

House Owners' Interests and Actions in Relation to Indoor Temperature, Air Quality and Energy Use - DTU Orbit (09/11/2017)

House Owners' Interests and Actions in Relation to Indoor Temperature, Air Quality and Energy Use

In order to make better and more realistic predictions of energy consumption in dwellings, more knowledge is needed about how individuals and households control the indoor environment. A questionnaire survey was conducted with the objective of studying the interest and actions taken in relation to indoor temperature, air quality and energy consumption by Danish house owners living in single-family detached houses with district heating. The house owners state that they are interested in, and concerned about, the indoor temperature and air quality and that it is an important element in caring for each other in the family. Actions are taken in relation to the temperature in the way that house owners are trying to keep different temperatures in differently heated rooms, e.g. to sleep in a cool bedroom or to save heat. Besides they wear warmer clothing, slippers or thick socks indoors during the winter compared with the rest of the year. Actions are taken to improve the air quality by the majority of the house owners by opening windows. The most frequent reasons for opening windows once or several times a day was "to get fresh air" and "in relation to showering". House owners are interested in saving energy for the sake of the environment and for their own economy, and quite a lot of households indicate that they know their own energy consumption, though only few follow it closely. Thus being concerned about energy is not necessarily related to an interest in detailed feedback on one's own energy consumption. Results show that well-planned communication about feedback possibilities is important. Women and men answer slightly differently to some of the questions, e.g. women are more active in airing, and they wear warmer clothing, whereas men are more actively following their energy consumption.

General information

State: Published

Organisations: Department of Mechanical Engineering, Department of Civil Engineering, Section for Indoor Climate and Building Physics, Aalborg University

Authors: Knudsen, H. N. (Forskerdatabase), Andersen, R. K. (Intern), Hansen, A. R. (Forskerdatabase), Gram-Hanssen, K. (Forskerdatabase)

Number of pages: 10

Publication date: 2016

Host publication information

Title of host publication: CLIMA 2016 - Proceedings of the 12th REHVA World Congress

Volume: 6

Publisher: Aalborg University

BFI conference series: REHVA World Congress (5010061)

Main Research Area: Technical/natural sciences

Conference: 12th REHVA World Congress, Aalborg, Denmark, 22/05/2016 - 22/05/2016

Electronic versions:

House_Owners.pdf

Source: FindIt

Source-ID: 2291732022

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016