ENERGY MATTERS

HOME ENERGY RESOURCE

ITS EFFECTS ON ENERGY EFFICIENCY IN THE HOME

APRIL, 2003

Prepared for **THE CENTRE FOR SUSTAINABLE ENERGY**

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INTRODUCTION

Background

The importance of educating young people to be "energy efficient" is now widely acknowledged. Understanding why energy efficiency is important - because it reduces the effects of climate change from the burning of fossil fuels - and understanding how and why energy is wasted in heating and powering homes, these are both key parts of the process of becoming "consciously competent" users of energy, and learning how to minimise humanity's impact on the environment. The Home Energy Conservation Act 1995 acknowledges the role that can be played by education in helping local authorities meet their targets to improve domestic energy efficiency by 30%, as part of the UK's commitment to international targets to reduce the emissions of greenhouse gases which cause global warming.

The Centre for Sustainable Energy has long been interested in developing ideas for energy education. An initial programme of energy education was developed by CSE (with funding from EAGA Charitable Trust and the Energy Saving Trust) and evaluated by New Perspectives and BMRB International between 1996 and 1998. Over 600 households in 5 areas of the UK were involved in this experimental research design: 307 households where children had two different levels of energy education at school, completed a home energy audit and then received advice from an Energy Efficiency Advice Centre; and 300 households where adults where adults completed a home energy audit (by 'phone or self completion questionnaire) and also received EEAC advice. The results of this study showed that young people could collect pretty reliable data and play a very influential role in helping to change their parents' behaviour and encouraging them to install energy efficiency measures at home.

Following the success of this project the Centre for Sustainable Energy secured funding from Shell Education Service to develop a more ambitious Home Energy Resource – *Energy Matters* – for distribution to a number of local education authorities, each of which it was hoped would involve several primary and secondary schools. *Energy Matters* was first distributed during 1999, and by April, 2003 was being used by hundreds of schools in the UK.

Energy Matters is designed to provide teachers with a complete teaching pack which covers several areas of the National Curriculum to Key Stage 2 and Key Stage 3. Its stated objectives are to promote awareness of energy conservation issues, and to encourage behaviour which conserves energy, among both children who receive the education directly, and among adults (i.e. the children's parents, guardians or carers) who become more aware of ways in which energy savings can be made. The pack includes materials for use in lessons at school, for conducting energy surveys at home, for analysing the data collected, for practical experiments and for making energy saving devices, and for producing recommendations to take home. Some children also designed brochures or TV commercials, and made recommendations about energy efficiency in the school.

It was in order to evaluate the effects of *Energy Matters* on the behaviour of these children's parents, guardians and carers (hereafter referred to collectively as "parents") that the Centre for Sustainable Energy again asked New Perspectives to help them provide independent evidence of its impact by conducting telephone interviews with parents. CSE themselves conducted semi-structured interviews with teachers and held discussion groups with children.

Purpose of the Research

The purpose of this research was to evaluate the effects of the *Energy Matters* education of children on their parents' activities at home. The specific objectives were to see whether *Energy Matters*:

- Changed parents' behaviour in ways likely to conserve energy.
- Encouraged parents to install any energy saving measures at home – e.g. low energy light bulbs, draughtproofing and insulation.
- Encouraged discussion of energy conservation at home, rewarding children for making savings, or seeking further energy advice.
- Played as great a role a other sources of influence on behaviour – e.g. TV, books or magazines, advice from friends, fuel companies or EEACs etc..
- Raised parents' or children's interest in energy efficiency.
- Had any effect on fuel bills.
- Produced any other benefits in the home.

Research Methods

In order to meet the above research objectives, the Centre for Sustainable Energy commissioned New Perspectives (who had conducted the 1997/8 research) to design and carry out a Telephone Survey among a sample of parents whose children had been educated around 12 to 6 months earlier by teachers using the *Energy Matters* Home Energy Resource.

New Perspectives designed a Telephone Questionnaire to meet these objectives, which was based on our experience of the 1997/8 Education Research and on our experience of evaluating the effects of advice from Energy Efficiency Advice Centres. New Perspectives in turn commissioned the telephone fieldwork from NFO – a London based research agency with which we do a lot of evaluation work on energy efficiency, and where we have given interviewers some training on energy efficiency measures. This Telephone Questionnaire was tested in a small-scale Pilot Survey at NFO on 17th December. Interviewers were briefed beforehand by Robin Sadler of New Perspectives and Caroline Heijne of CSE in London, who also monitored some of the pilot interviews. Following this Pilot some very minor changes were made to the questionnaire, but the 10 pilot test questionnaires could still be included in the main sample. It was also decided (in the main survey) to tape record answers to the one open-ended question (Q17) about ways in which children had influenced their parents to save energy at home.

In order to provide the sample of parents whose children's education has included use of the *Energy Matters* Home Energy Resource, the Centre for Sustainable Energy asked a number of schools to seek the consent of parents to be interviewed over the telephone. This process was not as productive as had been hoped, and only about 40 names were available for the Pilot. But the identities and telephone numbers of some 229 parents (of children at 14 schools) were available to New Perspectives and NFO by early February, 2003 and the main fieldwork was conducted between 19th February and 9th March, 2003. 148 interviews were completed – an excellent response rate of 65% of the sample available. Respondents' children attended 7 primary schools, 5 secondary schools and one special school. 89 of the parents had children aged 6-11 years at the time of *Energy Matters*, and 52 had children aged 12 to 18.

Initial Tables of the results were produced by NFO from their CATI system, and the data are also held in SNAP format by New Perspectives, so that any extra analysis can be done readily.

It had originally been hoped to conduct this research on a larger scale, involving around 600 interviews, but this was not feasible owing to the relatively small numbers of parents who agreed to be interviewed. But much has been learned about the problems of securing parental co-operation.

Although the sample of 148 interviews is not as large as originally hoped, and too small for detailed further analysis, we still feel it provides a useful indication of what can be achieved through the *Energy Matters* programme.

Arrangement of the Report

This Introduction is followed by the Findings section, which outlines the main findings and includes tables showing the key data from the 148 interviews. A short Conclusions section follows the Findings.

Finally comes the Appendix which includes an Analysis of the Sample, Verbatim Responses to Q17, Notes on the Schools Contributing Samples to this Research, the Telephone Questionnaire and some Supplementary Analysis done following the Presentation on 7th May.

All data are held by New Perspectives and by NFO, and additional analysis can be carried out if required.

A separate report by CSE covers the findings from the other parts of this research which they conducted themselves: semi-structured interviews with school teachers and discussion groups with children, all of whom took part in *Energy Matters.* This New Perspectives' report is designed to supplement the CSE report by showing the effects of *Energy Matters* on parents' behaviour.

FINDINGS

Parents' recall of *Energy Matters* activities their children did at school & at home

At the start of the telephone interview parents were asked some introductory questions about their home, tenure and type of heating system and the results are shown in Analysis of the Sample in the Appendix.

The first questions about *Energy Matters* itself covered how many children took part, and when. In most households (83%) only one child had taken part in *Energy Matters*, but in 11% of homes two or more children had done so. In 5% of cases parents could not say how many had been involved, which suggests that the parents' involvement in these few cases may have been minimal.

Parents' recall of *when* their children had done *Energy Matters* was also hazy in many cases, as most recalled it running as late as the *autumn* of 2002, whereas several of the schools who contributed names of parents for interview mentioned using the pack *earlier* in 2002. On the whole though it seems that most schools started using *Energy Matters* in the spring or summer terms, while parents' most recent recollections may have been the final stages when children brought home their recommendations after analysing their home energy audit data or when they continued to make suggestions or take actions based on what they had learned.

Only 8% of parents could not remember anything about what their children had done as part of *Energy Matter*. Most remembered several activities, a shown in Table 1 below:

TABLE 1 **Recall of children's *Energy Matters* activities by parents**	**All Respondents**	**Any action taken**	**No action taken**	**Children 6-11**	**Children 12-18**
Base: All Parents	148 100%	118 100%	30 100%	89 100%	52 100%
No. who recalled children...	%				
Doing lessons at school on energy	83	90	57	87	87
Bringing home recommendations on measures to install	64	73	30	73	56
Doing Energy Survey of home	64	70	37	67	63
Suggesting behavioural changes	62	71	27	70	58
Doing practical experiments at school	60	69	27	65	58
Designing energy saving brochure	43	46	30	36	58
Being awarded Certificate of Energy Awareness by school	30	37	3	34	27
Suggesting savings on fuel bills from installing measures	16	19	3	18	13
Making any draught excluders	16	19	3	19	12
Designing a website	7	8	3	6	10
Designing a TV commercial on energy saving as part of schoolwork	3	4	-	3	4
Don't know what they did	8	3	27	6	2
Average no. activities recalled	**4.5**	**5.1**	**2.2**	**4.8**	**4.4**

Those parents who had taken any energy saving actions since their children took part in *Energy Matters* remembered over twice as many activities which their children had taken part in (5.1) compared to the minority of parents (20%) who had done nothing to save energy since then and who recalled on average only 2.2 of their children's activities. This suggests

that the greater the range of *Energy Matters* activities the child is involved in, and/or the more they discuss it with their parents, the more likely it is that the parents will take some action to save energy.

