

A background image showing a silhouette of a bridge with people walking on it, set against a sunset sky. In the distance, there are snow-capped mountains. On the right side, there is a statue of a person on a horse. The overall color palette is warm, with shades of orange, red, and brown.

BEHAVIOURAL SCIENCE INSIGHTS FOR INCREASED ENERGY EFFICIENCY IN SMEs

BEHAVE CONFERENCE, APRIL 21ST 2021
TORBEN EMMERLING, PAULE ANDEREGG

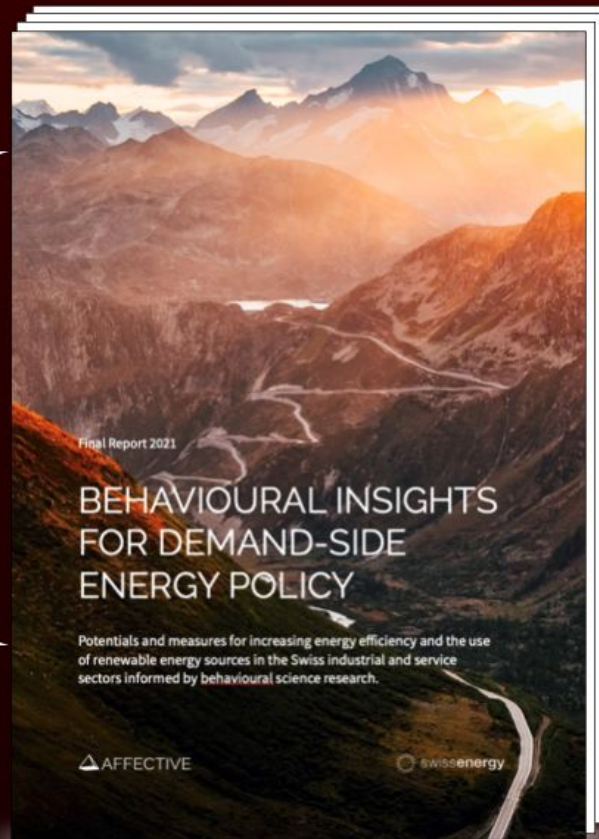
THE PROJECT

TARGET

Research and development of behavioural science insights for the implementation of voluntary demand-side energy policies for increasing energy efficiency and use of renewable energies in the Swiss industrial and service sector.

OUTCOME

- 82 page comprehensive report
- 90 papers & reports reviewed
- 12 key heuristics & biases discussed
- 6 behavioural levers identified
- 11 interventions presented
- 4 pilots planned for 2021



THE PROCESS & INSIGHTS



THE BI INTERVENTION CATALOGUE

"ENERGY EFFICIENCY QUICK WINS"

"ENERGY BILLS 2.0"

Goal Using social comparisons, past consumption levels and industry best practice on energy bills, in order to enable SMEs to evaluate their energy consumption in useful benchmarks and to adapt behaviours accordingly.

Target Group

Executives

Intervention Type

Adaption

Category

Feedback Devices

Partner

Energy Supplier, BI Advisor

Realisation

Sponsoring

Hotspot

Feedback, Social Norms, Framing



DESCRIPTION

The energy billing of utility companies is revised with regards to the displayed information. The energy consumption of an SME is presented in relation to similar companies, time periods, regions, sectors, etc. in order to allow social and past behaviour comparisons. The depth of the comparison depends on the data available to the respective utility.

The framing of the current consumption in relation to other companies or the own consumption in a previous period is crucial: SMEs should be positively supported if their consumption is below a comparison average. On the contrary, concrete energy saving tips should be offered if it is above average.

A pilot project can take place in cooperation with a selected utility company, offering the benefit of additional insights on customer interaction and satisfaction through external evaluation. The aim is to give the SMEs helpful feedback to form fact-based concrete actions for increased energy efficiency. This approach has proven successful in private households (cf. [Power in the UK](#)) and is ready to be tested in SME contexts as well.

Relevant BI Concepts Overconfidence Bias, Availability Bias, Loss Aversion, Mental Accounting

Critical Success Factors Cooperation with utility company, Development of relevant benchmarks / average parameters, Reaching decision makers of the target group (Mgmt & Finance of SME)

IMPLEMENTATION

In cooperation with utility companies, energy bills of SMEs shall be visually reworked and improved with relevant comparative variables. Sector-specific energy-saving tips for above-average consumers are worked out together with utility companies (and possibly intermediaries if appropriate) and provided directly with the energy bill. Energy-conscious companies shall be socially rewarded, for example by appearing as testimonials on the website of the Utility Company/SwissEnergy. Additionally, savings potentials based on estimates of the current calculator on the SwissEnergy website can also be made available on the energy bill. In an initial pilot, it shall be tested whether the provision of the new energy bill reduces the actual energy consumption.

Process:

- I. Establish cooperation partnership with energy supplier and networks.
- II. Determine relevant parameters for social and past consumption comparisons, development and design of new energy bill 2.0
- III. Calculation of benchmarks / savings potentials by sector (display of relevant social or temporal comparison on energy bill)
- IV. RCT pilot phase with distribution of new bill to group A vs. old bill to group B
- V. Evaluation of the measure with regard to changes in effective energy consumption
- VI. Analysis and publication of results.

^(A) Estimates of the project group

^(B) Key from inside to outside: short ; medium ; long

^(C) Key from inside to outside: low ; medium ; high



IMPLEMENTATION

Initiated Pilot of a Social Media Communication Campaign: The most important and simplest EE solutions are elaborated together with selected representatives of energy consulting experts. Differences in individual industries and projects may have to be considered. Second, two series of posts will be drafted for the LinkedIn/YouTube channel of SwissEnergy, one series with conventional communication and one series with "Quick Wins" (B).

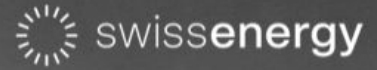
Process:

Elaboration of generally relevant "Quick Wins" in cooperation with energy consultants, Design of 2 LinkedIn post series, a control series with conventional communication (A) and a test series with "Quick Wins" (B), Randomized publication of the posts with trackable links via the SwissEnergy channel, Tracking links distinguish between reaction to A or B, Test the effectiveness of communication strategies A & B

^(A) Estimates of the project group

^(B) Key from inside to outside: short ; medium ; long

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