

Engaging Homeowners in Energy Efficient Home Improvement

Volume 2

Rosemary Parnell

School of Architecture,
University of Sheffield,
Arts Tower,
Western Bank,
Sheffield,
S10 2TN

Thesis submitted for PhD
May 2003

14. Appendix A: Phase 1

14.1 Interviewees

Organisation name (abbreviation)	Organisation type	Date of interview	Area of work	Relevant domestic energy efficiency programmes
Sheffield City Council, Department of Environmental Housing (SCC1)	Local Authority	16.08.99	Refurbishment and advice programmes	Home Energy Efficiency Scheme (HEES), Home Energy Conservation Act (HECA), Home Improvement Programme (HIP)
Leeds Environmental Design Associates (LEDA)	Consultants	20.08.99	Refurbishment programmes	N/A
Sheffield City Council, Department of Environmental Housing (SCC2)	"	23.08.99	Refurbishment and advice programmes	"
Energy Audit Company (EAC)	Consultants	8.09.99	Refurbishment and advice programmes	HECA
Stay Put, Sheffield (SP)	Home Improvement Agency	27.09.99	Refurbishment and advice programmes	HIP
Energy Saving Trust, Marketing Department (EST)	Government-backed advice etc.	29.09.99	Advice and awareness programmes	Market Transformation Programme, Energy Efficiency Marketing Programme, Home Energy Efficiency Programme
Department of Environment Transport and the Regions, Sustainable Energy Policy Division (DETR1)	Government Department	29.9.99	Policy	all EST programmes, Energy Efficiency Commitment
Leicester Local Energy Advice Centre (LEAC)	Government-backed advice etc.	5.10.99	Advice and awareness programmes	Energy Efficiency Marketing Programme
National Energy Action, Training section (NEA)	Government-backed training, advice etc.	18.10.99	Advice and awareness programmes	HEES, HECA
Newark and Sherwood Energy Agency (NSEA)	Local Authority	21.10.99	Refurbishment and advice programmes	HEES, HECA, HIP
Groundwork Trust, Ashfield and Mansfield (GT)	Home Improvement Agency/	22.10.99	Refurbishment and advice programmes	HIP

	Government-backed advice			
DETR, Sustainable Energy Policy Division (DETR2)	"	21.6.00	Policy	HECA, HEES
DETR Energy Efficiency Programme (DETR3)	"	7.8.00	Policy	Home Energy Report (Seller's Pack)
(DETR4)	"	7.8.00	Policy	Home Energy Report (Seller's Pack)

Table 14-1: Organisations represented in phase 1 of the field research – interviews

Note:

Since the LEDA representative had worked primarily with Housing Associations householders rather than homeowners, the data relating to the first three sections of the interview were not included in the analysis.

14.2 Interview guides

14.2.1 Energy advice programmes providers

General description of the programme

- What are the main areas of information covered by your advice programme?
- Who is the information aimed at? Homeowner occupants/ tenants?
- What are the primary aims of the programme?
- (To reduce CO₂ emissions, reduce the number of people in fuel poverty, reduce fuel bills...)
- By what different means is advice given?
- What are the main/ most important considerations in designing the programme to be effective?
- Anything to add to the general description of the programme?

The advice in detail

- Which areas of energy advice are targeted by your office?
- By subject?
- By delivery method?
- Why do these areas take priority?
- Which areas of information do *you* feel are the most important when addressing home energy efficiency?
- Why?
- Anything to add?

Levels of motivation among owners-occupiers

- How is the programme in general received by householders?
- Which advice is the most popular or successful with householders?
- By subject?
- By delivery method?
- Why do you think this is?
- Is this advice put into action by householders?
- Which information is the most effective in motivating householders to adopt energy saving measures?
- Are incentives necessary for action?
- What are they/ which are the most effective?

- How does the success of information and incentive vary according to household type?
- Anything to add?

Methods of implementation

- Is there any formal post-delivery evaluation?
- How successful would you say the programme was in terms of
- raising awareness about home energy efficiency and changing behaviour of householders?
- reducing the negative environmental impact of the existing housing stock in the UK.
- Would you do anything differently if designing another similar programme?

The future

- What measures do you believe are necessary to significantly improve the energy efficiency of the housing stock (e.g. to meet the government targets of a 20% reduction in CO₂ emissions usage in the next 10 years / 30% increase in energy efficiency in the next 10 years?)
- Any other points you'd like to make which haven't been covered?

14.2.2 Project officers involved in refurbishment programmes

Description of the programme

- Tackling which area?
- Which home types?
- Owner Occupants/ tenants?
- Main/ most important considerations in designing the programme?
- Anything to add to the general description of the programme?

The refurbishment measures themselves

- Which measures did you implement or offer as part of the scheme?
- Why were these the priority?
- Which were the most popular/ most readily taken-up?
- Which areas do you feel are the most important to address in general when addressing home energy efficiency?
- Anything to add?

(if also giving advice)

- What advice was covered?
- Which area of advice was the priority in this case?
- Which areas do you feel are the most important to address in general when addressing home energy efficiency?)

Levels of motivation among owners-occupiers

- How was the programme received by the participants / locals?
- How did they react?
- Was it easy to get people involved?
- How did you do this?
- Were incentives necessary?
- What were they/ which were the most effective?
- Anything to add?

Methods of implementation

- How did you introduce the programme to the potential participants?
- Would you do anything differently if designing another similar programme?
- Was there any post upgrading evaluation? What were the results?

- How successful would you say the programme was in terms of
- raising awareness about home energy efficiency and changing behaviour of householders?
- reducing the negative environmental impact of the existing housing stock in the UK.

The future

- What measures do you believe are necessary to significantly improve the energy efficiency of the housing stock (e.g. to meet the government targets of a 20% reduction in CO₂ emissions in the next 10 years.)
- Any other points you'd like to make which haven't been covered?

14.2.3 Energy Efficiency Programme Manager, DETR 3

(Focus on the seller's information pack energy report, pilot study)

Description

- Am I right in thinking that the principle of including an energy report in the seller's information pack has now been approved by the Government?
- When will the seller's pack be introduced?
- When is the Bristol pilot scheme due to be completed ?
- What is the intended role and what are the aims of energy report?
- Impact of the report
- Is it expected that the report will make a significant contribution to the domestic 20% CO₂ reduction target? (i.e. 20% below 1990 CO₂ levels by 2010)
- Have there been estimates of the potential impact of the report on the energy efficiency of the UK housing stock, or on domestic CO₂ emissions?
- How many households is it estimated the energy report will reach annually on its introduction?

The history and development of the report

- Is the introduction of the energy report based on any evidence that this type of report has had good results in other situations?
- Where has it been used?
- What were the results?
- Why was it decided to include the report in the sellers' pack rather than in any other form?
- Does this energy advice method have advantages over other alternatives?
- What are they?
- Also, more specifically, do you think that this method is more likely to motivate people to act than other methods?
- What information is included in the report for the Bristol Pilot scheme?
- Why were these items chosen?

Results of the pilot so far

- What has been the response to the report so far, of the buyers who have taken part in the pilot? Would you like to add anything to what you have already said, perhaps about the response of sellers?

- What has been the response of sellers?
- Has there been any research into which information is received most positively by either buyers or sellers?

Future effectiveness of the report

- Do you think the report will be effective in encouraging adoption of energy efficiency measures once it is introduced?
- Based on feedback so far and on your experience, do you think there ways in which it could be made more effective, for example through support mechanisms and initiatives?
- Is it intended that there will be any incentives provided to encourage the take-up of recommended measures? What would these be?
- Would you like to add anything at all?

15. Appendix B: Domestic energy efficiency programmes

15.1 Introduction

The programmes described below were the primary UK Government programmes associated with improving energy efficiency in the owner-occupied domestic stock in 2000/01 when the author chose to focus the empirical study on the home energy report. This appendix therefore provides the context for this choice. The programmes and relevant targets described are outlined in the UK Climate Change Programme (DETR 2000c), the UK Fuel Poverty Strategy (DETR 2001a) and the housing policy document - Quality and Choice: a decent home for all (DETR 2000d). Section 2 of this appendix provides an outline of programmes similar to the HER that are running in other countries.

The Climate Change Programme was launched in 2000 and sets out the strategy which aims to achieve the 20% reduction in CO₂ emissions by 2010. According to this document there are four main strands to the Government's overall strategy to improve domestic energy efficiency. Social policy renders increases in fuel bills unfavourable and hence the use of economic instruments is largely ruled out. Instead, the Government states that it aims to work through:

- provision of advice and information;
- incentives;
- regulations; and
- by working with others 'to provide a framework for the improvement of domestic energy efficiency and to create a climate in which energy efficiency becomes a routine, accepted, part of life.' (DETR 2000c:103)

The Government aims 'to offer everyone the opportunity of a decent home and so promote social cohesion, well-being and self dependence' (DETR 2000d). The housing policy document, Quality and Choice, a decent home for all (Ibid) outlines existing and proposed initiatives relevant to the stated goals. Domestic energy efficiency is key to many of the initiatives. Owner occupiers are generally expected to use their own funds to maintain their homes, however, the latter document recognises the potential importance of making public money available where a household's income is inadequate or where the quality of a neighbourhood is reduced significantly due to a

number of badly maintained houses. The proposals in the Housing Policy document build on the work of the Urban Task Force which recommended the use of a wider range of policy tools to encourage private home improvements.

In response to the Warm Homes and Energy Conservation Act, 2000, the Government launched the UK Fuel Poverty Strategy (21 November 2001), setting out how the Government and the Devolved Administrations will tackle fuel poverty in the UK. The strategy seeks 'an end to the blight of fuel poverty for vulnerable households by 2010', aiming to ensure that by 2010 no older householder, no family with children, and no householder who is disabled or has a long-term illness, need risk ill health due to a cold home. It is unclear as to whether or not this translates as a commitment to actually eradicate fuel poverty for the 'vulnerable' (Boardman 2001). However, the Government has set a specific target to reduce fuel expenditure as a percentage of income (including housing benefit and income support for mortgage interest) to 5% by 2003/04 for the lowest three income deciles (DTI 2001a: fuel poverty).

