Baby boomers use too much energy in their homes

January 17 2018

Credit: Swiss National Science Foundation

Many people live at home up to a ripe old age without needing much outside help. In a study conducted for the National Research Programme "Managing Energy Consumption," researchers have examined how much energy could be saved in elderly people's households and why this saving potential is not being exploited.

"The homes of the baby boomer generation are in terms of energy efficiency of particular interest: on the one hand, living space and energy consumption per person increase as people get older. On the other hand,

they themselves feel they have too much living space," says Dr. Heinz Rütter, who leads the research project "Energy reduction potentials of elderly people's households." "Our aim was to find out how big this energy-saving potential really is and to learn what factors encourage the elderly to optimise their residential energy consumption, as well as the obstacles that can stop them from taking action."

Energy-saving strategies as a counterweight

In interviews with owners of single-family homes and apartments and people in rental accommodation, as well as investors and property managers, the research team was able to identify three principal energy-saving strategies for elderly households: (1) energy-efficient renovation: (2) structural and social densification; (3) moving to a smaller apartment. Almost all owners of single-family detached homes and apartments, but also people in rental accommodation, seem to be uncertain as regards their future living situation and tend to keep their options open. The moment when the children move out is of particular importance here.

However, a representative survey among over-55-year-olds has revealed considerable energy saving potential: 15 per cent of the owners of single-family homes plan to make a change in the next five years, while 54 per cent could imagine a major change in the long term, compared to 8 and 47 per cent among owners of apartments. Though people's living situations can be very different, their incentives for taking up the mentioned strategies are similar, and so are the obstacles. They often say the desire to protect the climate and save energy motivated them to make their homes energy-efficient. Structural densification ("granny flat," additional living space) and subletting make it possible to use living space more efficiently, create added value or generate extra income. At the same time, such measures make homes more comfortable. And densification helps to save a considerable amount of embodied energy. Some of the interviewees also cited social reasons for sharing their

(large) homes with others.

Moving to a modern age-appropriate apartment is often motivated by the desire to be able to live independently for as long as possible. Many also find it liberating that they are no longer surrounded by a myriad of things. Often changing ones living situation spurs friends and relatives to do the same.

"Is it still worth it?"

State subsidies play only a minor part in the decision to renovate or densify. Many of the respondents were deterred by the high cost of energy-efficient renovation or structural densification and were unsure whether such an investment would still be worthwhile. House owners find it particularly difficult to finance the renovation by re-mortgaging. Because banks use an imputed interest rate of 5 per cent, many people no longer fulfil the mortgage criteria even before they retire. "It's something of a paradox: young people are not yet trusted with a mortgage and elderly people are no longer granted one if they want to make their homes energy-efficient. It is up to the financial sector and politicians to act if the potential of older homes is to be fully exploited," says Thomas Ammann of the Swiss Homeowners Association HEV.

How to address a taboo subject?

"Many people don't want to think about how they will live when they are elderly. But thinking about one's future living arrangements is a key factor in realising energy-saving potentials," says Heinz Rütter. And he adds that even at an institutional level, there is still very little support.

Hence there is considerable untapped potential for motivating elderly people to optimise their residential energy consumption. What's needed

are innovative, economically viable adaptations of the existing system to ensure that people over 60 can take out mortgages for the energy-efficient renovation and structural densification of their homes. It might also make sense to create incentives by adapting building laws so that it becomes possible to combine energy-efficient renovations with granting higher plot ratios.

The study shows that financial incentives alone do not sufficiently motivate people to choose and implement the strategy that suits their situation best. It is also necessary to address personal values (e.g. environmental and climate protection, social responsibility) and offer comprehensive information and advisory services.

In collaboration with the Swiss Homeowner's Association, an implementation project within the National Research Programme "Managing Energy Consumption" (NRP 71) is currently taking initial measures to optimise energy consumption in the households of elderly people.

Provided by Swiss National Science Foundation

Citation: Baby boomers use too much energy in their homes (2018, January 17) retrieved 17 August 2024 from https://phys.org/news/2018-01-baby-boomers-energy-homes.html