Because the total sample is rather small (only 148 interviews) we cannot analyse these results in great detail with any reliability, but it does seem that older children (12-18) may have been slightly less willing to discuss with their parents any recommendations on energy saving measures to install or behavioural measures to adopt.

But over 50% of parents remembered their children doing the following: doing energy lessons (83%) or practical experiments at school (60%), doing an energy survey of the home and bringing home recommendations on measures to install (64%), and suggesting behavioural changes to save energy (62%). All this is very encouraging as it suggests that for most of these households the children's *Energy Matters* activities had quite some impact on their parents.

Parents' behavioural changes since *Energy Matters*

We next asked parents whether they themselves had made any of a number of behavioural changes since their children had taken part in *Energy Matters*, and we found that around three quarters of them (74%) had made at least one change which was likely to save energy, and that those who had changed their behaviour had made around 4.4 changes each on average. Although we felt that older children might be passing on fewer recommendations, it does seem that some parents of older children have heeded any advice just as much as those of younger children, because the pattern of actions taken since *Energy Matters* is very similar, as Table 2 shows. However there are also slightly more parents of older children who have done nothing (25%). But the most dramatic effect seems to have occurred where parents recall their children suggesting the possible savings which might be made through energy conservation. Although the sample is small (only 24 households) these households have done more than other households in terms of changing their behaviour:

TABLE 2 **Behavioural changes adopted by parents since *Energy Matters***	**All Respondents**	**Any action taken**	**Parents told of possible savings**	**All Children 6-11**	**All Children 12-18**
Base: All Parents	148 100%	118 100%	24 100%	89 100%	52 100%
	%	%	%	%	%
Turning off unneeded lights	58	73	79	61	60
Discussing how to save energy	54	68	75	58	52
Controlling heating carefully	45	56	67	44	50
Not leaving appliances on standby	42	53	63	43	46
Closing curtains/blinds earlier	41	52	71	40	46
Habits using cooker/kettle/fridge	41	51	67	40	44
Controlling hot water carefully	31	39	50	29	37
Looking at meters more often	16	20	25	13	23
Rewarding kids for energy savings	16	19	29	15	17
Keeping record of energy used	11	14	13	10	13
ANY BEHAVIOURAL CHANGES	76	95	96	81	75
NOTHING DONE	24	5	4	18	25
Average no. of behavioural changes	**3.5**	**4.4**	**5.4**	**3.5**	**3.9**

The overall degree of behavioural change observed in this *Energy Matters* survey is broadly similar to that which we measured in our 2002 survey on *The Benefits of Energy Advice* for the Energy Advice Providers Group of the Energy Efficiency Partnership for Homes (published by EST March, 2002). There we found that about two thirds of behavioural advice was followed by households which received such advice, and that the more or less comparable figures for some of the above actions were as shown below in Table 3. But here again we should take into account the apparently dramatic additional effect when children tell their parents about the possible savings: amongst this small group (only 24) the levels of behavioural change are *higher* than we found among households which received advice from other sources:

TABLE 3 **Behavioural changes adopted by parents since *Energy Matters* – compared to *Benefits of Energy Advice* Survey 2002**	***Energy Matters*** **All Respondents:** **148**	**Parents told by children of possible savings:** **24**	***Benefits of Energy Advice* Survey 2002** **% of respondents receiving each type of advice who followed it** **Total Sample: 1900**
No. who are now doing these things:	%	%	%
Turning off unneeded lights	58	79	54
Discussing how to save energy	54	75	n/a
Controlling heating carefully	45	67	56
Not leaving appliances on standby	42	63	14
Closing curtains/blinds earlier	41	71	72
Habits using cooker/kettle/fridge	41	67	51
Controlling hot water carefully	31	50	56
Looking at meters more often	16	25	n/a
Rewarding kids for energy savings	16	29	n/a
Keeping record of energy used	11	13	n/a
ANY BEHAVIOURAL CHANGES	76	96	67
NOTHING DONE	24	4	33
Average no. of behavioural changes	**3.5**	**5.4**	n/a

This suggests that behavioural advice received by parents via their children can be just about as motivating as behavioural advice received from fuel companies, EEACs and fuel poverty groups (the main advice providers included in the *Benefits of Energy Advice* Survey) and possibly even more so when children suggest the possible savings to be made.

Energy saving measures installed since *Energy Matters*

Parents of children who had taken part in *Energy Matters* were asked whether they had bought or installed any energy efficiency measures since then. 54% of parents had already bought or installed at least one measure, and the numbers installing each type of measure (again compared to the 2002 *Benefits of Energy Advice* survey are shown overleaf in Table 4.

These data suggest that most parents whose children take part in *Energy Matters* are likely to install one or two of the lower cost measures (e.g. low energy bulbs or draughtproofing) but less likely to install more expensive measures (like loft and cavity wall insulation) which are often installed by other recipients of advice *on a grant.* This is probably because parents received little or no information from their children about the availability of grants. By comparison, people who received energy advice from fuel companies and EEACs (i.e. respondents on the *Benefits of Energy Advice Survey*) did install more of the grant-aided measures, and well over half of such measures were installed on a grant.

Nevertheless, *Energy Matters* has shown that it can encourage the installation of significant numbers of energy saving measures in the homes of parents whose children take part in this school project. The influence of younger children seems slightly greater than that of older children, perhaps because slightly more younger children discuss energy efficiency with their parents (58% - see Table 1) than do older children (52%).

TABLE 4 **Energy efficiency measures installed by parents since *Energy Matters***	**All *Energy Matters* Respondents**	**Children 6-11**	**Children 12-18**	***Benefits of Energy Advice* Survey 2002- Respondents who received advice on measures to install**
Base: All Parents	148 100%	89 100%	52 100%	1229 100%
No. who had since installed:	%	%	%	%
Low energy bulbs (CFLs)	40	46	33	30
Energy efficient appliances	15	16	15	2
Draughtproofing	11	13	10	20
Double/secondary glazing	10	12	8	7
Heating timer/programmer	9	11	8	2
Loft insulation	7	8	6	32
Block gaps in skirting	7	8	8	n/a
Floor insulation	6	8	4	1
Hot water timer	5	8	2	1
Solid wall insulation	5	8	2	1
Loft hatch insulation	5	4	6	n/a
Loft hatch draughtproofing	4	4	4	n/a
Cavity wall insulation	3	2	4	19
New CH boiler	3	4	2	6
Hot tank thermostat	3	2	4	2
Pipe insulation	3	2	4	2
Radiator foil	3	6	-	3
Radiator shelves	2	3	-	1
Hot water jacket	2	1	4	7
Room thermostat	-	-	-	2
Thermostatic rad valves (TRVs)	-	-	-	2
ANY MEASURES	54	58	52	70
Average no. measures installed	**1.4**	**1.7**	**1.2**	**1.5**

There is again strong evidence that parents who recall more of their children's *Energy Matters* activities are likely to install more energy efficiency measures. In the next table (Table 5 – overleaf) we show the numbers of parents who recall each activity, how many of them have since installed any measures, and how many measures on average they have each installed.

The results show clearly that parents who recall more of the activities which other parents don't recall tend to be more likely to install any measures within a few months of their children taking part in *Energy Matters*, and that they are also likely to install more measures each on average. This seems particularly true where children suggested the possible savings, made draught excluders or designed a website, although the sample sizes are too small for these results to be conclusive.

TABLE 5 **Measures installed by Activities recalled**	**Base: No. of Parents recalling each activity:**	**% of whom installed any Measures since:**	**Average No. of Measures installed**
CHILDREN'S ACTIVITIES RECALLED			
Doing lessons at school on energy	123	59%	1.5
Bringing home recommendations on measures to install	95	63%	1.7
Doing Energy Survey of home	94	62%	1.7
Suggesting behavioural changes	92	64%	1.7
Doing practical experiments at school	89	66%	1.9
Designing energy saving brochure	63	57%	1.5
Being awarded Certificate of Energy Awareness by school	45	64%	2.1
Suggesting savings on fuel bills from installing measures	24	71%	**2.4**
Making any draught excluders	23	78%	**2.7**
Designing a website	10	90%	**2.7**
Designing a TV commercial on energy saving as part of schoolwork	5	100%	2.4
Don't know what they did	12	25%	0.8
ALL PARENTS	**148=100%**	**54%**	**1.4**

Energy saving measures planned for installation

Although most of the children in the households in our sample had started on *Energy Matters* some 5 to 11 months before we interviewed their parents, there was evidence that some parents may only have received the recommendations about measures to install some two or three months before we interviewed them. Some parents may therefore still be planning measures on their children's advice, so we asked them whether they were. Combined results for both measures already installed, and those planned for the next six months, are shown below:

TABLE 6 **Energy efficiency measures installed or planned by parents since *Energy Matters***	**All Respondents** Measures installed	**All Respondents** Measures planned	**All Respondents** Measures installed or planned	***Benefits of Energy Advice* Survey 2002- Respondents who received advice on measures to install**
Base: All Parents	148 100%	148 100%	148 100%	1229 100%
No. who had since installed:	%	%	%	%
Low energy bulbs (CFLs)	40	2	41	30
Energy efficient appliances	15	2	16	2
Draughtproofing	11	3	14	20
Double/secondary glazing	10	7	16	7
Heating timer/programmer	9	1	9	2
Loft insulation	7	2	9	32
Block gaps in skirting	7	1	8	n/a
Floor insulation	6	1	7	1
Hot water timer	5	1	6	1
Solid wall insulation	5	-	5	1
Loft hatch insulation	5	1	5	n/a
Loft hatch draughtproofing	4	1	5	n/a
Cavity wall insulation	3	1	4	19
New CH boiler	3	3	6	6
Hot tank thermostat	3	-	3	2
Pipe insulation	3	1	3	2
Radiator foil	3	2	5	3
Radiator shelves	2	3	5	1
Hot water jacket	2	1	3	7
Room thermostat	-	3	3	2
Thermostatic rad valves (TRVs)	-	3	3	2
ANY MEASURES	54	20	62	70
Average no. measures installed	**1.4**	**0.4**	**1.8**	**1.5**

These combined results for measures already installed and still planned following children's involvement in *Energy Matters* suggests that the influence of this educational programme is not far short of that exerted by professional advice from EEACs and fuel companies (as shown by the *Benefits of Energy Advice* results). But there is still a sizeable difference on those measures where *grants* play a significant part when professional advice is given – e.g. loft and cavity wall insulation, and perhaps hot water tank jackets. We have concluded that not enough signposting of grants is yet done through *Energy Matters*.