The variety of approaches taken is, according to the Government, a reflection of the recognition that different forms of encouragement are needed for different types of household. Since the focus of this thesis is on energy efficiency, it should be noted that only those strategies associated with reducing final energy *demand* through energy efficient home improvement are described. While the importance of also addressing energy supply issues is acknowledged, this area is beyond the scope of this thesis¹. The following initiatives have been categorised according to their primary aim.

15.2 Climate change-driven programmes

The Energy Saving Trust and Government publicity campaigns

The Government reaches the so-called 'fuel rich' through the Energy Savings Trust. These middle to upper income homeowners are currently the main audience of this part Government-funded private company, targeted through the Energy Efficiency Marketing Programme. Included in the programme is free energy advice, delivered through the Trust's network of 52 Local Energy Advice Centres (LEACs), a DIY home energy postal survey, grants and cash-back schemes for installation of energy efficiency measures, and awareness-raising activities through advertising and PR. The

¹ The author does, however, acknowledge the potential effectiveness of producing energy from renewable resources and via community heating systems to both reduce CO₂ emissions and, long-term, to reduce energy costs for the fuel poor. Micro CHP units have been included in the descriptions since they use existing energy supply sources in a more efficient way.

Energy Efficiency Marketing Campaign presents energy efficiency as the common sense option, encouraging householders to both save money and help the environment. By the end of March 2000, the local energy advice centres were calculated to have saved over 900,000 customers an average of £24 per year.

The Government also reaches a wide audience via the 'Are You Doing Your Bit?' campaign, raising awareness about domestic energy and car use and making links with climate change via television advertising, leaflets and a mobile road show.

Market Transformation Programme

A quarter of all the electricity consumed in the UK is used by domestic appliances and lighting (ref). The Government's Market Transformation Programme aims to encourage consumers to buy efficient lighting and appliances, ultimately aiming to phase out the least efficient items. Standards to remove inefficient boilers, refrigeration appliances and fluorescent lamp ballasts are currently in force. The programme works with business, the Energy Saving Trust and other experts to deliver more efficient products and services, stimulate competition and encourage consumers to take up efficient options. The programme also establishes the means of ranking or labelling efficient products for promotion under other programmes.

Energy labelling forms part of the Market Transformation strategy policy. An energy label allows consumers to directly compare the energy efficiency of various product models. The EU label is currently shown on white goods and light bulbs and labels are being developed for further sectors. In the UK, a similar rating scheme has been piloted for boilers and heaters and a system for cars and homes is being developed. The Energy Saving Trust also has an energy efficiency logo, which is used to endorse products that meet certain standards.

Reduced VAT

Since April 2000 VAT has been reduced from 17.5% to 5% for the installation on energy saving materials. Included are insulation, draught stripping, hot water and central heating system controls, and solar panels, however, DIY installation is not included. The reduction was extended to cover the installation, maintenance and repair of central heating systems in the homes of less well-off pensioners and the installation of heating measures in the homes of the less well-off, where these are funded by Government grants.

Energy services

The notion of Energy Services signifies a shift from the provision of units of electricity or gas to the idea of providing heat, light and power. The Government believes that this approach 'can encourage the installation of energy efficiency measures, reduce energy use and lower fuel bills' (DETR 2000c). For this reason, work has been carried out (with the Energy Services Association and the Energy Saving Trust) to tackle perceived barriers to this approach in the domestic sector. According to the PIU, many of the barriers to energy efficiency might be overcome through the marketing of energy services. In addition, the level of Government intervention needed to promote energy efficiency might be reduced (PIU 2002).

The Home Energy Report

The Government intends to introduce a Parliamentary Bill to require home sellers to prepare a "seller's pack" before marketing a property. The intention is to bring forward to the start of the buying and selling process essential information about the property and hence speed up the process and reduce incidence of 'gazumping'. It is proposed that the seller's pack will include an energy report detailing the energy rating of the dwellings and recommended measures to improve that rating. The inclusion of the energy report in the pack has been confirmed, however, there is no fixed date for their introduction. The potential of this report lies in the opportunity presented by the increased likelihood of renovation work occurring and finance being available at this time. It is possible that home movers may undertake energy efficiency work which is otherwise considered too disruptive (PIU 2002).

15.3 Well-being-driven programmes

The Energy Saving Trust (EST)

Through the Energy Efficiency Partnership for Homes (EEP), the EST has begun to broaden its scope to include the fuel poor, aiming to encourage cross-sector working to develop sustainable markets for energy efficiency measures. The Trust facilitates partnership between companies and organisations with an interest in promoting energy efficiency and eliminating fuel poverty, whether the interest be commercial, environmental or social.

Home Energy Efficiency Scheme (HEES)

The Home Energy Efficiency Scheme (HEES) concentrates on low-income households in private sector neglected and dilapidated homes, offering financial incentive for

heating and insulation improvement packages. According to the Climate Change Programme, the aim of the 'new' version of HEES (effective from June 2000) is '...to ensure that the most vulnerable households (the old, the young, the disabled and chronically sick) need no longer risk ill-health due to a cold home.'(DETR 2000c) The intention was to help about 460,000 households in the first two years of the scheme - 280,000 being low-income over-60s.

Home Energy Conservation Act (HECA)

The Home Energy Conservation Act (HECA) required local authorities to draw up affordable warmth strategies, with the suggested target of 30% improvement in the energy efficiency of the local housing stock. Financial help to meet this target is given in the form of HECAAction grants, which are given to local authorities in partnership with private sector organisations, to deliver or encourage domestic energy efficiency improvements. The purpose of HECAAction is to 'pump-prime local authority HECA-related activity, kick start self sustaining energy efficiency initiatives and assist in the development of long term partnerships to stimulate and deliver energy efficiency'(DETR 2000c). The Government's requirement that local authorities report the progress associated with their HECA strategies effectively encourages reviews of policies, plans and achievements in both tackling fuel poverty and also in domestic energy efficiency.

Energy Efficiency Commitment

Energy Efficiency Standards of Performance (EESOPs) have been effective in the electricity sector since 1994, requiring electricity suppliers to encourage or assist low-income consumers to take-up energy saving opportunities. The Energy Efficiency Commitment (EEC4) 2002 - 2005 will extend this scheme to gas providers and will focus on energy saving targets, allowing companies freedom to design their own programmes. It is hoped that this will result in a shift of focus from selling energy units at the lowest price, to offering economical energy packages that include energy efficiency. The utilities industry, in response to consultation documents, emphasised that they regard the scheme as part of their commitment to both consumers' well being and the environment (ref). The customer focus will remain with low-income householders and in this way the EEC will contribute to the alleviation of fuel poverty.

Affordable Warmth Programme

The Government has worked with Transco to develop an Affordable Warmth Programme. The programme offers 'operating lease finance' for the installation of new,

energy efficient gasfired central heating systems. It is intended that new systems will be installed in up to a million homes by 2007 (DETR 2001a). Operating lease finance means that Transco underwrites the residual value of each system at the end of the lease, thus enabling the finance provider to reduce the lease charge. Transco is also funding the development and management of training programmes to provide people with the necessary skills to meet the resulting demand. This will entail 3,000 skilled gasfitter jobs and around 7,000 less skilled jobs (eg housing survey, installation of insulation, administrative support), some of which will be recruited via New Deal (Ibid).

Micro CHP

The Government believes that the installation of micro-CHP units in individual dwellings could potentially result in large reductions in CO2 emissions and has 'considerable potential to reduce fuel poverty' (DETR 2001a). The combined heat and power units offer potential annual fuel bill reductions of £100 compared to a standard high efficiency gas central heating system. A government review of embedded energy generation aims to ensure that micro-CHP has effective access to the electricity network, at fair prices, and with financial recognition of the associated benefits. There has also been a reduction in VAT on domestic micro-CHP. A large-scale pilot, involving 6,000 installations over a 3-year period, will test the suitability of the technology for fuel poor households. If successful, the intention is to offer micro CHP through HEES for owner-occupiers once the product is cost effective.

Warm Zones

The Warm Zone initiative was originally developed by the EAGA Partnership to draw together energy utilities, local authorities and voluntary groups 'in a co-ordinated effort to tackle fuel poverty in the area' (DETR 2001a). The ultimate aim is to substantially deal with fuel poverty in 'Warm Zones' within 3 years, by reaching all households eligible for home improvement measures through available grant schemes. Five pilot Warm Zones are being supported by the Government to test the initiative and develop good practice. Their impact on fuel poverty is being evaluated both internally by Warm Zones Limited and also independently, by a team from the Centre for Sustainable Energy and the NEA. If the pilots prove to be successful, the Government hopes that the Zones will be developed elsewhere; funding options for doing so are being investigated.

Housing Investment Programme (HIP)

The Government provides Local Authorities with money to improve the housing stock through the Housing Investment Programme. The primary aim of the programme is to help elderly, disabled and vulnerable homeowners to stay in their own homes by improving the condition of housing. Although individual local authorities decide how best to spend their funds, Government guidance states that energy efficiency should be an integral part of each authority's housing programme; hence it is expected that a proportion of this money is spent on energy efficiency improvements. Grants are offered to Home Improvement Agencies through the HIP (although changes are expected when the Supporting People integrated budget is introduced in 2003-2004 (ref).

Legislation to enable effective Local Authority activity

In December 2001 DTLR introduced draft legislation to reform the legislation governing private sector housing renewal. If introduced, these reforms will give Local Authorities more freedom and a wider range of tools, to tackle poor quality private housing. The proposals include broadening local authority loan-giving powers and giving new powers to make payments to third parties to help lever in private finance for home improvement. Also proposed is a new general power for Local Authorities to give financial assistance, or to provide labour and materials, for home improvement and repair. The new power would replace current renovation grants, Houses in Multiple Occupation grants and common parts grants, home repair assistance and group repair. Local Authorities would be able to choose between giving grants, loans or other forms of financial assistance such as loan guarantees, and to decide how much assistance to give and what conditions to attach. They can deliver these policies themselves or through other bodies, such as Home Improvement Agencies.

