



HOW TO PROMOTE SUSTAINABILITY TO TENANTS

Tamsin McCabe



Introduction

- Code for Sustainable Homes (CSH) Level 3 – Current standard to gain funding
- Expected that from 2010 CSH Level 4 will be mandatory for funding
- Beyond Level 4





Why is it important to promote sustainability to tenants?

- To ensure they get the best performance out of their home, and thus reduce utility bills
- To minimise maintenance
- It can be a catalyst for community involvement/engagement
- To enable them to understand the wider implications of their actions on sustainability

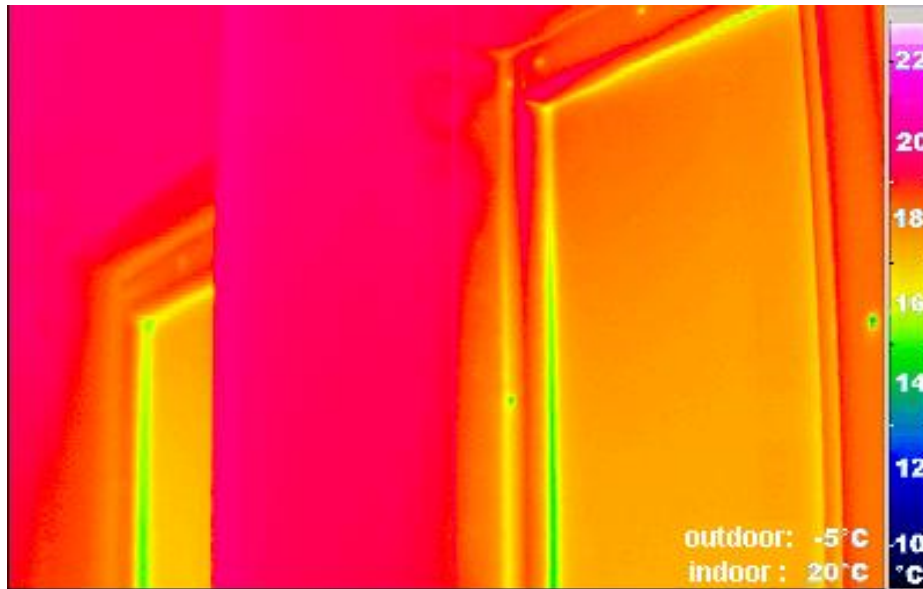
Expectation/perception of sustainable housing



- Solar thermal panels
- Photovoltaic panels
- Insulation
- Double/triple glazing
- Grey/rainwater recycling
- Low energy lights
- Mechanical Ventilation and Heat Recovery (MVHR)
- Good standards of Airtightness
- Low flush toilets
- Recycling facilities/composters
- Water efficient baths



- When people move into houses, they want a home and not a cause; they want to know about benefits not features

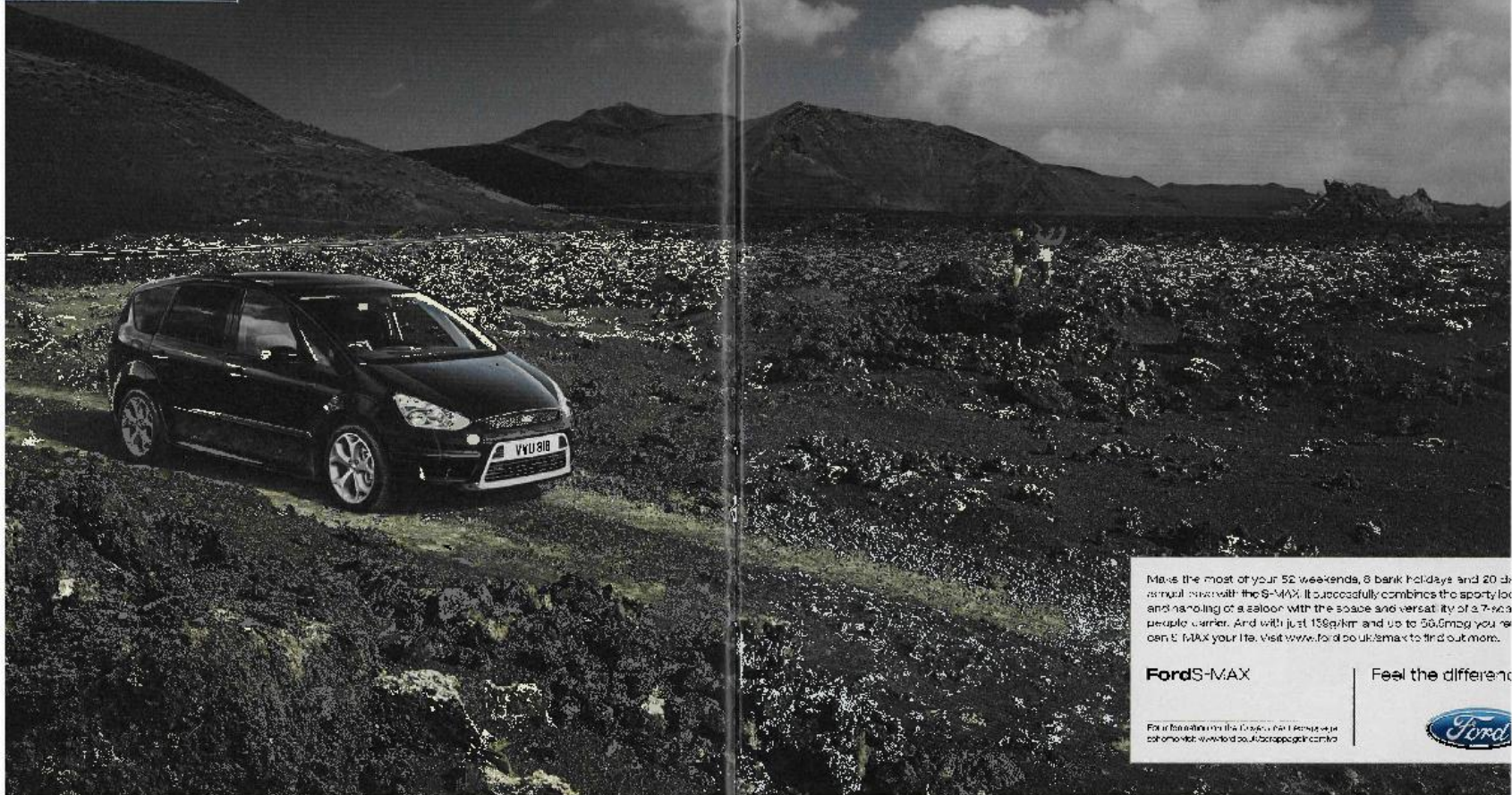
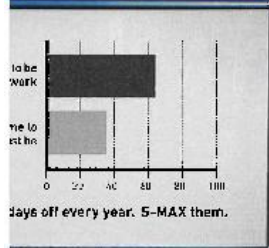






