

Energy consultancies for households



In Innsbruck, eleven apartment houses have been refurbished in the framework of SINFONIA. Among them, tenants of 40 apartments participated in a detailed monitoring of their personal energy consumption. The measurements aimed at providing tenants with well-founded advice for the improvement of their household's energy efficiency.

The partner Passive House Institute collected basis data of the tenants (e.g. number of persons that live in the household, living space, applied heating system, water heating, energy consumption of the last few year) at their first appointment. In addition, all electricity appliances were checked and noted by the tenants' self-assessment (age, duration of use).

The consultants were equipped with a measuring case containing eight measuring plugs installed to measure the consumption of the main devices in the household like the refrigerator or the electric stove. These were measured over a period of one to three months.

After this period, the results were evaluated including the calculation of possible savings and, as a first step, sent to the tenants by mail. The results of the monitoring pointed out a clear savings potential.

Additionally, the tenants was offered an on-site consultation for the personal presentation of the measuring results. It aimed at pointing out the potential for energy savings and optimized costs and hence, the optimization of the tenants' energy consumption.

vision

Through measurement-based consulting and the demonstration of improved economics the refurbished flats shall reach their full energy saving potential.

addressed stakeholder groups

tenants

outreach

40 households were consulted.

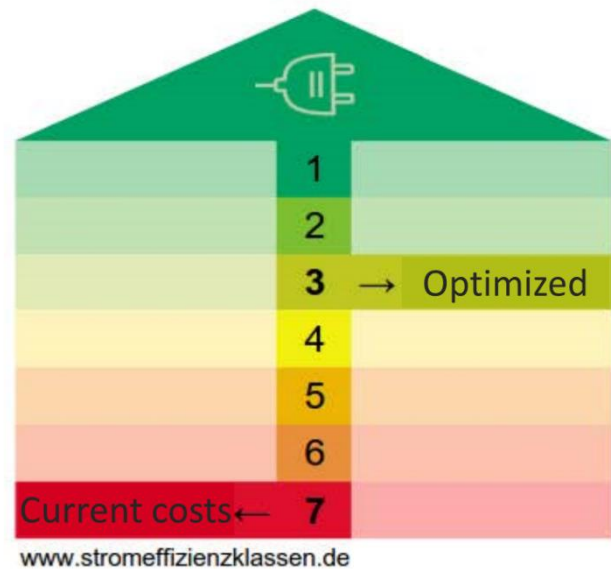
Résumé

Challenges

- ▶ The installation of monitoring systems, maintenance and handling of data are laborious.
- ▶ In most cases, tenants do not have the competence to interpret the measuring results regardless of the graphic preparation. Hence, the presentation of results is the most important part of the consultancies and requires extended individual discussions, well-illustrated graphic results and a consulting focus on the elaboration of suggestions for improvement.
- ▶ Most participants turned out to be elderly people with a conservative approach to investing in new appliances. This poses an additional limiting factor even for improvements that are clearly financially beneficial with regard to the lifecycle of the product in question.

Recommendations

- ▶ Depending on the age and educational background of the tenantry of a housing company the effort spent on explaining results and further actions must be adjusted. In any case, significant resources must be allocated for this purpose or the whole campaign is ineffective.
- ▶ Energy consultancy needs to be a continual effort.
- ▶ In some instances, TV and related auxiliary equipment contributed more significantly to the total consumption than expected. This should be considered in following campaigns.



„With efficient appliances and limited stand-by losses a very low electricity consumption is within reach for everyone. Regulations should mandate very low stand-by power consumption. Less than 1W should be mandatory for any energy related product while class A and higher ratings should only be granted for considerably less.“

Wolfgang Hasper, Passive House Institute