As an interim measure, Local Authorities were given new freedom to declare renewal areas and group repair schemes and been given powers to waive the repayment of relevant grants in a certain circumstances. This is intended to allow them to 'tackle areas of abandonment' and help to stabilise areas on the brink of decline (DETR, 2000d).

15.4 HER programmes in other countries

Europe

The Home Energy Rating as a Europe-wide concept was first introduced through a Specific Actions for Vigorous Energy Efficiency (SAVE) directive in the early 1990s. The directive required all countries in the European Union to certify the energy efficiency of their homes. The potential of this type of certification scheme was thought to lie in its ability to catalyse the input of measures to upgrade the energy performance of the ageing housing stock. Since no definition was provided for such a scheme, many different approaches emerged.

In January 2003 the European Commission (EC) published a Directive on The Energy Performance of Buildings, which became European Law the following day. The principal objectives of the Directive are:

- To promote the improvement of the energy performance of buildings within the EU through cost effective measures;
- To promote the convergence of building standards towards those of Member States which already have ambitious levels.

In order to achieve this, member states are required, among other things, to: set minimum performance standards to new *and existing buildings* based upon an agreed methodology; ensure that homeowners supply an energy performance certificate to prospective buyers or tenants when a property is sold or rented; identify cost effective energy efficiency improvements; and provide information on best use of energy in buildings. In other words, it will be a requirement to have a single home energy rating scheme and information programme in place for existing dwellings in each country by January 2006.

The UK and Denmark have been the forerunners in producing single institutionalised schemes. In the UK two primary Home Energy Rating systems have emerged: SAP (Standard Assessment Procedure) and NHER (National Home Energy Rating). SAP is the government approved method and scores dwellings on a scale of 1-120. NHER provides a scale of 1-10 and rather than looking only at fixed elements of a home, includes some site-specific information which helps to reflect actual running costs. SAP is widely used for new homes due to the requirement that all new dwellings in the

UK be assessed and SAP rated. Both SAP and NHER are also used by Local Authorities to assess their existing stock since they have a requirement to report energy efficiency progress under the Home Energy Conservation Act 1995. These systems are also used to produce the HERs currently provided by mortgage lenders in England, however, the provision of Home Energy Ratings for private sector homeowners in existing dwellings is currently relatively rare due to a lack of supportive legislation.

In Denmark an institutionalised home energy rating scheme has been operating since 1981. The scheme began by offering grants to homeowners for implementation of recommended measures. However, this scheme has gone much further than in the UK since its use within the existing stock is already enforced through legislation. In 1985 an obligation was placed on home sellers to have an energy audit and make the results available to potential buyers. In addition there is now a requirement for buildings over 1,500 square meters to be evaluated every three years. The rating system used requires input of dwelling dimensions and bases calculations on the Danish standard for energy performance of buildings. The report that is produced gives information about the building's existing heating-energy performance, CO₂ emissions, electricity consumption and water consumption. As in the case of the UK HER, it also makes recommendations for measures to reduce overall consumption.

Several other home energy rating schemes have been developed in Europe, for example in Ireland, Belgium and the Netherlands. In the Netherlands a home energy rating and advice scheme for existing dwellings has also been adopted nationally. This is supported by a 25% subsidy for implementation of the recommended measures. Sustainable Energy Ireland is developing a Home Energy Rating programme that is intended to provide a definitive national standard. In the early stages of using this scheme it is intended that financial incentives will be used to stimulate homeowners to voluntarily undertake the home energy surveys, for example by providing grants towards recommended measures. There will also be investment to encourage suppliers and associated trades to promote the rating scheme and marketing of the appropriate standards and certification schemes. It is proposed that the homeowners will also receive follow-up information and advice on the measures recommended.

The USA and Australia

In the USA individual states have taken different approaches, developing a variety of home energy rating schemes. There are, however a few dominant schemes that have

found acceptance nationally. The most prominent labelling scheme is the Energy Star Homes programme provided by the federal Environmental Protection Agency. This system provides a score between 1 to 100 which is equated to a Star rating ranging from a 1 Star for a very inefficient home to a 5 Star for a highly efficient home. The scheme requires new-build homes to achieve a score of 86 out of 100 possible rating points, or 5 stars. An estimate of the home's energy costs is provided and, as with all the other systems cited, the homeowner receives a report listing cost-effective options for improving the home's energy rating. These ratings are also linked to the provision of energy mortgages.

A variety of energy mortgage products have been developed, being sponsored by both federally insured mortgages programmes and also the secondary mortgage market. For those buying an existing dwelling the recommended improvements can be financed through an energy improvement mortgage loan. For those buying an energy efficient home, a number of private mortgage lenders offer discounted down payments or interest rates for the purchase of Energy Star certified homes.

The Energy Star Homes programme is marketed through a national campaign of public service announcements and its label is reinforced through use in a wide variety of efficiency programs. A number of state energy offices have adopted the Energy Star label to boost public recognition of their own energy programmes.

In Australia different states again take different approaches. Most states do not enforce home energy ratings for existing dwellings via legislation. In the Australian Capital Territory, however, homesellers have had to provide a copy of an energy rating assessment for prospective buyers since 1999. This state uses its own rating system: ACTHERS (ACT House Energy Rating System). There is no federally enforced system, however, one of the most commonly used systems across the rest of Australia is the Nationwide House Energy Rating Scheme (NatHERS). This software considers the dwelling dimensions and construction materials and calculates its performance for every hour of the year. The result is an energy rating in megajoules per square meter (mj/m²) and a star rating from 0 (poorly performing) to 5 (excellent). In New South Wales it is becoming more common for so-called 'Energy Smart Councils' to require a 3.5 star rating for the development of a new dwelling. Some authorities use other simplified systems that are based on NatHERS, for example, First Rate which is used widely in Western Australia.


This outline of different approaches to the HER around the world shows that the UK scheme is not unique. Policy makers can potentially learn a great deal from the experience of other nations in order to refine the UK scheme prior to implementation.

15.5 References

- Boardman, B. (2001). "Reciting the arguments." Energy Action(83): 14.
DETR (2000c). Climate change: the UK programme. London, HMSO.
DETR (2000d). Quality and choice, a decent home for all. HMSO, London.
DETR (2001a). The UK fuel poverty strategy. London, HMSO.
DTI (2001a). UK energy sector indicators, HMSO.
PIU (2002). Energy Review. London, Performance and Innovation Unit.

16. Appendix C: Phase 2

16.1 Cover letter and questionnaire

	THE UNIVERSITY OF SHEFFIELD School of Architecture	The Arts Tower Western Bank Sheffield S10 2TN Tel: (0114) 222 0399 Fax: (0114) 279 8276
---	--	---


Please can you help with this research?
I would like to know your views on the home energy report

Dear Sir or Madam,

Enclosed is a questionnaire that forms part of an independent research project into the energy efficiency of UK homes. Your contribution to this research will be extremely valuable, should you wish to help. You are being asked to participate in the research because you are one of the few homeowners in the UK who has received a home energy report, which forms part of your HomeFile Report. Ekins Surveyors has agreed to send you this questionnaire on my behalf. It is entirely up to you whether or not you complete and return this questionnaire.

All information that you provide will be completely confidential and used only for research into domestic energy efficiency as part of a PhD at the School of Architecture, Sheffield University. The *overall* results of the research will be made available to Ekins Surveyors and to other providers of home energy reports, to inform use of the report in the future. **No individual responses will be read by Ekins and the information provided will not influence your mortgage in any way at all.** I would be very grateful if you would return the completed questionnaire in the prepaid envelope provided

Many thanks for your time.



Rosie Parnell (Main researcher)
If you have any questions please write to me at the address above or phone on the daytime number given.

Figure 16-1: Phase 2 cover letter

A. About you

We would like to know a little about your background so we can see how different people feel about the topics in this questionnaire. **Ekins Surveyors has not passed on any of your details to us.** As with the rest of this survey, all answers are strictly confidential. If you do not want to answer any of the questions about yourself just miss them out.

1. Name:									
2. Address:									
	<i>Please ring the correct answer each case:</i>								
3. Age	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">18 - 24</td> <td style="width: 50%;">25 - 29,</td> </tr> <tr> <td>30 - 35,</td> <td>36 - 44,</td> </tr> <tr> <td>45 - 60,</td> <td>60 +</td> </tr> </table>	18 - 24	25 - 29,	30 - 35,	36 - 44,	45 - 60,	60 +		
18 - 24	25 - 29,								
30 - 35,	36 - 44,								
45 - 60,	60 +								
4. Approximate annual household income	<p style="text-align: center;">under £8000, £8000 - £15,000, £15,000 -£30,000 £30,000-£50,000, £50,000+</p>								
5. How many people live in your home?	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1</td> <td style="width: 50%;">4</td> </tr> <tr> <td>2</td> <td>5</td> </tr> <tr> <td>3</td> <td>6</td> </tr> <tr> <td colspan="2">other(specify):</td> </tr> </table>	1	4	2	5	3	6	other(specify):	
1	4								
2	5								
3	6								
other(specify):									

B. About your new home

It is useful to know the type and age of your new home because this gives us an idea of how much energy it might be expected to use.

1. What type of home are you purchasing?	<p style="text-align: center;">Terrace Semi-detached Detached Flat Other:</p>
2. When was this home first built?	<p style="text-align: center;">Pre 1919 1919 - 1944 1945 - 1965 1965 - 1980 post 1980</p>

Figure 16-2: Phase 2 questionnaire, page 1

C. Energy report details

Please refer to the energy report you have just received in your HomeFile Report.

1. What does the report say the current SAP energy rating is for your home (out of 100)?	Please ring the correct answer:		
	0-10	51-60	
	11-20	61-70	
	21-30	71-80	
	31-40	81-90	
	41-50	91-100	
2. Look at all of the energy efficiency measures listed below...	Please mark all of the appropriate boxes below with a cross:		
	this is recommended in the energy report	this is already installed in the home	we would probably install this within the next year
Loft/ roof insulation			
Cavity wall insulation			
Solid wall insulation (internal or external)			
Hot water tank insulation			
Heating Controls			
Thermostatic Radiator Valves (TRV's)			
Pipe insulation			
Energy-saving light bulbs			
Draught-proofing doors and/or windows			
Double-glazing			
Secondary glazing			
Other -please specify:			
Other -please specify:			
3. Do you intend to carry out any other home improvements to the property (not energy efficient)?	Please ring: Yes No		
<i>If yes, what are they ?</i>			
.....			
.....			
.....			
.....			
.....			
.....			
.....			
.....			
.....			
.....			
.....			
.....			
.....			
.....			