Who paid for (or will pay) for measures installed or planned

The hypothesis above about the role of grants is borne out by answers to questions about who had paid (or would pay) for measures which had already been installed, or were planned for the next six months. We found that of the 319 measures installed or planned, 86% would be paid for by the householders, 7% by landlords, 5% by the Council, and only 3% by grants. On our *Benefits of Energy Advice* survey we found that *well over half* of all the loft insulation, cavity wall insulation and draughtproofing was paid for by grants to which advice centres had directed callers.

We have therefore concluded that the *Energy Matters* advice from children really needs to be backed up by more information on grants and other sources of advice (such as EEACs and fuel companies) if it is to be truly as effective as other types of advice. Many households (and especially those on low incomes) need the incentive of a 100% grant or at least a substantial discount to encourage them to install those energy efficiency measures which could make the biggest savings in their homes – e.g. cavity wall insulation, loft insulation, efficient condensing boilers and modern heating controls. Such households also need the support of Energy Efficiency Advice Centres, or fuel suppliers, who can direct them to the most beneficial schemes and help them with their applications.

We feel that a one-page addition to the *Energy Matters* resource could help communicate the advantages *to all households* of seeking further advice and grants. That further help is available to *all households* needs to be a vital part of the communication strategy, to overcome any embarrassment or reluctance that some households may have to "spongeing" off the state. Seeking help for improved energy efficiency needs instead to be seen as "socially responsible", in just the same way as sober driving, recycling or sending the kids to school is socially responsible.

Why some households haven't installed or planned any measures

36% of our sample of 148 parents had not installed any measures yet, and nor were they planning to. When they were asked why they replied as follows:

TABLE 7
Why no measures installed or planned

Base: All Parents installing/planning no energy efficiency measures:	53 100%
No. who gave reasons as:	%
Happy as we are/done enough	36
Can't save more/DK what more to do	25
Already have recommended measures	19
Lack of time/not got around to it	8
Not thought about it/lazy	6
Lack of money/grant/high cost/not convinced of savings	9
Planning to move	8
Not our house/landlord should do it	4
Lack of information from school project	4

Parents' main reasons for not doing anything to improve the energy efficiency of their homes seems to be that they are *happy as they are* or that they feel they have *done enough*, and don't know what more they could do to be more energy efficient.

It is unlikely that all these homes are truly "energy efficient"; it is more likely that these parents have received less convincing advice from their children than they might perhaps have received from a professional source of energy advice.

To check this we have run some additional analysis on what they recall of their children's *Energy Matters* activities, and whether they have discussed energy saving with their children.

As Table 8 (overleaf) shows, we found that the parents who had installed or planned no energy efficiency measures also recalled fewer children's activities, and only around one third (36%) had any discussions at home on how to save energy:

TABLE 8: Recall of children's *Energy Matters* activities by parents	**All Respondents**	**Any action taken**	**No measures installed/ planned**	**No action taken at all**
Base: All Parents	148 100%	118 100%	53 100%	30 100%
No. who recalled children...	%			
Doing lessons at school on energy	83	90	73	57
Bringing home recommendations on measures to install	64	73	53	30
Doing Energy Survey of home	64	70	54	37
Suggesting behavioural changes	62	71	49	27
Doing practical experiments at school	60	69	42	27
Designing energy saving brochure	43	46	37	30
Being awarded Certificate of Energy Awareness by school	30	37	22	3
Suggesting savings on fuel bills from installing measures	16	19	10	3
Making any draught excluders	16	19	7	3
Designing a website	7	8	2	3
Designing a TV commercial on energy saving as part of schoolwork	3	4	-	-
Don't know what they did	8	3	14	27
Average no. activities recalled	**4.5**	**5.1**	**3.5**	**2.2**
Discussed how to save energy at home	54	68	36	-

Whether other energy advice on energy efficiency has been sought

We had hypothesised that some parents might be encouraged by the information on energy efficiency provided through their children to ask *other sources* for similar or more comprehensive advice, or that they might become more aware of *receiving* energy efficiency advice (e.g. unsolicited and through leaflets etc.). In this survey we found that 7% of parents had indeed sought any such advice since their children took part in *Energy Matters*, and that 14% recalled receiving any such advice. The sources of this advice are shown in Table 9:

TABLE 9: Energy advice sought/given since *Energy Matters*	**Advice asked for**	**Advice given by**
Base: All Respondents No. recalling asking for/receiving advice from:	148 100%	138 100%
Builder/heating or insulation installer	3%	4%
Council/from Council after taking part in a (HECA) survey	2%	4%
Friends/relatives/work colleagues	-	3%
Gas company	1%	2%
Electricity company	1%	1%

Architect	1%	1%
Energy Efficiency Advice Centre	-	1%
Glazing company	-	1%
Internet	1%	1%
Housing Association	1%	-
NONE/Don't know	93%	86%

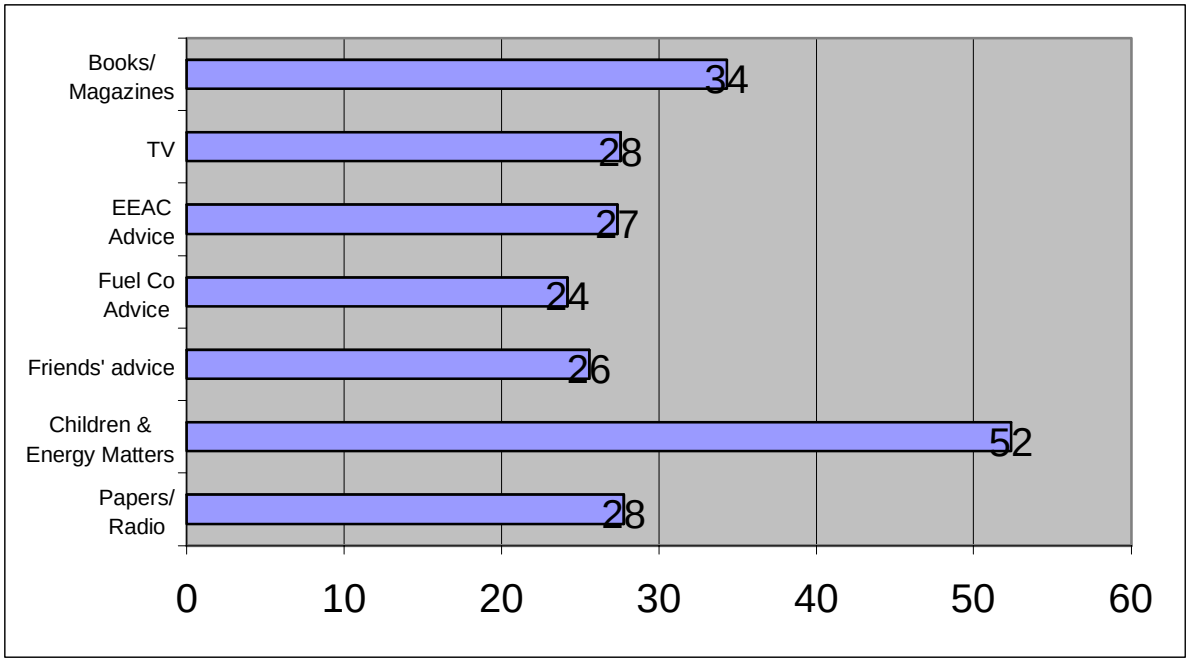
At first sight this may look encouraging, but normally we would expect about 5% to 10% of typical UK households to seek energy advice within any twelve month period (from our experience of evaluating EEACs and HECA programmes) and we would also expect as many as 30% to 35% of typical households to recall receiving such advice within the last 12 months. Therefore we do not feel that *Energy Matters* has increased the likelihood of parents seeking or noticing energy efficiency advice.