CO2 emissions (g/km) in mpg: 1130 and Ford S-MAX (regulation 267-2014 (27-197)) in mpg: 666-920 (65-74), combined: 471 (291 @ 0-97)

Critical CO2 emissions: 156 (232) km



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Occupier experience of MVHR

- Bad air quality is generally not perceived to be a problem in dwellings
- The perception is that increased air tightness may restrict access to fresh air and ventilation
- However once installed occupants are pleased with MVHR and would install one again
- A high level of user acceptance has been seen in rental housing



I would recommend a passive house to others

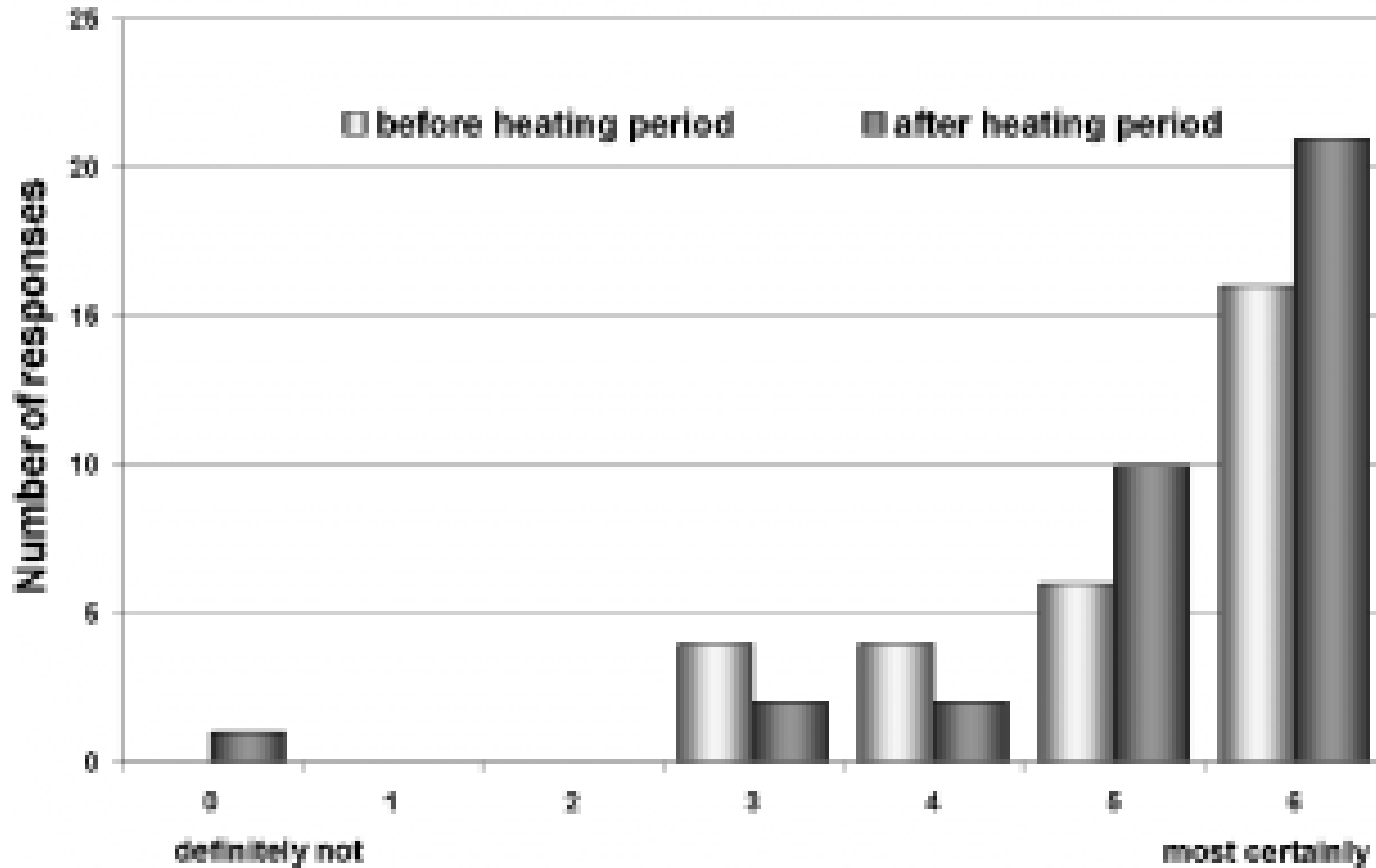


Figure 11. Results of a social science evaluation in the publicly-assisted rental housing construction sub-project in Kassel/Germany. Figure from [Hübner 2001].



Occupier experience of low energy housing

- Occupants in the UK neglect filters of mechanical ventilation systems
- Need for education for residents of low energy homes
- Increased ventilation needed for occupants with pets, children and who smoke
- Consumers expect central heating systems, gas appliances and fireplaces



Does better indoor
air quality affect
nocturnal
recreation of
passive house
occupants?



Methods of promoting sustainability to tenants

- Residents feedback suggests need for improved communication
- Technical manuals detailing features and information of controlling systems
 - Large and detailed
 - Small booklets
- Meet your neighbour sessions



Methods of promoting sustainability to tenants



- Presentations
- Neighbourhood advisors scheme
- Show home/onsite exhibition
 - Naked home at Gallions ecopark
- Encourage residents to set up a tenants' association or forum
- Newsletters/factsheets
- Press coverage





Living in the Passive House – At a glance



What you should do on a regular basis:

- The windows should be closed from November to the end of March (according to the weather), and the ventilation system should be operated with the Bypass-gate set.
- Normal window ventilation during the summer and venting of the bathroom and toilet by switching to "summer ventilation". During the warm summer period, take out the Bypass-gate and place it on the system, so that it is easy to find again.
- Filter change: Inspection of the ventilation system every 3 months (both filters), inspection of the kitchen filter every 3 months.