Figure 16-3: Phase 2 questionnaire, page 2

1

D. Information

1. Have you ever received information or advice on domestic energy efficiency by any of the methods listed below? *Please mark the appropriate boxes in column 1.*

2. Were any of the methods or sources particularly helpful in the past when it came to choosing and installing energy efficiency measures? *Mark the appropriate boxes in column 2.*

Source of Information or Advice	1 Received	2 Useful
Visit to a local energy advice centre to see an advisor or for leaflets		
The energy hotline (telephone)		
The free postal energy survey by Energy Savings Trust		
Free leaflets posted through your door		
Information leaflets / advice from employees at a hardware / DIY store		
Home visit by a local Council energy advisor		
Home energy efficiency survey by/for the local Council		
A builder/ installer		
A product manufacturer/ supplier		
Other - please specify:		
Other - please specify:		

E. Motivational factors

1. Below are some reasons why you might want to adopt the energy efficiency measures recommended in the energy report. How important is each reason to you? *Please mark a number from 1 to 5 in every case.*

1 = not at all important
5 = extremely important

Possible reason to adopt a measure	1	2	3	4	5
to improve temperature for health reasons					
to increase comfort / make the house warmer					
to reduce fuel bills/ reduce spending on fuel					
to reduce waste/ keep the heat in					
to increase convenience					
to replace or repair something that has to be dealt with anyway					
other home improvement work is going on anyway so it is easy to do					
to reduce impact on the environment					
to reduce energy consumption					
a loan or grant is available to part-fund the work					
Other (please specify):					
Other (please specify):					

Figure 16-4: Phase 2 questionnaire, page 3

3. Below are some barriers that might stop you adopting the energy efficiency measures recommended in the energy report. How likely is it that each of them will stop you adopting energy efficiency measures?

Please ring a number from 1 to 5 in every case:

1 = not at all likely
5 = extremely likely

Possible reason not to adopt measure	1	2	3	4	5
It will mean I can't afford other things (holidays, cars, clothes etc.)					
I don't have enough reliable information on what to do					
I'm not going to be living in house for long enough					
I can't afford it					
I have no time to do it/ organise it					
I do not have the necessary DIY skills					
I can't be bothered					
I can't find a reliable installer/supplier					
It will take too long to get the money back in reduced fuel bills					
It involves mess and hassle					
Other (please specify):					
Other (please specify):					

F. Your views on the Energy Report

Please ring Yes or No:

1. Do you think the energy report could be improved in any way?	Yes	No
If yes, how could it be improved? (use back of sheet if necessary)		
1.....		
2.....		
3.....		
4.....		
2. Would it be helpful to have an advisor to ask questions related to the energy report?	Yes	No
If yes, what sort of questions would you ask?		
1.....		
2.....		
3.....		
4.....		

Figure 16-5: Phase 2 questionnaire, page 4

3. Would it be helpful to have an advisor to ask questions about energy efficient home improvement in general?		Yes	No
If yes , what sort of questions would you ask? 1..... 2..... 3..... 4.....			
4. Which, if any, of the following people would be suitable to act as your advisor?		<i>Mark as many as you like below:</i> X	
	Builder		
	Housing officer from the Council		
	Independent energy advisor		
	Council energy advisor		
	Council Environmental architect		
	Interior designer		
	Environmental architect		
	Installer		
	A DIY expert		
	Architect		
Surveyor			
Other- specify:			
5. If a free advice service of this kind were offered to you shortly after you moved into your home, would you use it?		Yes	No
Other comments:			
6. Do you have any other comments at all about the home energy report or associated issues? Please use the back of the sheet for your comments.		Yes	No
7. Thank you very much indeed for taking the time to fill in this questionnaire. If any further research is needed, would it be okay to contact you at a later date for a short interview by telephone (10 - 15 minutes)?		Yes	No
If yes , please give your phone number here: Area code: number: What days and times would be best to call?.....			
Please return the survey in the prepaid envelope provided.		Many thanks.	

Figure 16-6: Phase 2 questionnaire, page 5

16.2 Assumptions made in analysing the phase 2 data

Questionnaire section A. Q. 4: The household was assumed to be that which was moving into the new dwelling (or which currently lived in the home being re-mortgaged). There was, however, a possibility that some individuals would respond to this question by giving the number of people living in the current household and that this might in fact differ to that in the future household.

Questionnaire section A. Q. 5: The data generated from this question was disregarded, since it was possible that the respondent would reply with current numbers rather than future numbers and that these numbers might differ (particularly in the case of first-time buyers moving from a shared rented house.)

Questionnaire section B. Q. 1: If an end-terrace was specified, then this was recorded as a semi-detached house, since these are equivalent in terms number of external walls and hence potential for energy loss.

Questionnaire section C. Q. 1: A few home energy reports had apparently specified a range from 5-15, 16-25 etc. rather than 0-10, 11-20 etc. In this case, the lower of the two relevant ranges specified in the questionnaire was recorded.

Questionnaire section C. Q. 3: Where the response was 'perhaps' or 'maybe', this was recorded as 'no'.

Questionnaire section D. Q. 1&2: Where there were no responses at all it was assumed that the respondent had previously received no domestic energy efficiency information or advice, although, where there was no answer to any of the questions on this page, it was assumed that the page had been missed and the answer was instead recorded as 'missing'.

16.3 Phase 2 sample profile

16.3.1 Demographic information

		Age	Household Income	Previous exposure to energy advice and information
N	Valid	253	244	256
	Missing	3	12	0

Table 16-1: Respondent age and household income response statistics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	17	6.6	6.7	6.7
	25-29	47	18.4	18.6	25.3
	30-35	63	24.6	24.9	50.2
	36-44	69	27.0	27.3	77.5
	45-60	53	20.7	20.9	98.4
	60+	4	1.6	1.6	100.0
	Total	253	98.8	100.0	
Missing	System	3	1.2		
Total		256	100.0		

Table 16-2: Respondent age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under £8,000	1	.4	.4	.4
	£8,000 - £15,000	15	5.9	6.1	6.6
	£15,000 - £30,000	84	32.8	34.4	41.0
	£30,000 - £50,000	85	33.2	34.8	75.8
	£50,000+	59	23.0	24.2	100.0
	Total	244	95.3	100.0	
Missing	System	12	4.7		
Total		256	100.0		

Table 16-3: Household income

16.3.2 Dwelling details

Home-type	When built?	SAP	Number of energy efficiency measures already installed in the dwelling
254	253	242	252
2	3	14	4

Table 16-4: Dwelling-type and age response statistics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Terrace	68	26.6	26.8	26.8
	Semi-detached	83	32.4	32.7	59.4
	Detached	78	30.5	30.7	90.2
	Flat	25	9.8	9.8	100.0
	Total	254	99.2	100.0	
Missing	System	2	.8		
Total		256	100.0		

Table 16-5: Dwelling-type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pre 1919	60	23.4	23.7	23.7
	1919-1944	30	11.7	11.9	35.6
	1945-1965	33	12.9	13.0	48.6
	1965-1980	48	18.8	19.0	67.6
	Post 1980	82	32.0	32.4	100.0
	Total	253	98.8	100.0	
Missing	System	3	1.2		
Total		256	100.0		

Table 16-6: When the dwelling was built

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-10	2	.8	.8	.8
	11-20	15	5.9	6.2	7.0
	21-30	7	2.7	2.9	9.9
	31-40	37	14.5	15.3	25.2
	41-50	65	25.4	26.9	52.1
	51-60	53	20.7	21.9	74.0
	61-70	41	16.0	16.9	90.9
	71-80	16	6.3	6.6	97.5
	81-90	5	2.0	2.1	99.6
	91-100	1	.4	.4	100.0
	Total	242	94.5	100.0	
Missing	System	14	5.5		
Total		256	100.0		

Table 16-7: SAP rating

74% of the dwellings had a SAP rating of less than SAP 60

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	52	20.3	20.6	20.6
	1	32	12.5	12.6	33.2
	2	37	14.5	14.6	47.8
	3	36	14.1	14.2	62.1
	4	26	10.2	10.3	72.3
	5	21	8.2	8.3	80.6
	6	16	6.3	6.3	87.0
	7	16	6.3	6.3	93.3
	8	11	4.3	4.3	97.6
	9	1	.4	.4	98.0
	10	2	.8	.8	98.8
	11	2	.8	.8	99.6
	12	1	.4	.4	100.0
	Total	253	98.8	100.0	
Missing	System	3	1.2		
Total		256	100.0		

Table 16-8: Number of energy efficiency measures already installed

20% of dwellings had no energy efficiency measures already installed (according to the respondents); 52% had between 1 and 4 measures already installed.

Energy efficiency measure	frequency	%
energy saving light bulbs	14	1.8
draught-proofing	54	6.9
loft/roof insulation	137	17.5
cavity wall insulation	56	7.2
thermostatic radiator valves	32	4.1
condensing boiler	1	0.0
heating controls	101	12.9
hot water tank insulation	135	17.3
solid wall insulation	44	5.6
secondary glazing	22	2.8
double-glazing	128	16.4
pipe insulation	57	7.3
other	1	0.0
Total	782	99.8

Table 16-9: Measures already installed

16.4 Other intended home improvements – listed by category

Windows/doors
Add double doors between lounge and dining room.
Block 2 Internal Doors
Fit new doors.
New external door to second bedroom to improve draught/ warmth in room.
New front door.
Repaint window frames etc.Locks on doors. Reseal double glazing.
Repair masonry in window mullions.
Replace dining room window with french door
Replace doors.
Replace patio doors - seal around has broken.
Replace rotting timber on garage door and windows.
Replacement of front door.