Factors which have influenced parents' energy efficiency decisions

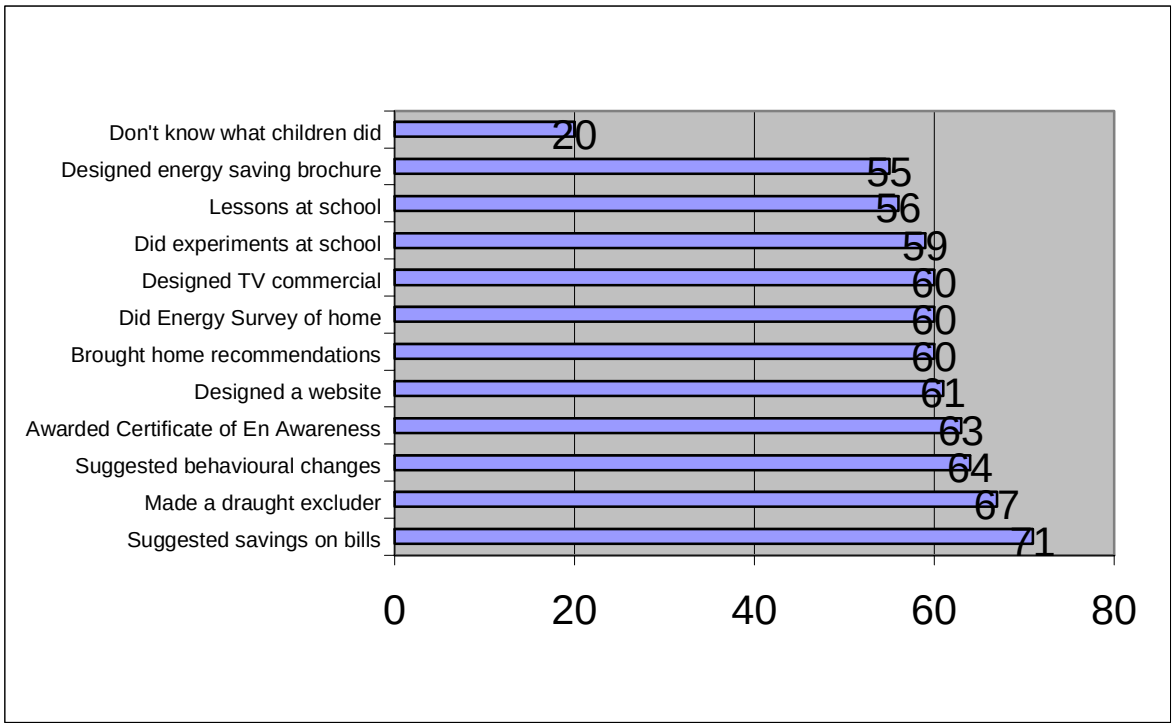
All 126 households which had changed their behaviour in any way, or installed or planned any energy efficiency measures following their children's involvement in *Energy Matters*, were asked:

> *"I would now like you to think about all the factors that have influenced your decisions to install or plan energy efficiency measures in your home or to change your behaviour to save energy. Please can you tell me, on a scale of 1 to 5, how much each of the following have influenced you, where 5 means it has influenced you a lot and 1 means it has not influenced you at all."*

Seven possible influential factors were then read out in turn, with the order rotated between interviews to minimise any positional bias. Based on the answers people gave we have calculated the influence of each factor on a 0-100 point scale. A score of 100 would mean all agreed it influenced them "a lot", and a score of 0 would mean all agreed it influenced them "not at all". The results were as follows, showing that the influence of "children and *Energy Matters"* was far greater than all other factors in these households' decisions to do something about energy efficiency:



We also analysed these data to see whether the degree of the children's influence seemed to depend on what activities they had been involved in at school (or at least as far as the parents could remember). We found some marked differences in the results: where parents could not recall what their children had done as part of *Energy Matters* the influence of the children was very low (only 20 out of 100), but in those homes where children had suggested possible savings on the fuel bills their influence was greatest (71 out of 100). The influence of the children on energy saving behaviour was also higher than average (52) if their parents remembered the children being involved in most of the *Energy Matters* activities:



This suggests that the more involved the parents became in their children's *Energy Matters* schoolwork, and the more they became involved in the energy audit, the recommendations for behavioural changes and energy efficiency measures, and particularly where they learned about potential savings from their children, the greater was the effect of *Energy Matters* on the parents' behaviour and energy awareness.

How parents have been influenced by their children to save energy at home

All 106 parents who said that their children had been at least partly responsible for influencing their decisions to make energy efficiency changes at home were asked how they had been influenced by their children. The complete set of answers to this open-ended question are shown in the Appendix (see Verbatim Responses to Q17). But the quotations which follow show how the influence of children who have taken part in *Energy Matters* has ranged from simple behavioural suggestions to switching to low energy bulbs, fitting thermostats and even double glazing. In some cases it has also met parents' desires that children should be educated to be more modest consumers generally.

"I think it's made us more aware of leaving the lights on and keeping doors closed - to keep the heat in. ***What difference made****? It has cut down on the cost of the electricity and the house is being kept warmer.* ***What else****? Because he was so keen on saving energy and being more environmentally friendly, it has made you think more about it."*

"My daughter's told me quite a lot about it - changing the light bulbs, not leaving the TV on standby. ***What difference made****? It's made quite a lot of difference because I got an electric bill the other day and it was, compared to my other bills, it was quite cheap.* ***What else****? Nothing."*

"I think that the enthusiasm they've shown, the fact that he's come home with ideas and brought it to our attention - and is very keen and aware of energy saving. We've actively started using the timer on our heating and water heater. We turn appliances off and light bulbs off. We're having double glazing replacing our secondary glazing. ***Anything else****? He enjoyed the project."*

"It's influenced me into realising that by switching off the lights and putting the heating down and keeping doors closed, that the energy will be used more efficiently. ***What difference made****? It has made me more aware of energy and how it's used."*

"Mostly with leaving lights on and not being in a room. Closing the door when you walk out of the room and the TV - walking out and leaving it when nobody's watching it. They're always on to us about doing that. ***What else****? They're fairly aware of saving energy especially after the survey because they were made to walk around and note down where the radiators were, where the lights were and so it's opened their eyes to everything now and made them more aware of saving energy. They are confidently behind us now."*

"He was very good at explaining how energy efficiency could save us money and make our home actually more comfortable, so the information he brought home was very concise and backed up. It made us think about these things. ***What else****? Basically to be more aware day-to-day how we can save energy without changing our lifestyle in a great way, just things like switching off lights, having a kettle which can boil just a cup of water. Turning down the thermostat by a couple of degrees, having thermostats fitted - that sort of thing."*

"By being interested, his attention has been provoked at school so he's interested and become more involved in real matters like saving energy and costs in the home. ***What else****? It's reminded me, it made me feel, thank God, it's being talked about at that level. Sometimes I feel like in my little ways of trying to recycle and save energy, that it's all a bit of a waste against the rest of consuming populace who don't seem to give a toss, so it's actually quite helpful to me that my child was being encouraged to think about it and it should be part of everyone's education, it ought to be and they should carry on, it shouldn't be a one off thing it should be constantly practiced and maybe they should be educated as well not to be vast consumers and eat fast food and have all that explained to them so they can make considered choice which they can't make without the right knowledge. I allow and encourage my child to watch exposé programmes about what burgers are really made of, it's not usual, the population is*

lulled into a false sense of security that someone cares about their well-being when no-one really does."

We have also tabulated all the ways in which parents said (in answering this question) that they had been influenced by their children. The following Table 10 shows all the specific ways mentioned:

Table 10 **Ways in which children have influenced their parents**	**All Parents whose children influenced them: 106=100%**
Turning off lights	39%
Made more aware	23%
Being careful with fuel/energy	22%
Energy efficient light bulbs	15%
Switching off plugs/TV/computers etc	14%
Not leaving appliances on standby	12%
Closing doors	11%
Controlling heating	10%
Children more aware at/from school	10%
Children more aware	10%
Closing curtains	8%
Draft excluding/sealing round windows/insulation/double glazing	8%
Recycle more	6%
Not filling up kettle	6%
Cooker awareness/position	3%
Radiator shelf/reflector	3%
Reduce temperature of washing machine	3%
Save/not waste water	3%
More interest	2%
Keeping freezer well stocked	1%
Lower wattage bulbs	1%
Placing lids on pans when on hob	1%

But what is perhaps most notable is that the vast majority of mentions are behavioural changes. Apart from low energy light bulbs (which 40% of parents bought following *Energy Matters* and which 15% mentioned here) other energy saving devices are rarely mentioned; there are just a few mentions of draughtproofing, insulation, double glazing and radiator shelves or reflectors. This suggests that there may be some parental resistance to accepting even written recommendations from children that relatively expensive measures ideally need installing in these homes – extra loft insulation and cavity wall insulation, for example. Some of this resistance may be due to the expense of these items, and because few people know these measures may be available on a 100% Warm Front grant, or at perhaps a 50% discount from gas and electricity companies.

How interested parents and children are now in saving energy at home

All 148 parents/carers/guardians in our sample were asked how interested they felt their children (who took part in *Energy Matters*) now were in saving energy at home, how interested they themselves were, and also whether their interest in saving energy had increased or not since *Energy Matters*. Results are shown below in Table 11.