- Monthly visual inspection of the building services and solar thermal system. |
- To avoid over-heating during the summer: use night ventilation and shades, use the most energy efficient household equipment possible.

What you should regularly do over longer periods of time:

- Wash the ventilation system's heat exchanger every two years.
- Adjust the windows, check the seals and grease the fittings.

What you should be aware of:

- Even during long periods of absence during the winter, do **not** turn off the heating system, e.g. set the thermostat at 18°C.
- Only open windows during the heating period if absolutely necessary (ventilation system failure, party, etc), close entrance doors and balcony doors after use as quickly and snugly as possible! The main door only closes air-tight when the key is turned fully twice.
- Avoid placing indoor items and bright or reflective surfaces in front of the window (minimum distance 20 cm), local heating could lead to the breaking of glass.
- Puncturing of the air-tight envelope due to dowels, nails, screws, etc.: After removal, carefully spackle the remaining holes in the plaster with caulking mortar!
- Always keep inflow, overflow and outflow openings free and do not change the settings!
- Do not use exhaust-air drying machines to dry clothes (mold formation due to too much condensed water!)
- Empty the garden water pipe before the first frost.
- If possible, avoid shading the windows during the cold season (solar gains).

How you can save energy:

- Avoid window ventilation during the hot season.
- Set the room temperature only as high as necessary (don't overheat rooms!)
- As a rule, keep the bathroom heater switched-off, or at least avoid using it to heat continuously.
- To dry clothes, use an airing cupboard **without** an electrical heater or dry the clothes on a clotheshorse in the hallway or the bathroom, so that the humidity can better dissipate.
- Use high-efficiency household equipment and energy-saving (CFL) lightbulbs, turn off systems with stand-by functions completely when not in use.



Recommendations

- Low maintenance and mature technologies should be offered
- Provide specific training to induction staff
- Appeal to aspirations of tenants
- Make the product relevant to the tenants – benefits not features
- Provide information in a non-technical manner
- Provide a variety of communication methods for different people



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