Table 16-10: intended home improvements - windows/doors

Extension/conversion
Build back porch.
Build kitchen extension, open-up ground floor living area. New low voltage lighting. New electrical points.
Building a porch to the front.
Cellar conversion
Consider an extension at rear and conservatory/ summer house.
Conversion of double garage into living space. Addition of conservatory. Extension to front of house.
Convert 1960's extension- pitch roof
Convert garage to study
Expand living area
Extend
Extend driveway
Extend for Kitchen.
Extend garage, possible loft conversion
Extension
Extension
Extension
Extension
Extension
Extension top build on downstairs loo.
Front porch extension/
Loft conservation
Loft conversion. Extension to the back of the house.
May add on and a front door porch.
Possibly extend kitchen area
re build the front porch

Extension/conversion
Small extension
We will convert integral garage into a family room
Yes, extend kitchen. Add 4th bedroom and study

Table 16-11: intended home improvements - extension/conversion

Bathroom
Add a shower.
Add a WC and shower in ground floor
Adding downstairs toilet and utility bathroom
Bathroom
bathroom refits, downstairs shower
Bathroom.
Change bathroom suite.
Convert en-suite toilet to shower room.
Fit en-suite to bedroom.
Fit shower.
Fitted ...bathroom
Have a shower installed.
improve ... Bathroom
install bathroom. Add extra WC.
install new [extra] bathroom downstairs
install new bathroom
Install shower and toilet in utility room
Longer term - new bathroom,
Modernise bathroom
New ...bathroom, toilet
New bathroom
New bathroom suite and shower
new bathroom suite plus tiling
New bathroom suite
new bathroom
new bathroom
New bathroom
New bathroom
New bathroom
New bathroom
New... bathroom
Refit bathrooms
Replace bathrooms
Replace entire bathroom
Replacement of bathroom suite and redesigning of bathroom
resite shower due to possible water leakage into structure
Shower room and W.C.

Table 16-12: intended home improvements – bathroom

Conservatory
Addition of conservatory
Build on conservatory
Conservatory
Conservatory
Conservatory
Conservatory
Conservatory
conservatory
Conservatory
conservatory
Conservatory
Consider ... conservatory/ summer house
May add on conservatory if possible
Perhaps replace current (old) lean-to conservatory
would like to build a conservatory on the back of the house

Table 16-13: intended home improvements - conservatory

Damp-proofing
Damp-proof course improvements
Damp-proofing
Damp-proofing
Damp-proofing
Damp-proofing

Table 16-14: intended home improvements - damp-proofing

Decoration
Complete redecoration
Completely redecorate throughout
Decorate inside
Decorate most of property
Decoration
Decoration
Decoration
Decorative
External & internal decoration
General cosmetic decoration
general cosmetic redecoration
General decorating
general maintenance including redecorating
Interior decoration
Internal decoration
Internal decoration
Paint and decorate throughout
Painting and decorating
Painting and decorating
Re gloss and emulsion
Redecorate hall and stairs

Decoration
Redecorate
Redecorate
Redecorating interior
Redecoration
Redecoration
Total redecoration
Usual paint decorating & furnishing of each room

Table 16-15: intended home improvements - decoration

Double-glazing
Change all windows - DG
Double glaze all windows
Doubleglazing
Doubleglazing
New double glazing throughout
Replacement UPV-C windows
Replacement windows

Table 16-16: intended home improvements – double-glazing

Electrical work
Get electrics checked with view to updating fuse box etc.
Get electrics checked with view to updating fuse box etc.
Get electrics updated
Install more electric points
Re-wire whole house
Rewiring
Rewiring
Re-wiring
Re-wiring
Update electric system.

Table 16-17: intended home improvements - electrical work

Building envelope
Air brick
External decoration
External pointing repairs & drainpipe replacement
External redecoration
Fit UPVC soffit and fascias
Guttering inspected and any defects rectified. Recover flat roof of kitchen extension
Improvements/ repair to the roof
New roof
New windows
New windows
overhaul flat roof covering
Recover flat roof of kitchen extension. Guttering inspected and any defects rectified
Remove 2 external windows & brick up
Re-paint the outside

Building envelope
Repair door lock. Repaint house
Repair roof
Repair roofstructure at base of chimney by renewing flashing and re-pointing chimney. Bedding slates back down at edge of roof.
Repair to slate roof and guttering
Repair/replace flat roof to single storey additions
Replace (where necessary) guttering
Replacement ... soffits, fascias
Repoint house
Roof repairs. Re-mortar walls
roof re-tiling
UPVC soffits and fascias/

Table 16-18: intended home improvements - building envelope

Floor
Floor coverings
floors
In future I would like put the laminated wood floor in all the rooms
Install wood laminate flooring
Install wooden flooring to ground floor
Laminate floor in lounge
lay laminated flooring in lounge through to dining room
New carpets/ laminate flooring
Recarpet
Replace floor-boards in some rooms
Replace rotten floor joists.
Total redecoration including carpets
Wooden flooring mainly throughout ground level

Table 16-19: intended home improvements – floor

Grounds / outbuildings
Asbestos materials to the outbuildings (remove)
Block paved drive
Build carport
Garden
Gardening. Shed/garage. Parking- entry mirror.
Improve back fence
Installation of side entrance gate. Replacement of patio. Replacing front lawn with brick/block paving
Landscape the garden
New drive. New garage roof.
Paving. Garden shed.
Possibly new garden fence and concrete post around rear garden
Power & light to garage. New garage door.
Re concrete yard area
replacement driveway and paths around the property
Tarmac the drive

Table 16-20: intended home improvements - grounds/outbuildings

Kitchen
Definitely update kitchen
Fit a new kitchen
Fitted kitchen
Improve kitchen ...
Integrate kitchen and utility room more fully
Kitchen
Kitchen
Kitchen
Kitchen
Kitchen
Kitchen refit...
Longer term ...new kitchen
Make the kitchen a kitchen/diner by removing several cabinets
Move kitchen
New fitted kitchen
New kitchen
New kitchen
New kitchen
New Kitchen
New kitchen
New kitchen
New kitchen
New kitchen
New kitchen
New kitchen
New kitchen
New kitchen
New kitchen & worksurfaces

Kitchen
New kitchen including boiler
New kitchen units
New kitchen. Knock the kitchen into cold store as there isn't even room for the washer, it is that small.
Refit kitchen
Replace kitchen
Replace kitchen units
Replace old kitchen units etc. Replace bathroom suite.
Update kitchen

Table 16-21: intended home improvements - kitchen

Miscellaneous
2 walls knocked through - open plan
Alarm
Alarm
Building fire wall in attic between the property and the adjacent property
Definitely update lounge
dismantle fireplace
Double brick utility room
Fit water softener. Fitted bedroom units
fitted bedroom
gen improvements to the inside of property
General modernisation
General modernisation
General modernisation
Get bedroom windows hung more tightly - there is a gap and it is letting in a draught.
I am always doing DIY and decorating although the year so the house is up together
Improve heating and ventilation to cellar to improve damp
Install central heating. We are currently renovating a house which was previously 6 bedsits and a flat. The only heating is from coal fires.
Install water softener
Knock out wall between kitchen. Dining room to make a kitchen diner.
Lightbulbs
Maybe a little upgrading
new central heating boiler/
New gas fire
New radiators
no as I do not intend to keep the property for more than 3 years
not sure yet
Opening up the utility room at the back of the kitchen into a conservatory style breakfast area to get more light in the kitchen and more space
Overhaul gas appliances. Change position of ceiling light fittings. Replace existing coving.
Patio area - extend via 'conservatory glass'
Pulling down internal walls, reinstating in different positions. Wood treatment throughout.
Re plaster all walls
Rectify timber rot as recommended and decorate.
Redevelop ground floor kitchen/living area.
Remodelling of access between garage and utility room.

Miscellaneous
Remortgage
replace fireplaces/ rationalise central heating
re-plumbing, installation on central heating system...
rip out both fireplaces as they date from the '50s..
Sound-proofing
structural work
Treat localised damp in upstairs chimney breast.
woodworm
Would like to portion front door way and stairs to make the sitting room separate, depending on price

Table 16-22: intended home improvements - miscellaneous

16.5 Source of information or advice

Source of Information or Advice	Received (freq)
Free leaflets posted through your door	94
Information leaflets / advice from employees at a hardware / DIY store	57
A product manufacturer/ supplier	42
A builder/ installer	37
The free postal energy survey by Energy Savings Trust	20
Visit to a local energy advice centre to see an advisor or for leaflets	15
The energy hotline (telephone)	11
Home visit by a local Council energy advisor	13
Home energy efficiency survey by/for the local Council	7
Other	28
Other categories:	
Media	9
Job	4
Friends	3
Books/specialist literature	4
Education	2
CAT	2
Miscellaneous	4

Table 16-23: previously received advice - source and frequency

57.4% ($\pm 6.1\%$, $n=256$, $p<0.05$), of respondents recall having previously received energy advice or information. 35.2% ($\pm 5.9\%$, $n=256$, $p<0.05$), of the previously received advice was useful according to the respondents.