TABLE 11 **Interest in saving energy now, and whether more/less than before**	**Among Children**	**Among Parents**
Base: All Respondents (Parents):	148 100%	148 100%
No. of respondents who felt their children/they were:	%	%
Very interested in saving energy at home	20	49
Fairly interested in saving energy at home	47	41
Not very interested in saving energy at home	16	4
Not at all interested in saving energy at home	9	1
Don't know/no reply	8	5
No. of respondents who felt their children/they were.....than before:		
More interested than before	63	46
About the same as before	30	49
Less interested than before	2	-
Don't know/no reply	5	5

These results show that most parents are now either *very interested in saving energy at home* (49%) or *quite interested* (41%), and that almost half of them are *more interested than before* (46%).

Parents, on the whole, do not think that their children are as interested as they are – only 20% consider their children *very interested* and 47% *quite interested.* But most parents do agree that their children are now *more interested than before* (63%).

All this suggests that *Energy Matters* has done much to raise interest in energy efficiency among both parents and children, and that, if anything, many parents are now more interested in energy efficiency then their children.

Changes in fuel bills since *Energy Matters*

Raising people's interest in energy efficiency is only beneficial if people are able to cut their fuel bills, or live in warmth and comfort where previously they were cold. We therefore asked parents who had taken any action since *Energy Matters* whether they thought their fuel bills had been lower, higher, or about the same since they took measures to try to use energy more efficiently.

Some 40% of these parents reported that their fuel bills were now lower, 41% felt they were the same, 2% that they were higher, and 18% felt it was too early to tell or did not know. Amongst those who felt their fuel bills were now lower the average saving per quarter was around £13, while the two households which reported higher bills had bills around £10 higher per quarter. This pattern is similar to that which we found in our 2002 *Benefits of Energy Advice* Survey (see Table 12) which again suggests that energy advice delivered by children, following energy education through *Energy Matters*, can produce average savings comparable to that from professional energy advice.

TABLE 12 **Savings from energy efficiency measures following children's education via *Energy Matters***	**All parents taking action following *Energy Matters***	***Benefits of Energy Advice* Survey, 2002**
Base: Respondents taking action following *Energy Matters*/advice	118 100%	1900 100%
No. of respondents who reported:	%	%
Bills lower	40	34
Bills the same	41	40
Bills higher	2	5
Too early to tell/don't know	18	21
AV. SAVING PER QUARTER WHERE BILLS LOWER	£13	£17
AV. INCREASE PER QUARTER WHERE BILLS HIGHER	£10	£29

Amounts spent on energy saving measures

Almost half (45%) of our sample of 80 parents who had installed any energy efficiency measures had spent no more than £50 on them; most of these households had installed CFLs (low energy lamps) but a few had also installed some draughtproofing, a heating or hot water timer, or radiator foil. But half our households had spent rather more than this, ranging up to 4% who had spent over £2,000 – on 28 measures among only three households. This helped raise the average expenditure to £543 per household where any measures had been installed.

TABLE 14 **Expenditure on energy efficiency measures since children did *Energy Matters***	**All parents installing measures since *Energy Matters***
Base: All installing measures since *Energy Matters*	80=100%
No. who spent..... on energy efficiency measures since *Energy Matters:*	%
Up to £50	45
£51-£100	6
£101-£200	8
£201-£300	3
£301-£400	1
£401-£500	4
£501-£700	5
£701-£1,000	3
£1,001-£1,500	1
£1,501-£2,000	1
Over £2,000	4
Nothing – all cost free measures	1
Nothing – all paid by Grant	3
AVERAGE SPENT	£543

This level of expenditure on energy efficiency improvements is broadly comparable to that we have measured in the past among clients of Energy Efficiency Advice Centres, whose clients each spent on average between £522 and £739 per annum between 1995 and 1997.

Other benefits noticed since *Energy Matters*

All 118 households which had taken any action since their children took part in *Energy Matters* were asked whether their homes were now warmer or more comfortable, colder or about the same; we also asked them whether they had changed their use of their heating or appliances and noticed any other benefits since installing measures. Results are shown in Table 15, below, and compared with results from the 2002 *Benefits of Energy Advice* survey:

TABLE 15 **Other benefits noticed since children took part in *Energy Matters***	**All households taking any action since *Energy Matters***	**All households following advice on *Benefits of Energy Advice Survey 2002***
Base: All Households taking action since Energy Matters:	118 100%	1247 100%
No. who said their Home was now:	%	%
Warmer, more comfortable	41	63
About the same	55	31
Colder, less comfortable	3	1
Too early to tell/don't know	2	5
No. who had.... to their Heating:		
Turned heating up/had it on longer/heated more rooms	4	n/a
Left heating about the same	46	n/a
Turned heating down/had it on less/in fewer rooms	47	n/a
No. who had.... with Lights & Appliances:		
Used lights/appliances more	3	n/a
Used lights/appliances about the same	43	n/a
Used lights/appliances less	54	n/a
No. who had noticed Other Benefits:		
Less draughty	37	46
Less condensation	25	31
Better light	16	n/a
Fewer health problems such as coughs, colds, asthma	14	23
Less damp	13	13
Less mould	9	11
Others	3	n/a
Don't know/too soon to tell	47	-

Quite a few households (41%) had noticed that their home was now *warmer and more comfortable* having followed some of the tips brought home by their children, even though many households had also turned down their heating or had it on in fewer rooms (47%). Over half the households had used their lights and appliances less (54%). These changes in behaviour help explain the savings which some households are already noticing. Slightly more people from our *Benefits of Energy Advice* survey had found their homes more comfortable (63%) but more of these households had installed substantial grant-aided measures like loft and cavity wall insulation, so this is to be expected.

Nevertheless, many households whose children took part in *Energy Matters* have also noticed other benefits besides warmer homes: fewer draughts (37%), less condensation (25%), better light (16% - from using CFLs), and fewer health problems (14%). Again these benefits have not been noticed to quite the same extent as on our 2002 *Benefits of Energy Advice* survey, but they are substantial.

Typical temperatures in the home, ease of paying bills & amounts spent on fuel

In our telephone interviews with parents whose children had taken part in *Energy Matters*, we finally explored their experiences of typical temperatures in their homes, ease of paying fuel bills, and amounts spent on fuel.

TABLE 16 **Temperatures and Fuel Bills**	**All Households**	**Action taken**	**No Action taken**
Base: All Households	148 100%	118 100%	30 100%
No. who said typical temperature in home last winter was:	%	%	%
Sometimes too hot	7	8	-
Always warm enough	51	46	73
Usually warm enough but sometimes too cold	37	40	27
Often too cold	2	3	-
Always too cold	1	2	-
Don't know	1	2	-
No. who found their fuel bills:			
Very easy to pay	14	14	13
Quite easy to pay	32	30	40
Neither easy nor difficult	41	42	37
Quite difficult	11	14	3
Very difficult	1	-	3
Don't know	1	-	-
No. who spent.....on fuel each year:			
Up to £250	2	3	-
£251-£450	10	11	7
£451-£650	22	21	23
£651-£850	20	21	13
£851-£1,050	11	13	7
£1,051-£1,250	9	4	30
£1,251-£1,450	1	1	3
Over £1,450	3	3	3
Don't know/refused	22	24	13
AVERAGE ANNUAL FUEL BILL	**£741**	**£702**	**£877**

More of the households which had taken some action had noticed that their house was sometimes too cold, but fewer of those who had not taken any action were ever cold. This suggests that those who are usually warm enough see little point in doing much about energy efficiency, especially as very few of his group find their fuel bills difficult to pay, even though their fuel bills are higher than average. This is probably because most of the households with the highest fuel bills are also on the highest incomes, so they can still afford them relatively easily.

On the other hand, of the 148 households taking part in this survey we found 21 (14%) who were either *often too cold* or *always too cold* in winter, or who still find it *quite difficult* or *very difficult* to pay their fuel bills. These households are likely to be suffering from Fuel Poverty – unable to afford to heat their homes to a reasonable temperature consistent with good health. They really need additional help, above and beyond that provided through *Energy Matters*, so it would have been more beneficial if *Energy Matters* had been able to direct them more successfully to other sources of advice or to the Warm Front and Energy Efficiency Commitment programmes.

SUMMARY AND CONCLUSIONS

1. This research project was conducted by New Perspectives and NFO in February, 2003, to evaluate the effects on home energy efficiency of school children receiving education through *Energy Matters.*. This education was provided by primary and secondary schools using the *Energy Matters* Home Energy Resource, which was developed by the Centre for Sustainable Energy with funding from the Shell Foundation. The resource pack provides materials for lessons, experiments and projects at school, and enables pupils to conduct home energy audits, analyse data, and take home recommendations and estimates of possible savings from energy efficiency.

2. To evaluate the impact of *Energy Matters* on energy efficiency in parents' homes, telephone interviews were carried out with a sample of 148 parents, guardians and carers whose children attended one of the 14 schools throughout England which took part in this research. These interviews were conducted by NFO between 19th February and 9th March, 2003, after a small-scale pilot test in December, 2002. The Telephone Questionnaire was designed by New Perspectives, and was based on considerable previous experience of evaluating energy education and energy advice programmes.

3. Most parents (92%) could recall one or more of the *Energy Matters* activities in which their children had taken part – e.g. lessons on energy (83%), doing a home energy survey and bringing home recommendations (both 64%) – and we found that the more activities the parents remembered, the more likely it was that they had taken some action to use energy more efficiently, either by changing their behaviour or by installing energy saving measures at home. Altogether 80% of all parents had done something to improve energy efficiency at home.

