

STRUKTUR / GLIEDERUNG KURZBERICHT

Title

Long title:

Socio-scientific Evaluation of the Model Program 'Efficiency House Plus Standard'

Addition: Resident's Survey incl. Test Family 2014-2015 and Energy-management - Touchpanel- Usability tests

Background

The aim of the research project was to examine the user friendliness for residents of Efficiency Houses Plus. The evaluation by means of social science methods are an essential part of the successful dissemination of the Efficiency House Plus standard. As the energy revolution should not only supported by builders, but also by the leasers/tenants of apartments of Efficiency Houses Plus, an investigation of their motivation, attitude and experiences is of utmost interest. Only when it can be demonstrated that efficiency houses plus are suitable for everyday use, they will be realized more widely.

Objects

Social research in this project was carried out by using qualitative and quantitative methods. Three apartment houses were built in Frankfurt am Main, one in Berlin and two in Neu-Ulm. Moreover, two holiday homes in Bischofswiesen and a residential building for students (Schloss Hansenberg) were included in this project. With the exception of Neu-Ulm, all buildings are constructed newly.

The "Aktiv-Stadthaus" in Frankfurt am Main is the largest multi-storey residential building in Efficiency House Plus Standard. 74 residential units are located above a commercial basement on seven floors while the other buildings provide 17 or 18 apartments.

The tenants in the Efficiency Houses Plus network were interviewed twice by online questionnaires: the first survey was made after they moved in, the second survey 12 months later. In this way, it can be determined whether and to which extent motives and expectations are an outcome of their experience in the Efficiency Houses Plus.

131 residents were involved at the initial survey and 70 in the second survey. In addition to the questionnaire, a group discussion and 15 qualitative interviews were conducted.

We assessed the satisfaction of the inhabitants with their residential experience, how well they handled dealing with new technologies and which influence living in such a house had on the consumption of energy. In some houses, additional information were collected on the extent to which electromobility is used and how it is incorporated into everyday life. The questions were collected to provide information on whether these the Efficiency Houses Plus were accepted and whether they - from the user's point of view – are suitable as a standard.

Conclusion

The tenants of the Efficiency Houses Plus show an increased interest in energy saving as well as an increased awareness regarding energy consumption. Inhabitants of energy-plus buildings seem to be ecologically and energy-conscious people. This can be seen as a positive signal for the dissemination of the Efficiency House Plus standard. The main reason is the high level of acceptance and practicality of the technology in efficiency houses. Comfort and energy savings are not at odds in these buildings. The satisfaction of the tenants with their apartment was very high. The majority would recommend an apartment in the Efficiency Houses Plus to their friends.

Key data

Short title: Socio-scientific Evaluation of the Model Program 'Efficiency House Plus Standard'. User friendliness, acceptance, influenceability of energy saving behavior. Final Report Part II.

Forscher / Projektleitung: Dr. Eva Schulze, Berlin Institute for Social Research

Overall costs: 77.711,60 Euro

Anteil Bundeszuschuss: 100 %

Term: 20th October 2014 to 31th March 2017

BILDER/ ABBILDUNGEN:

5 - 7 Druckbare Bilddaten als **eigene Datei** (*.tif, *.bmp, ...) mit der Auflösung von mind. 300 dpi in der Abbildungsgröße (z.B. Breite 10 - 20cm). Bilder frei von Rechten Dritter.

Bildnachweis jeweils:

Bild 1: Bild 1_Speicherstraße FFM
Bildunterschrift: Aktiv-Stadthaus in Frankfurt am Main

Bild 2: Bild 2_ FFM Riedberg
Bildunterschrift: Effizienzhaus Plus im Frankfurter Stadtteil Riedberg
Quelle: HHS Planer + Architekten AG, Kassel, www.hhs.ag

Bild 3: Bild 3_ Neu-Ulm 4_6
Bildunterschrift: Effizienzhaus Plus im Altbau, Pfuhler-Straße 4 & 6, Neu-Ulm
Quelle: Architekt: Werner Sobek / Foto: Zooey Braun

Bild 4: Bild 4_Neu-Ulm 12_14
Bildunterschrift: Effizienzhaus Plus im Altbau, Pfuhler Straße 12 & 14, Neu-Ulm
Quelle: Eibe Sönnecken, Darmstadt

Bild 5: Bild 5_Geisenheim Internatsschule Schloss Hansenberg
Bildunterschrift: Effizienzhaus Plus Geisenheim - Internatsschule Schloss Hansenberg
Quelle: Drexler Guinand Jauslin Architekten

Bild 6: Bild 6_Ferienwohnung Bischofswiesen

Bildunterschrift: Ferienwohnung im Effizienzhaus-Plus Bischofswiesen

Quelle: Hans Angerer/ Fotograf: Georg Greiner