Source of Information or Advice	Useful (frequency)	Useful (% of received)
Visit to a local energy advice centre to see an advisor or for leaflets	14	93.3
The free postal energy survey by Energy Savings Trust	18	90.0
The energy hotline (telephone)	8	72.7
A product manufacturer/ supplier	30	71.0
Information leaflets / advice from employees at a hardware / DIY store	36	63.2
A builder/ installer	22	81.7
Free leaflets posted through your door	40	42.6
Home visit by a local Council energy advisor	11	84.6
Home energy efficiency survey by/for the local Council	2	28.6

Table 16-24: previously received advice - useful

16.6 How the HER could be improved listed by category

'How to'
Suggested sources of local supply for items such as cavity wall insulation.
When suggestion are given it would be great if there was a phone number to call for advice or way to do it. What one could achieve by DIY.
Info on good quality materials/ installers
More energy efficiency ideas and information on professionals who can do more in the area.
Have a list of suppliers so that I can choose which one I may require.
A list of local recommended contractors to price up/ do the work.
Listing other sources of information and directories of industry certified installers/ suppliers ...
Further explanation on recommended procedures/ improvements.
How and where to get help/ advice on home energy efficiency improvements ...
Provide contact telephone numbers for governing bodies of builders etc., so that good, reliable contractors can be found.
Supply leaflets of reputable companies who specialise in energy saving products

Table 16-25: how the HER could be improved - 'How to'

Alternative measures
Comment on water metering - potential resource saving.
Perhaps go further, e.g. suggesting low-flush toilets, solar panels, other low-energy appliances
Alternate energy source info - solar panels/ wind generator/ heat pump etc.
It doesn't give any alternatives, just one recommendation. It doesn't propose any form of fuel other than the one installed, which is oil. Nothing is mentioned about the possibilities for solar power (or wind).
Give general advice on how to conserve energy by not using it in 1st place i.e. switching off at plug instead of using stand by etc. How much energy could be saved via solar power. Show those types of energy saving tips which will not save energy/not worth
Info on energy efficient appliances is what savings, new house visually new appliances purchased.
Would like info on solar power to be included

Table 16-26: how the HER could be improved - alternative measures

Further details
Comments on what is already there it seems to focus on what isn't
Comment on boiler/hot water system type/efficiency. Comment on siting/ size of radiators.
Rate the central heating system - i.e. is it a good one?

Further details
Measures recommended - the result on the SAP rating for each measure.
Comment on replacing windows. Types of replacements/ U values etc.
More detail on where to improve, e.g. if insulation on solid wall required, start where? Can job be completed in part?
There is some loft insulation but the report does not say what is wrong with it.
Clarify recommendations (e.g. solid wall add 50mm insulation)
Explain it better
More detail on existing central heating system.
Further detailed description.
More detail
How could rating be improved, rough idea on costs and payback period - this may be present in a fuller report, but all I got on this one was lightbulbs.
Did not list all measures that had been considered and discounted.
It's not clear from the table if items/ facilities are already installed in the property.
Better explanations and options
Info on state of items needing repairs.
Give accurate and precise data (e.g. boiler efficiency - length of wall needing cavity insulation etc.)
More detail about recommendations i.e. type of boiler - price comparison with other boilers
Greater detail on suggested improvements.
No SAP rating on my report
Indicating how much the energy rating would be increased for each recommendation
Explain why and what's wrong with big things like boiler give time scale for replacement.

Table 16-27: how the HER could be improved - further details

Further explanation of calculation methods
We do not know what the rating of our current house is therefore the rating of 75 does not really mean anything to us until we could put it into perspective.
Detail on why the property received the SAP rating attributed
Cost of heating should be verified. What tests were carried out? E.g. test draughts through windows/ heat loss from boiler etc.
More info on how energy rating is calculated. More info on how annual energy bill is calculated.

Table 16-28: how the HER could be improved - Further explanation of calculation methods

Report format, structure & language
Reduce the use of jargon - how many lay people understand what a TRV is?/ Explain what a condensing boiler is.
It could explain in simpler language. What is wrong/ How these things could be improved
The table showing improvements is a little unclear
Diagrams, charts (instead of figures)
I don't understand all of it.
Misleading first page - tells me my rating out of possible 100, then goes onto say max possible score really only 61. I would suggest putting the % and true potential score at the front.
As eye-catching as an advertisement.
Include a computer model that I can use to understand the report. Load my details to a protected website. I can update and model energy use - maybe it could be linked to the energy suppliers. I can then monitor and graph energy consumption.
Too many pages to read.
Do not understand notes on cover/ helplines.

Report format, structure & language
So that first time buyers could understand it a bit easier
The maximum SAP figure is confusing with references to both 80 and 100

Table 16-29: how the HER could be improved - report format, structure & language

Information on grants
By finding out if I can receive a grant.
Could they possibly give information where grants are available for energy efficiency schemes or improvements
Provide information on grants available energy efficiency improvements.
Guidance as to what grants are available.
How and where to get help/ advice on home energy efficiency improvements i.e. grants.

Table 16-30: how the HER could be improved - information on grants

Lack of specificity
Regards draughtproofing, no close examination carried out, only indicates (no specifics)
Report was very poor value for money. The recommendations were couched in standard phrases which could have applied to any property. Cost savings quoted looked like figures plucked out of the air or, at best, generalised - probably little relevance...
Not all recommendations were applicable - need to question houseowner re some of the specifics to improve/ targeting.
It could be more personal and specific
It doesn't feel very attached to my house.
The report is too general and based on average house.
Ensure that it is tailored to the survey & not general. Don't advise on something that is not known in the survey i.e. type of wall insulation
Made more accurate
I am already renting the property and am aware the 2nd bedroom is very cold. Had I known in advance ... I could have prepared questions relating to this e.g. radiator sizing, draught-proofing etc. Rear doors v. poor insul - not picked up in report.
Bearing in mind that most surveys are somewhat cursory and of dubious value, I wonder how accurate and representative of the property the energy report is.
Why didn't the surveyor ask to see a breakdown of my energy costs? His estimate was massively inaccurate: gas/electricity total £1500 per annum; his estimate was £2500!
In some cases report was inaccurate - [said no cavity wall insulation installed, when it is and says no double glazing when new unit just done].
Be more specific rather than base data around averages
Could be more accurate - recommended solid wall insulation for the house, but it has cavity walls.
By NOT recommending what is already existing
I believe the estimated fuel cost is an exaggeration which makes it harder for me to believe that the other points raised are necessarily accurate. I would certainly seek further advice before implementing the more expensive options suggested.
Although the shortest payback option - drylining walls- is not very relevant in an Arts & Crafts turn of the century house.
Check with householder the current level of expenditure on gas and electric

Table 16-31: how the HER could be improved - lack of specificity

Further suggestions
No mention of fitting TVR's to radiators - surely a cost-effective option
No mention of cavity insulation
The cost (estimated) of draughtproofing seems excessive and misleading as this is generally a DIY task - so it may result in discouraging people in making this improvement
An explanation of why energy efficiency is important (i.e. cost savings and to reduce global warming potential).

Table 16-32: how the HER could be improved - further suggestions

16.7 Questions related to the energy report listed by category

'How to'
Do you have recommended contractor for the work mentioned?
..companies that could carry out the work
Minor details on DIY fitting etc.
Should I just add more insulation in the loft or replace it with the thicker?
Where to get the products from e.g. where's the best place to get energy saving light-bulbs.
How do I choose a good tradesman?
Advice specifically on the improvements and how to go about it.
Where can I get more information? Who can carry out the work?
Recommended installers. How to do it ourselves.
They could recommend an installer/ supplier to you
Reliable installers in our area
How can I draughtproof sash windows?
How to go about getting the work done.
Suggestion on supplier.
Where would I go to get the improvements done.

Table 16-33: questions related to the energy report - 'how to'

Alternative measures
Advice about solar power heating.
Which fuel source would be most cost effective & efficient for size/ type of house. Gas v electric.
What effect install solar heating.
What impact to the energy rating would major changes to house make i.e. addition of conservatory.

Table 16-34: questions related to the energy report - alternative measures

Further details
What impact would the work have on the current decorative condition of the property?
Just to clarify points brought up in the survey
Which would be the most effective way of reducing CO2 production.
Cheapest form of heating
As above, plus which one item would be top priority and produce largest energy saving for my budget.
How energy inefficient is the house?
What is a condensing boiler?
Types of cavity wall insulation pros and cons. condensing boiler - how much more eff as opposed to conventional boiler

Further details
Details about boilers
Exacting questions on types of installations etc.
Which is the most important thing to do first?
All related to the above: what alternatives do we have? I like to weigh up the pros and cons and then make an informed decision.
Explanation of the 'bigger' tasks e.g. solid wall insulation-what is it, how it works, how much impact the improvement would have at time of installation - e.g. can't use the room - can't use electrics etc.
How do I get optimum use out of system to provide heat and hot water when needed.
To confirm necessity of adjustments
What needs doing? What order should things be done in, e.g. What will be most efficient etc.
What is a typical rating for this type of property.
What sort of secondary glazing exists?
For clarification of points raised if there was any confusion
What is really necessary and what can wait?
About different options.
I would ask for a concise list of measures already in place like the improvements list.
How destructive is going to be.
Why they think boiler needs replacing and what it will entail.
To clarify on specifics the report recommendations
What fuel types are long term savers.[Advisor] To provide specialist knowledge of energy saving improvements.
What improvements are priority.

Table 16-35: questions related to the energy report - further details

Explanation of calculation methods
How have the savings figures been calculated?
What on earth does a SAP rating actually mean/ stand for?
Basis of costs and cost saving i.e. a proper justification of the projected savings.
Report states that making recommendations would increase rating by 10%. Why not to 100% rating.
How was the energy rating assessed. How is the payback time for improvements assessed.
Were costings based on cheapest costs. Were they assuming installation by professionals or where possible DIY?

Table 16-36: questions related to the energy report - explanation of calculation methods

Lack of specificity
It would be nice to get personal advice.
Why is some of this information in this booklet if it is not relevant.
How much of this advice is generic/ how much specific to this property.
How relevant is each advice to my home. I do not feel this report is done with involvement.

Table 16-37: questions related to the energy report - lack of specificity

Information on grants / cost
..cost
How to acquire grant
What measures can we take without paying a fortune?
Best buy products to buy - cost versus efficiency.

Information on grants / cost
Cost/ benefit analysis of different options- priorities within budget.
Quotes for cost of appliances, materials etc.
...and clarify costs on-costs, savings.
What grants are available to help with costs?
Details of grants from local authorities.
Grants available.
Cost in more details.
What grants may be available to improve energy ratings for a property?
How much would they be.

Table 16-38: questions related to the energy report - information on grants/cost

Further comments / questions
Only if I wanted to pursue any recommendations made by the report.
How does economy 7 heating work?
My report seemed rather rushed and superficial to be of great benefit, but I agree the concept is good.
...but for an older house (3bed+) this would be useful
More information on the services provided by the Energy Savings Trust
Are you saying that there isn't an advisor? Can I not ring 08705606090, or contact Elmhurst direct?
Don't know what questions TO ask
But not pressurised
To have the option of speaking to an advisor as and when, it is convenient to consider the issues raised.
What does the future hold on energy?