4. Three quarters of all parents (76%) had adopted some behavioural changes to save energy following their children's involvement in *Energy Matters.* The average household had taken 3.5 different actions, such as turning off unneeded lights, controlling heating and hot water more carefully, not leaving appliances on standby, closing curtains and blinds earlier, and discussing how to save energy with their children. This level of behavioural change is broadly comparable to that found among all households seeking energy advice from fuel companies, Energy Efficiency Advice Centres etc., and suggests that *Energy Matters* can be as influential in encouraging behavioural change as typical professional sources of advice. (See *The Benefits of Energy Advice* by New Perspectives, published by the Energy Saving Trust, 2002). Where children were also able to pass on to parents some ideas of the possible savings from energy efficiency, then we find that the influence of *Energy Matters* is even more marked.

5. Many children who took part in *Energy Matters* took home written recommendations on energy efficiency measures to install. These too had an effect, although not quite as marked as the behavioural advice. Over half the parents (54%) had already installed some measures, and an additional 12% were still planning to. The average amount spent was £543 per household installing any measures. The more popular measures installed were low energy lamps (40%), energy efficient appliances (15%), draughtproofing (11%) and double glazing (10%). Where parents remembered more of the children's *Energy Matters* activities, they also tended to install more measures. But we found rather few households had installed the most worthwhile (and expensive) measures like cavity wall or loft insulation, and only 3% had applied for any grants. We have concluded that this is because few parents knew that some measures were available through Warm Front grants or EEC subsidy schemes, and it would have been useful if *Energy Matters* could have conveyed such information. Nevertheless, in terms of numbers of energy saving measures installed, *Energy Matters* again seemed almost as influential as professional energy advice.

6. Just over one third of our sample (36%) had not yet installed any energy efficiency measures (since their children took part in *Energy Matters*) nor were they planning to. Most of these households said that this was because they were happy as they were, had already done enough or already had the recommended measures. (This is unlikely in most cases.) But we found that these less motivated households were also less aware of what their children had done as part of *Energy Matters*, and few of them had discussed with their children how to save energy at home. We also found that more of these households tended to be warm enough in winter, and find their bills easier to pay, because even though their average fuel bills were higher, so were their incomes. This confirms the findings from so many previous surveys: when people are warm enough and can afford their fuel bills they see little need for energy efficiency.

7. Since their children took part in *Energy Matters*, relatively few parents had sought additional advice on energy efficiency (7%) or recalled being given such advice by any source (14%). These levels are no higher than we would expect in the general population, so we conclude that *Energy Matters* has not encouraged many households to seek further advice on energy efficiency. This is a shame, because more parents might then have received more information on the grants available for the more appropriate measures for their homes. We conclude that *Energy Matters* resources should include a one page guide to grants and further information, stressing that all households are eligible for some help.

8. We are confident that children's education through the *Energy Matters* Home Energy Resource has been primarily responsible for the behavioural changes made and the energy efficiency measures installed. Parents who had done something about energy efficiency rated the influence of their children and *Energy Matters* as almost twice as important as other sources such as books, magazine, papers, radio, and advice from friends, family, fuel companies or Energy Efficiency Advice Centres. Many parents could describe several ways in which their children influenced their behaviour and encouraged them to install some energy efficiency measures, although these tended to be the cheaper measures, and not the more effective (and expensive) ones where a grant might have been needed to help them afford them.

9. We found that levels of interest in energy efficiency among both children and parents were in many cases now higher than they had been before the children took part in *Energy Matters*, and that 90% of parents were now *very interested* or *fairly interested in saving energy at home.* We conclude that *Energy Matters* has helped to raise awareness and interest in energy efficiency among both parents and children.

10. Many households are already feeling the benefits from heeding their children's advice following their *Energy Matters* education. Of all households which have taken any action some 40% have already noticed fuel bills which are lower, by £13 a quarter on average (or probably about £39 a year, as it was a winter quarter when we did fieldwork). 41% have noticed their homes are warmer (even though half of them have also been able to turn the heating down). Others have noticed fewer draughts (37%), less condensation (25%), less damp (13%) and fewer health problems (14%). These benefits (and the numbers noticing each one) are substantial, and are only slightly lower than the numbers noting similar benefits after receiving professional energy advice from fuel suppliers and Energy Efficiency Advice Centres.

11. Despite the influence of *Energy Matters* and the measures adopted as a result, we still found that about 14% of our 148 households were either *often too cold/always too cold in winter,* or that they found their fuel bills *quite difficult/very difficult* to pay. These households are likely to be suffering Fuel Poverty – unable to heat their homes to a temperature conducive to good health. We believe that these households at least really needed further signposting from *Energy Matters* to sources of additional help such as Warm Front, energy suppliers' Energy Efficiency Commitment programmes, or Energy Efficiency Advice Centres.

APPENDIX

Analysis of the Sample

Verbatim Responses to Q17

Notes on the Schools Contributing Samples to this Research

The Telephone Questionnaire

ANALYSIS OF THE SAMPLE

ALL RESPONDENTS	**148**	**100%**
SEX		
Male	26	18%
Female	122	82%
AGE OF CHILDREN AT *EM* TIME		
6-11 years	89	60%
12-18 years	52	35%
HOUSEHOLD INCOME		
<£10,000 p.a.	8	5%
£10,001-£20,000 p.a.	21	14%
£20,001-£30,000 p.a.	35	24%
£30,001 and over	71	48%
Households in receipt of **Benefits**	33	22%
TENURE		
Owner occupier	115	78%
Rent from Council	14	9%
Rent from Housing Assoc	7	5%
Rent privately	8	5%
Other/DK	4	3%
TYPE OF HOME		
Detached	42	28%
Semi-detached	50	34%
Terrace	36	24%
Flat/Maisonette	19	13%
Other	1	1%
AGE OF HOME		
Pre 1919	46	31%
1919-1944	20	14%
1945-1964	24	16%
1965-1994	41	28%
1995 or later	7	5%
Don't know	10	7%
TYPE OF HEATING		
Central heating	135	91%
Electric storage heaters	5	3%
Gas fires/room heaters (mains gas)	3	2%
Paraffin/oil heaters	2	1%
Open fires/coal/wood stoves	1	1%
Communal heating system	1	1%
Aga/Rayburn/range with no radiators	1	1%
MAIN FUEL FOR HEATING		
Mains gas	116	78%
Oil	13	9%
Electricity	8	5%
Solid fuel (coal)	2	1%
Bulk LPG/Calor	1	1%
Bottled gas/LPG/Calor	1	1%

VERBATIM RESPONSES FROM Q17

Q17: You said you've been influenced by your child to take measures to save energy at home. In what way have they influenced you?

1 It influenced quite a lot. I would like to do more .. Careful. Not leaving lights on, not using the kettle full. Trying not to waste hot water. It makes a lot of difference.

2 By turning off lights and computers and television. **What difference has this made?** I think we are more aware than our children. **What others ways have they influenced you?** Making the children more aware in energy.

3 Just by letting us know what they have been doing at school. **How influenced you?** Knowing that she's taking notice, it's a reminder to me about being aware of saving energy? **What else**? I think a lot of what we do, we tend to recycle a lot more. **What difference has this made?** Has opened the power industries.

4 I think children have learned, looked at the ways of saving energy - it has made us think more. **What difference made?** It's made us think more about how much energy can be wasted unnecessarily. **What else?** I'm not sure.

5 I think it gave us the opportunity to talk about the importance of energy saving with the children. **What difference made**? I think they are more aware about saving energy around the home although they still need to be reminded. **What else**? I think it's reinforced for us that we need to continue to save energy in the home.

6 They brought it to our attention by bringing the questionnaire home and hence, we committed ourselves to this phone call. **What difference made**? You know, when they bring things from school you read it. **What else**? Not a lot. If they've given us more from the school then we probably been influenced more. Most of the answers are no.

7 I think it's made us more aware of the energy we are using. **More aware, what way?** It's made us more careful. **What difference**? I think we are much more careful to turn things off. **What else**? Not leaving things on standby.

8 Due to feeling responsible because of my child's interest in the subject matter. **What difference made**? It makes you feel much more a part of their learning process, making an effort to ensure that they see results from their learning process. **What else**? Don't think so.

9 In smaller ways, such as the draught excluder. We've put a seal around the windows. Also energy saving light bulbs and we are going to install radiator shelves. **What difference made**? I don't know if it's made a great deal of difference financially but it gives us a better sense that we're saving money and helping the environment. **What else**? More aware.

10 Shutting doors between rooms, shutting windows properly and turning lights off when they went out of the room. **What difference made**? Keeping the doors and windows shut keeps the house warmer and the lights are keeping the electric bill down. **What else**? To boil what we need in the kettle.

11 Keep the house more warm - you shut the curtains. **What difference made**? Saves my bill as well. **What else**? It's excellent. Keeps warm, saves environment, recycle - have green box in home. Put houseplants indoors - gives off oxygen.

12 I think mainly through discussion - discussing it as a family, it makes you more aware of saving energy in small ways. **What difference made**? Such as switching off lights and saving hot water. **What else**? Can't think of anything else.

