; in Biel, 30 percent of the recipients completed the questionnaire, and at 50 percent, the rate was even higher in Lucerne.

One of the findings of this field study was that measures are effective if they take into account the phase a person is in as well as the socio-psychological influencing factors. For instance, if a person is considering cycling but does not feel fit enough to do so, information regarding the seasonal rental of e-bikes has a positive effect.

Two out of five people wish to keep their old mobile phone

However, the implementation of the Energy Strategy 2050 can only succeed if the proportion of people in phase 4 is increased. This is the phase in which people seek to maintain their behavioural changes.

The study shows that affiliation to phase 4 can actually be increased by addressing the socio-psychological influencing factors. One such measure could be announcements regarding the availability of mobile phone repair shops. In a simulation model for Lucerne, this information led to an increase in phase 4 affiliation: prior to the announcement, 48.8 percent of Lucerne residents were in phase 4. After release of the information, the proportion rose to 60.6 percent.

For this project, the Lucerne University of Applied Sciences and Arts worked in close collaboration with the participating cities of Lucerne and Biel. The guidelines ("toolboxes") for the six fields of action, such as the prolonged use of mobile phones, can also be used in other cities.

Produkte aus diesem Projekt

- Nachhaltigkeit: Vom Gedanken zur Tat
  Date of publication: 09.04.19
- Bericht im Hochschulmagazin
  Date of publication: 09.04.19
- Reducing individual meat consumption: An integrated phase model approach
  Date of publication: 01.01.18
- Rethinking social psychology and intervention design: A model of energy savings and human behavior
  Date of publication: 01.01.18
- Moving into energy-efficient homes: A dynamic approach to understanding residents' decision-making.
  Date of publication: 01.01.18
- How to postpone purchases of a new mobile phone? Pointers for interventions based on socio-psychological factors and a phase model of behavioural change
  Date of publication: 01.11.18
- 2. Hand – der Kauf von gebrauchten anstatt neuen Gütern
  Date of publication: 07.02.19
- Energiesparsamer Wohnen
  Date of publication: 07.02.20
- Förderung des Öffentlichen Verkehrs
  Date of publication: 07.02.20
- Reduktion von Fleischkonsum
  Date of publication: 07.02.20
- Velofahren
  Date of publication: 07.02.20
- Verlängerung der Lebensdauer von Mobiltelefonen
  Date of publication: 07.02.20

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