Table 16-39: questions related to the energy report – further comments/questions

16.8 General questions listed by category

'How to'
Recommended contractors. What DIY measures are available?
...recommended suppliers, installers
How to find help.
Just as before advice about what to buy and use
Approved installers
Find out about reliable, reasonably prices installers
Details of approved suppliers
Draughtproofing windows and doors how and materials to use?
How to obtain correct materials to do the recommended tasks.

Table 16-40: general questions – 'How to'

Alternative measures
Appliance efficiency. Heating systems/ radiator types and siting
How easy would it be to install solar panels and whether excess electricity could be sold back to the grid.
Alternative energy sources - i.e. solar
Up to date materials for future extension etc. Health risks of materials such as fibreglass.
Personally I would be interested in 'friendly products' e.g. solar/ recycle water

Alternative measures
Alternative solutions.
How can one maximise the efficient use of gas warm air central heating.
Positions of radiators in house (bay or side walls?) Which will keep house warmer, carpets or laminate flooring?
To discuss new ways to improve efficiency (new products for example).
Solar Power?

Table 16-41: general questions – alternative measures

Further detail
Which offer the most benefit (as this is outlined in the SAP report)
What are the simple low cost ways to improve efficiency
How to save money
What will save me money?
Generally what could be done and where exactly
Ideas for reducing fuel bills, maintaining heat.
Current recommended standards
How can we improve the energy performance of our home? What range of alternatives do we have? What are the long term advantages of certain changes?
'Quick fixes' - anything that can be done at a lower cost with less intrusion, but still contributing to energy efficiency e.g. energy efficient light bulbs.
Are there any little inexpensive measures I can take to improve heat efficiency in new home.
What else could be done to save money/ energy?
Establish known problems
What options are available to me and how I can save money. Long term what my benefits would be.
Which to do first
What needs doing
What is the nature of the work?
Differences in possible types of insulation - benefits and disadvantages of each type
...general knowledge.
How can I improve energy efficiency
What would be suitable for our home
Questions enabling me to weigh up the different factors onward i.e. cost, efficiency savings, environmental impact etc.
I would ask about disruption to household when improving measures.
Best value in short term.
Types/ design of boiler for best operation
Anything that would be of benefit to the family or household
What are the most important things to do now? What are the easiest and simplest thing I could do to make an immediate impact?
Best ways to improve energy efficiency and save money
Area specific changes/ adaptations
What improvements would be most energy efficient

Table 16-42: general questions – further detail

Information on grants / cost
What if any grants available to me to help GB reduce CO2 emissions to meet international obligations under Kyoto agreement?
Any grants available...

Information on grants / cost
How much it'd cost and what's most worth doing
Where is the cheapest central heating and most effective central heating I can install? Is there any funding available for those people not on any benefits but want to help the environment.
Cost of improvements?
What grant help etc. is available
If possible - estimated costs of different types of insulation.

Table 16-43: general questions – information on grants/costs

Further questions / comments
Only if a survey had not been carried out, e.g. if new here and wanted info on what could be improved
How do I get my heating a wiring tested so I know they are both safe and efficient?
Can't think of any at present. Will do at the time work carried out.
Do not yet know as not a homeowner yet.
Having a contact to ask general advice is always good.
When required
To give general advice.
Any non-fee (voluntary) genuine advice would be appreciated as long as it is going to be convenient.

Table 16-44: general questions – further questions/comments

16.9 Comments about free advice

Comments about free advice
[No] As it is a brand new house
A free service based on points received in the energy report would be worthwhile to explain products, ways forward etc. A lot of people plan what they will do before completion, discussion shortly after may be too late.
Although I would like to see more independent advice through the use of pamphlets, brochures etc.
Answer maybe yes if information given was different to that in energy report. No use if getting same information twice!
As a first time buyer it is all a bit overwhelming and I do not know which is the most important. Going to someone who can give impartial advice would be very helpful.
As long I did not feel pressured into buying something if it were just advice that would be fine.
Definitely yes.
Having read the report I don't think that I would gain from an advisor.
I feel people would need time to settle in the new home. You need to address your priorities (ie expenditure) then personally I would assess if I could afford to carry out improvements in the near future.
I have a number of friends who are architects - seek their advice foremost. More likely to be unbiased than people wishing to sell products.
I think the report is adequate, isn't that what it's been provided for? Although as mentioned above, isn't the report all I need?
I would possibly use a free advice service of this kind, although unless there was any major energy saving work needed that was essential any work would be governed by the initial outlay.
I would really welcome it.
If I felt I was not going to be sold something.
If I lived in a house built in the last 100 years.
If the improvements were free

Comments about free advice
It [the report] is clear enough for someone without a specialist knowledge.
It depends on what was advised how much it would save and how much it would cost to do.
It is self-explanatory [the report]
Moving house itself will take up all my free time. I wouldn't want advice until I was ready to implement any energy saving measures, which except for easy immediate items (e.g. loft installation) would probably not be until a year after moving.
My home only needs small things so not worth it.
Not if it were in anyway linked to businesses it would have to be completely independent otherwise I would be suspicious.
Nothing is ever free. 'Free' surveys from commercial enterprises can result in endless direct mail and pressure to buy.
Probably more worthwhile after a year or so. As do not intend making alterations etc. in short term.
Providing that leaflets or a letter was sent first for introduction.
Providing there were no commitments, I would certainly be interested in their comments and would act on them if possible (according to section E).
To review the report and expand/ explain findings. To answer other questions on general level such as questions above.
To see what non-expense incurring measures I could take.
Too busy - phonline or website instead.
Totally and utterly think this is a great idea. The report, although interesting, does not feel attached to my house - I would love to talk through the specifics.
When required
Yes, because likely to redevelop/renovate property soon after purchase.

Table 16-45: comments about proposed free advice service

16.10 Further comments

Further comments
[Would use advice service] Provided it was without obligation
[Would use free advice] As long as there is no string attached and no hard sell or cold calls.
Any professional advice would be welcome
As Energy Efficiency report is very helpful, I would advise people to get a similar report.
At a convenient time
Despite the house being fully doubleglazed why do we need to draughtproof windows and doors in the house as recommended?
I am MD of a development company. Very impressed generally.
I believe report is especially useful to first time buyers whose knowledge on such issues may be limited.
I complete Elmhurst energy surveys for new dwellings (job) - required to fill in rather more information than the NHER report provides eg U values for elements, orientation etc. Information gathered in order to state the rating of my survey not provided.
I felt that the report covered all aspects and explained items very well. Very good advice.
I would look at advice given, may not respond to it. 1st time buyers - lots of other things to pay for initially.
I would seek advice and check upon any installer and ask for recommendations
It was a nice surprise to get the report.
It was a welcome addition to our survey that we will keep for future reference and possibly act on in future.
Recycling benefits should be added to report as an addendum not forming part of the report
Remortgage - we have fully insulated and improved on a terrace house of this age.
The energy survey & report are a great idea. Payback is too long.
The report seemed informative, especially as I'd never seen one before. Presented well.
Very informative and enlightening
Well-presented, easy to read.
What is the scale? - 1-100 What does it relate to? What units is it? Linear or logarithmic. Can't see how you can lump everything in the house together and slap on single number.
As single woman with v.v. limited DIY/ home owning experience it would be great if this report could be a lot more detailed & specific. Also less jargon would be useful. Perhaps including a very basic DIY list of 'How to' save energy would not only be useful but also empowering...phone numbers.. gas board, energy advice
We are intelligent enough/ both adults in the house have further degrees to research and decide ourselves what energy home improvements are suitable for our home. I found the Energy report clear and concise and easy to understand. If I was to purchase the house and intent on living in it or many years (eg plus 10) then I would proceed with some energy saving home improvement.
I am quite interested in low energy technology and energy saving. Ultimately I am interested in a 'new build' scheme. However, the level of improvements achievable versus cost and ease of installation in older properties would be very useful to have. Is there an easily accessible/ useable information source such as a University R&D unit or website available.
Time and money is the biggest obstacle for all these improvements - even though it saves money in long run - so - really a business that was concerned in saving money and energy only needs a 'loan' to get ball rolling - then the business would do the work and be paid from income that came in from earlier projects, i.e. company would benefit from savings for 25% longer than individual, eg if it takes 3 years to become profitable for a measure, then the company would take the savings for 4 years etc.
I've bought two properties, both with a homebuyers survey. In both instances the electric wiring, although looking perfectly satisfactory on first glance, was not earthed and there lethal. In the second instance the vendor had assured me the electricians had been tested. On checking I found

Further comments
the fuse box wasn't earthed. A combined energy safety and efficiency check could possibly save lives and the environment - just a thought.
I have found it very interesting reading the energy rating report. It is very clear and concise. Other than the condensing boiler, I feel that I am aware of the items mentioned for improving energy efficiency in our new house. It has served as a nice reminder though. Thank you.
This is the first survey I've seen so I have nothing to compare it to, but it seems very comprehensive. I have no questions as all the energy efficiency measures suggested are fairly simple to understand. Had I had a problem with insulation or doubleglazing I may need advice.
A very interesting and enlightening survey which is extremely easy to follow and understand even by a complete novice to this subject area. It does however, draw attention to the fact that secondary/ double glazing and loft insulation must be the biggest con of the last century when you realise how little both increase the SAP rating of a house.
Advice on things that are not relevant e.g. survey says roof inspection was required. The SAP rating is calculated on insulation etc within the home - how if roof and wall insul. was not surveyed? Hot tank insul. was not surveyed. There is more survey info about the SAP rating than the information on our house. It's stressful enough without being advised on how much money (an incredible estimated cost) we would need to improve our energy consumption. I think the SAP rating etc. are good things, but when you pay a ridiculous amount of money for a two page, very brief survey and get more about SAP rating and general rubbish that does not relate to the survey then it becomes pointless.
I may do if I had free money to get the work done. If not it is often a case of make do until funds allow. There is little point asking questions like this when the only people who ever get money to help them improve energy in their homes are people on benefits. Those who work for a living never get advice or funding for such projects. Try asking people who live in housing association or council houses rather than those people with mortgages. The rest of us put up with what we can afford. I would love to improve the energy rating in my home, but have to do it as funds allow.
The reason for saying no to F2 and F3 is that you get nothing for free. Would rather work out the facts for myself. Report was well-presented - very clear. Each section was well explained without giving excessive info. Would have liked to have a section on solar power - even if only to acknowledge that it is available (+ giving contact details). Liked the idea of the table to illustrate payback (years). Problem with this is that we are only looking at this house over 5 years, therefore outlay would not give payback benefits in time!