13 They made you more aware. Taking time out and thinking about things. **What difference made**? I couldn't say I've noticed the difference but hopefully maybe try to make a difference.

14 I've and they've been more aware of waste. We did do a lot of energy efficiency before. They're more aware to switch the lights and telly off. **What else**? Nothing.

15 Just by trying to save energy (respondent mumbles - interviewer repeatedly asks politely to repeat what he had said but he refuses.)

16 I think it's made us more aware of leaving the lights on and keeping doors closed - to keep the heat in. **What difference made**? It has cut down on the cost of the electricity and the house is being kept warmer. **What else**? Because he was so keen on saving energy and being more environmentally friendly, it has made you think more about it.

17 They've made us more aware of how we can save energy. Such as turning lights off and it's encouraged us to do so. **What difference made**? I would assume it's saved fractionally on our lighting which isn't very expensive. **What else**? Little really, we were already quite aware about energy saving.

18 My daughter's told me quite a lot about it - changing the light bulbs, not leaving the TV on standby. **What difference made**? It's made quite a lot of difference because I got an electric bill the other day and it was, compared to my other bills, it was quite cheap. **What else**? Nothing.

19 It's actually the other way round. I was always trying to tell them about turning lights and computers off if they weren't in the room. But because they've done that project, they're more aware and therefore more inclined to listen to me. It's influenced my power over them. **What difference made**? They are more aware.

20 I haven't been influenced, she may become more aware. It's something I already knew - commonsense.

21 We try to switch off the lights when not needed and also put things on standby - like video. Since starting this project they've started switching them off rather than leaving them on standby. **What else**? None really.

22 Lights and putting things on standby. **What difference made**? Not a huge difference but it's things you should be more aware of perhaps. **What else**? It makes you more aware of how heat escapes without those measures they point out to you.

23 He's discovering about use of energy and how to save it. We are doing things like turning the telly off rather than put it on standby. **What difference made?** Minimal difference - I'm becoming more aware anyway, I have managed to get a recycling system put in at the school I work at.

24 Just reiterating what we already knew. **What difference made**? I think they have made her more aware by turning off the telly, things kids take for granted.

25 She's just made me think more about the cost and basically saving energy to save the planet. **What difference made**? Not a lot. **What else?** Nothing really.

26 I think it made me aware that I ought to be telling them about cost and effect of energy consumption and saving. **What difference made?** I think it has made them aware of wastage. **What else**? That there are a couple of things that I could do that I wasn't aware of i.e. the radiator foil/reflector.

27 She's influenced me by the lights and keeping the freezer stocked. **What difference made**? I haven't seen any as yet. **What else**? None.

28 Being more aware of the way that energy is being used and the effect it is having on the environment. I think it is important if everybody does a little bit to reduce the consumption. **What else**? Looking at low energy light bulbs which I've never considered and are not too expensive. We didn't do a lot differently, just the light bulbs.

29 Not a great deal, just by not filling the kettle too much if I only have one cup. Turning off the lights is they are not being used and not leaving things on standby. **What difference made**? Probably not a lot but I don't really know.

30 I'm more aware of turning lights off, switching off lights when not in use. **What difference made**? A lot of difference. **What else**? Switching off plugs. Basically switching off things when not in use such as TV.

31 I have been trying to do my best to save energy. **What difference made**? I feel it is very important.

32 He gave us a reminder although before we weren't very careful. Since the project we are more careful. **What difference made**? Of course it will help us.

33 Obviously I'm well aware of leaving lights on, doors open and no need to fill the kettle to the very top every time. **What difference made**. Obviously, common sense but sometimes you have to have the obvious pointed out to you. The house is warmer by having the doors closed and we must be using a fraction of the electricity and lighting than before.

34 She's encouraged me to stop having things on standby and switch off lights we don't need. And also to keep doors closed. Generally, just makes us more aware. **What difference made**? Hopefully it's saved us money and made my children more environmentally aware.

35 You do save a lot of energy by controlling the heating, also by closing the curtains - these are the things that stick to mind that was done during the school project. Also placing lids on pans when cooking. Energy efficient light bulbs. Also not to have the cooker to close to your fridge. Switching the plugs off at night. **What difference made**? It's made me more aware of how much we consume. **What else**? To be more careful as to energy.

36 I think it makes you feel a bit more guilty about how much energy we do waste. **What difference made**? I wish you had done more in the project as you didn't do anything about efficiency tips or make a draught excluder. **What else**? I don't know.

37 When he did the project and we worked out how much we could be saving (can't hear response to much interference).

38 Raised awareness. A feeling of responsibility - the children are making me feel.

39 My husband's not very good at it. I don't fill the kettle up, and things like lighting.

40 We both try to switch the lights off and the television as it takes up a lot of energy. We bought energy efficient bulbs. **Anything else**? I try not to fill the kettle up to much. I nag him to close the door. He understands more now - as he is special needs.

41 By talking about the different things he had been doing and going on about it until I did change. Most keen on the electric light bulbs - energy efficient ones. Individual room heaters (thermostats) - more energy efficient. **Anything else**? We already had a lot of things like loft insulation and double glazing. I'm going to find out why he hasn't made me a draft excluder.

42 I'd been doing anyway - like not having the TV on standby, turning lights off.

43 I think that the enthusiasm they've shown, the fact that he's come home with ideas and brought it to our attention - and is very keen and aware of energy saving. We've actively started using the timer on our heating and water heater. We turn appliances off and light bulbs off. We're having double glazing replacing our secondary glazing. **Anything else**? He enjoyed the project.

44 I feel that having told my children already about saving energy around the house, they've been made more aware by the school. It's nice to see the schools are actually doing something to make children understand real life issues about saving money. We already energy efficient I believe - we make sure we don't use up to much because everybody else needs to use it as well and money comes into it as well. I told my children to grow up as energy efficient aware as we are.

45 We turn off lights and lowering temperature on the washing machine.

46 I suppose an interest in the energy used, the cost of energy and where energy is going to come from in the future. We've got energy efficient light bulbs. We had a lot of insulation and other things previously and our central heating isn't easy to adapt for energy efficiency without changing it.

47 He's always reminding me to switch things off. If I go into the garden and leave the door open, he says "mummy you're letting the heating out" before he wouldn't have thought of it. It's made him more aware of things, he doesn't take things for granted - like he used to leave the fridge open.

48 It's made me more aware and to think more about saving energy and the ways I can save energy. We have energy saving light bulbs and we are replacing our radiators and we are going to put on thermostats.

49 They've made me aware of not leaving lights on when you leave a room. When we were buying our fridge freezer, we were very conscious about the measurements. Mainly with heating, turning it down.

50 Thinking twice about things - like drawing our curtains. Things like putting a timer on the hot water. Getting the long use light bulbs. Children are very influential - they can point out very obvious things that you haven't seen because you've been looking at them for such a long time - they come in with a new set eyes and say what about this.

51 Much of the things we already implemented but we are more conscious of the things we do less often like showers and baths and keeping the water in for cleaning teeth. More of an effect on him like turning off lights, now he's more aware and it's not just the parents saying it.

52 By turning the heating down and by water consumption. Filling the washing machine rather than doing half a load. It's a good idea to encourage children.

53 It's brought to our attention the fact that we could save a little bit of money on these energy saving light bulbs even though the cost is quite high. **What difference made**? Hoping that it will save us some money long term also more durable and last longer. **What else**? I feel as though we are saving energy.

54 I think that nothing different has been suggested but it has raised awareness of turning lights off and not filling kettles and lowering heating temperature. **What difference made**? In the short term it has had an influence on energy consumption. **What else**? I think the project is more effective than just ???

55 We have been more conscious of turning lights off, closing doors, keeping the heating low, not leaving things on standby and switching TV's and radios off when we are not in the room. **What difference made**? It's bound to help reduce our bills. **What else**? Just generally being more prepared.

56 Probably coming home and saying about leaving the lights on and the washing machine - done at a lower temperature. I haven't but with light bulbs you can get an energy saving. **What difference made**? It's made a bit of difference, I haven't changed the light bulbs but I have made a difference where the washing's concerned. **What else**? Nothing else.

57 Turning off the lights, closing doors to keep heat in and turning off appliances when not in use. **What difference made**? I presume that we are cutting down on energy that we use. **What else**? I don't think it's influenced me so much as my child. It has made him very aware.

58 She's very conscious of the global effect, that she isn't mainly concerned with what goes on in our own home but she is most definitely concerned about the need to save water for example because the world's resources are precious. It most definitely influenced me - I can give a very specific example, a simple one, making sure I pull the curtains at night to exclude draughts and keep heat in. I have become also very conscious of closing all the doors at night in order to conserve heat when the central heating would have gone off in the night.

59 I've become more aware of several small measures which I could take to save energy. **What difference made**? It's only a small difference because we already had a saving policy in action. **What else?** It's good to make teenagers more aware of which appliances are energy greedy.

60 It is very very fantastic. How to make use of electric and not to consume a lot. **What else**? They teach them in the school and bring back the information is very interesting.

61 Light bulbs and changing light bulbs to energy efficient ones. And switching off lights and closing the curtains earlier. **What difference made**? It makes you aware generally about saving energy in other areas.