Table 16-46: Further respondent comments

16.11 Statistical data analysis: results

16.11.1 Chi-square test: Intention to carry out other home improvements and intention to take-up at least one measure within the next year

Do you intend to carry out an other home improvements?

	Observed N	Expected N	Residual
no	108	121.0	-13.0
yes	134	121.0	13.0
Total	242		

Take-up at least one measure?

	Observed N	Expected N	Residual
no	124	115.5	8.5
yes	107	115.5	-8.5
Total	231		

Test Statistics

	Do you intend to carry out any other home improvements?	Take-up at least one measure?
Chi-Square	2.793	1.251
df	1	1
Asymp. Sig.	.095	.263

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 121.0.

b 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 115.5.

Figure 16-7: SPSS output

16.11.2 Mann-Whitney Test: intention to carry out other home improvements and overall rate of intended take-up

Ranks

	Do you intend to carry out any other home improvements?	N	Mean Rank	Sum of Ranks
Takeup	no	94	102.24	9610.50
	yes	124	115.00	14260.50
	Total	218		

Test Statistics

	Takeup
Mann-Whitney U	5145.500
Wilcoxon W	9610.500
Z	-1.604
Asymp. Sig. (2-tailed)	.109

a Grouping Variable: Do you intend to carry out an other home improvements?

Figure 16-8: SPSS output

16.11.3 Spearman's Rank Test: overall take-up and motivation level

Correlations

			Takeup	Motivation level overall
Spearman's rho	Takeup	Correlation Coefficient	1.000	.193
		Sig. (2-tailed)		.007
		N	231	195
	Motivation level overall	Correlation Coefficient	.193	1.000
		Sig. (2-tailed)	.007	
		N	195	216

** Correlation is significant at the .01 level (2-tailed).

Figure 16-9: SPSS output

16.11.4 Mann-Whitney Test: Motivation level and intention to take-up at least one measure within the next year

Ranks

	Take-up at least one measure?	N	Mean Rank	Sum of Ranks
Motivation level overall	No	100	88.98	8898.00
	Yes	95	107.49	10212.00
	Total	195		

Test Statistics

	Motivation level overall
Mann-Whitney U	3848.000
Wilcoxon W	8898.000
Z	-2.292
Asymp. Sig. (2-tailed)	.022

a Grouping Variable: Take-up at least one measure?

Figure 16-10: SPSS output

17. Appendix D: Phase 3

17.1 Interview Guide: example

Follow-up research –semi-structured telephone interviews		
(151) Tel: XXXXXXXXXXX 9-5		
1) Have you done any home improvements since you moved in?	Yes	No
2A) YES		
a) What have you done exactly?		
.....		
.....		
.....		
.....		
b) [Non en eff imp] Did you incorporate or consider any energy saving or environmentally friendly materials or products?	Yes	No
What exactly?		
How did you find out about this?		
b) Did you do the work yourself or employ someone to do it?	DIY	Emp
[DIY energy efficiency measure]		
i) Did you find it relatively easy or difficult to get hold of the products or materials you needed?	Easy	Diff
ii) Did you feel you had enough information about what exactly you needed to buy?	Yes	No
iii) Did you feel you had enough information on how to install the measure?	Yes	No
iv) How did you find out what you needed to do?		
.....		
.....		
.....		
[Installer energy efficiency measure]		
i) How did you select the person who did the work?		
.....		
.....		
.....		
ii) Was it relatively easy or difficult to find someone suitable who knew about this kind of thing?	Easy	Diff

Figure 17-1: Follow-up interview guide page 1

iii) Why did you decide to make these improvements? ... What appealed to you about them? [probe]		
iv) Do you think you would have made the energy efficiency improvements if you hadn't received the home energy report?	Yes	No
v) Are you satisfied with the results?	Yes	No
.....		
vi) Does/do the improvement(s) work and look just as you expected? (If not how does it differ?)	Yes	No
.....		
vii) How is/are the improvement(s) benefiting you now? (En eff. m's - Increased comfort, reduced fuel bills etc.? Other - More convenient/functional, better lifestyle)		
viii) Does your home feel better to be in, in anyway? How? (Is it quieter, warmer, does it look better, lighter, more pleasant, feel more homely, more expensive, better quality)	Yes	No
.....		
ix) Has it/Have they changed the way you use the home? How?	Yes	No
.....		
x) Do you think that any of the improvements have increased the value of your home? Which? 1. 2. 3.	Yes	No
	Yes	No
	Yes	No
	Yes	No

Figure 17-2: Follow-up interview guide page 2

2B) NO [2 for those intended en eff m's not yet adopted]																				
a) Are there any improvements that you still intend to make to your home? [List]																				
<p>.....</p> <p>.....</p>																				
c) In the questionnaire you said that you intended to install...[energy efficiency measures] Do you still intend to do this? Condensing boiler Energy saving light bulbs Double glazing Draft-proofing Thermostatic radiator valves Loft or roof insulation And build an extension	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr><td style="width: 50%;"></td><td style="width: 25%; text-align: center;">Yes</td><td style="width: 25%; text-align: center;">No</td></tr> <tr><td style="text-align: center;">Yes</td><td style="text-align: center;">Yes</td><td style="text-align: center;">No</td></tr> <tr><td style="text-align: center;">Yes</td><td style="text-align: center;">Yes</td><td style="text-align: center;">No</td></tr> <tr><td style="text-align: center;">Yes</td><td style="text-align: center;">Yes</td><td style="text-align: center;">No</td></tr> <tr><td style="text-align: center;">Yes</td><td style="text-align: center;">Yes</td><td style="text-align: center;">No</td></tr> <tr><td style="text-align: center;">Yes</td><td style="text-align: center;">Yes</td><td style="text-align: center;">No</td></tr> </table>		Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	
	Yes	No																		
Yes	Yes	No																		
Yes	Yes	No																		
Yes	Yes	No																		
Yes	Yes	No																		
Yes	Yes	No																		
c) What would you say are the main reasons that you haven't yet installed the other measures / any measures? (Has anything actually put you off carrying out the measures that were recommended?)																				
Thermostatic radiator valves..... Loft or roof insulation..... Energy saving light bulbs..... Draft-proofing																				
d) Is there anything that might have helped you to install these measures? What exactly?																				
<p>.....</p> <p>.....</p> <p>.....</p>																				
e) How long do you think you would need to live with the improvement(s) to make it/them worthwhile? 1. Thermostatic radiator valves 2. Loft or roof insulation 3. Energy saving light bulbs 4. Draft-proofing	<table border="1" style="border-collapse: collapse; width: 100%; height: 100%;"> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> </table>																			
f) How long do you expect it would take to financially payback each of the improvements you intend to make? 1. Thermostatic radiator valves 2. Loft or roof insulation 3. Energy saving light bulbs 4. Draft-proofing	<table border="1" style="border-collapse: collapse; width: 100%; height: 100%;"> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> </table>																			

Figure 17-3: Follow-up interview guide page 3

3) Of all the improvements that were recommended, do you think that any of them would increase the value of your home? [List] 1. Thermostatic radiator valves 2. Loft or roof insulation 3. Energy saving light bulbs 4. Draft-proofing	Yes	No	
	Yes	No	
	Yes	No	
	Yes	No	
	Yes	No	
4) Are there any other ways that you think you could improve your home to improve your quality of life or even your health? How exactly?	Yes	No	
.....			
5) Have you ever considered any other types of energy efficiency measures (other than those we've already mentioned)? What exactly?	Yes	No	
.....			
6) a) Have you heard about any of the following things to do with the home?			
b) [If yes, follow up each item with this] Have you ever thought about any of these issues when you have been improving your home? (Specify which)			
c) [In every case follow-up each item with this] Would you be interested in finding out more about any of them? (Specify which)			
Off-gassing by the formaldehyde in certain home products. (building and furniture materials, paints, varnishes and wood preservatives used in the home, can give off toxic gases which have been linked to asthma among other things)	a	b	c
Embodied energy in construction materials (the energy that is used to make the materials and transport it from its source to factories to the shops)			
Solar panels, photovoltaic panels, combined heat and power units (for hot water, for electricity,)			
Rainwater recycling for use in toilets (from your roof to use in things like toilets and washing machines to reduce water consumption.)			
Passive solar gain (used to heat the home(either directly or indirectly through glass)			
Recycling greywater (the water from baths and basins which can be filtered to use again in loos and washers, etc.)			
Heat exchangers (Used in ventilation systems where outgoing warm air is used to heat incoming fresh air)			
7) If you received an energy report next time you moved home, would you prefer it to be provided by a Government approved advice provider or an independent advice provider?	Gov	Ind	

Figure 17-4: Follow-up interview guide page 4

<p>8) The government is intending to make it compulsory for all home sellers to produce a pack of information about the property for all potential buyers to see before they put in an offer to buy it. The pack would include all the survey and legal information you need before you buy the home.</p>		
<p>Would you prefer to receive the energy report as part of this pack of information, or directly from your mortgage lender, as you did?</p>	Pack	Lend
<p>9) Would it be better for you if the energy report information was integrated into the general home condition report or kept entirely separate?</p>	int	sep
<p>10) Are there other times or situations that you think it would be useful to get domestic energy advice, other than after you have just moved?</p>	Yes	No
<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>		
<p>11) Where might it be helpful to get this advice from? (Who would provide it? – e.g. builder, DIY shop etc. etc.)</p>		
<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>		

Figure 17-5: Follow-up interview guide page 5