62 More energy efficient bulbs. **What difference made**? A little.

63 I suppose it makes sense, when you leave a room and you turn a light off, in that you know that you are saving money and energy. **What difference made**? It's made a difference in my bills and it's a good habit to get the children into at a young age. **What else**? A lot of other things are mentioned in the leaflet, it is a lot safer also.

64 It's influenced me into realising that by switching off the lights and putting the heating down and keeping doors closed, that the energy will be used more efficiently. **What difference made**? It has made me more aware of energy and how it's used.

65 Since the project was done, my daughter has been more efficient with turning lights off and more interested in implements in the kitchen and home. **What difference made**? My electric is on a key meter and I'm finding that I'm not having to put so much on so frequently. **What else**? That's it.

66 By nagging us about what they've learnt about the environment at school and ways, not so much about saving money, but help the environment by cutting down on energy used. **What else**? That's it really.

67 He's made us more aware to turn off lights and he's working with me - so he doesn't leave the light on in the bathroom. That's about it - it's about lights rather than anything else. Everything else is controlled already. I was energy conscious already.

68 Well - just talking about it and saying gosh I'm cold sat in that draught. **What else?** I don't know, we have a general thing in the house about not wasting things, so it's a general philosophy. For example, we save tin cans and glass and paper and we deposit them.

69 We've start thinking more about the kind of things we are using in the house and what we could do to change it to save on our bills. **What else**? No other way.

70 Turning off lights, draught excluding and not having the TV on standby are probably the main things. **What else**? Nothing.

71 Because he's doing it at school I take an interest. **What else**? My bills are not that high anyway. I do what's reasonable.

72 Just reminding me about lights on, the waste aspect, leaving appliances on. **What else**? Not very much - I like to think I already knew most of it.

73 Mostly with leaving lights on and not being in a room. Closing the door when you walk out of the room and the TV - walking out and leaving it when nobody's watching it. They're always on to us about doing that. **What else**? They're fairly aware of saving energy especially after the survey because they were made to walk around and note down where the radiators were, where the lights were and so it's opened their eyes to everything now and made them more aware of saving energy. They are confidently behind us now.

74 Mostly it just around what she said before because it plugs into what I feel about saving energy for environmental reasons. That's more or less what she brings home - I feel guiltier. **What else**? Not very much really - she tells me off about turning lights off.

75 Well, to get the bulbs that last so long - I think it's a year or so it's lasted - it's quite good compared to the others. And draught excluders, when it's really cold normally it felt quite cold but since we had them it's alright. **What else**? That's it.

76 By explaining it - some of the more obvious things like light bulbs and shutting the curtains and doors. **What else?** I don't really know.

77 I think to be more thoughtful about leaving lights on when going from room to room. Not to leave the TV/computer on standby. The small things rather than the big things. **What else**? I think that's it.

78 Reinforce my habits - it encourages him. **What else**? It's encouraging that its come from that end and anything that a child picks you up on is something that you might have corrected them on. When you hear something come back from school and your child that you've told them and gone on about it in the past, then you're not a lone voice. Anything the parent says isn't correct - it's just moaning.

79 He was very good at explaining how energy efficiency could save us money and make our home actually more comfortable, so the information he brought home was very concise and backed up. It made us think about these things. **What else**? Basically to be more aware day-to-day how we can save energy without changing our lifestyle in a great way, just things like switching off lights, having a kettle which can boil just a cup of water. Turning down the thermostat by a couple of degrees, having thermostats fitted - that sort of thing.

80 By being interested, his attention has been provoked at school so he's interested and become more involved in real matters like saving energy and costs in the home. **What else**? It's reminded me, it made me feel, thank God, it's being talked about at that level. Sometimes I feel like in my little ways of trying to recycle and save energy, that it's all a bit of a waste against the rest of consuming populace who don't seem to give a toss, so it's actually quite helpful to me that my child was being encouraged to think about it and it should be part of everyone's education, it ought to be and they should carry on, it shouldn't be a one off thing it should be constantly practiced and maybe they should be educated as well not to be vast consumers and eat fast food and have all that explained to them so they can make considered choice which they can't make without the right knowledge. I allow and encourage my child to watch exposé programmes about what burgers are really made of, it's not usual, the population is lulled into a false sense of security that someone cares about their well-being when no-one really does.

81 Very aware that it's very important that we are more economical with energy and not take it for granted because it would have a knock-on effect on global warming.

NOTES ON THE SCHOOLS CONTRIBUTING SAMPLES TO THIS RESEARCH

School A

This is a Primary School in Tunbridge Wells, Kent where Energy Matters was used with the whole school as part of science, technology, ICT, Literacy & numeracy. Home energy surveys were completed and analysed, and the results taken home. The school also made use of outside speakers to talk about energy. (2 interviews)

School B

This is a Primary School in Aylesbury, BUCKS. The Energy Matters resource was used with 29 pupils, years 5&6 over 7 week period in Spring '02 and will be used each Autumn from now on. The work was done as part of RE topic 'the natural world'. The pupils did brainstorming on energy saving at home, completed Home Energy checks and analysed these, taking home results & recommendations. Pupils designed brochure and some carried out further research into sustainable energy resources. (4 interviews)

School C

This is a Primary School in West London. They used the Energy Matters resources in the Summer term 2002 with years 2 & 3 and 5 & 6. The pupils did the home energy survey and, after analysing their results, most of them took recommendations home. They also made a brochure on energy saving. The school is continuing to use these resources. (3 interviews)

School D

This is a Primary School in Rickmansworth, Herts. Mixed year group classes, Years 3&4 (7-9yrs), followed Energy Matters at Easter 2002. The pupils did the work as a block as part of science week. They used Home Energy resource, doing Home energy checks, making draught excluders, and monitoring energy use at home during the week. The school also linked this work to their literacy and numeracy strategies. (12 interviews)

School E

This is a Primary School at Chesham, BUCKS. They used the Energy Matters resources with Year 6 in summer 2001 and the Year 5 in summer 2002. The pupils brainstormed ideas, did the home energy survey, made draught excluders which linked to design & technology and played the energy game. Some activities used as part of environmental lunch club. (1 interview)

School F

This is a Primary School in Norwood, London where 64 pupils in Year 6 took part in Energy Matters in February, 2002. They used the Key Stage 2 material on home energy and supplemented this with some Key Stage 3 activities on sustainable energy. Their Special Needs pupils did work at Key Stage 1 on energy and keeping warm. Pupils did a home energy survey and analysed their findings in school. They then designed a brochure on energy saving and took recommendations home. (43 interviews)

School G

This is a Primary School in South London who used the Energy Matters resources in the Autumn term 2002. They used the resource as part of science and maths at KS2 with years 3 and 4. The pupils looked at the issue of energy use and keeping warm and then did the home energy survey. (7 interviews)

School H

This is a Roman Catholic primary school in Chelsea, London. Pupils took part in Energy Matters in March, 2002. The whole school, 220 pupils, used parts of the materials as part of their Science Week activities. Key Stage 1 materials were used with infant and nursery pupils; Key Stage 2 materials were used by years 3 and 4 and years 5 and 6 used Key Stage 3. Years 3 to 6 did home energy surveys, worked on their findings at school. In addition, they made brochures and designed a webpage. All pupils took some recommendations home. (6 interviews)

School J

This is a Secondary School in Cockermouth, Cumbria. They Initially ran the Energy Matters programme with the school's Eco-club for years 7.8,9 (11-14). They used KS3 section on energy ideas, carried out a home energy survey and analysed the data from this survey. They made and played the Energy Game from the resource. Pupils gave an assembly and presentation to school council, wrote an article for school newsletter & made energy saving posters. They also investigated energy use in the school and made suggestions to school which are being acted upon. (48 interviews)

School K

This is a secondary school in Farnham, Surrey, where 150 pupils in Year 8 were involved in Energy Matters in March, 2002. The Key Stage 3 sections of the Energy Matters pack were used. Children collected data on their own homes, these were analysed in the classroom to identify the most effective ways to save energy, and recommendations were taken home to parents/guardians. (6 interviews)

School L

This is a Secondary School near Reading, Berks. The school used the Energy Matters resources with seven classes, Year 8 geography in Autumn 2002. The pupils filled in home energy surveys, analysed these in school and produced wall displays. They made use of computers for the production of graphs from computer data. Recommendations were taken home. (3 interviews)

School M

This is a Secondary School at Ringmer, E Sussex. As far as we know, the school has been using the Energy Matters resources since 2000 but have no update on which parts they are using. (No interviews)

School N

This is a Secondary School in Evesham, Worcs. The school used the resource with 135 pupils across years7 to 11 (aged 11 to 15). They took part in the project including brainstorming energy ideas, completing and analysing home energy checks. 10 children, members of the eco-club, took recommendations home. (5 interviews)

School P

This is a Special School in Catshill, Worcestershire. The Years 6 & 9 classes worked on Energy Matters in June '01 using both KS2 and 3 resources. Pupils did a brainstorm of energy ideas, took home the energy survey, which was analysed in school. They then took home to parents energy saving tips & info in reducing fuel bills. Using the Sustainable Energy units, they looked at a range of exercises on sustainable energy and designed a brochure to promote energy saving. They also developed proposals for using sustainable energy in their school. (5 interviews)

SCHOOL AND DATE OF PROJECT TO APPEAR ON EACH SCREEN. SAMPLE IS SUPPLIED BY THE SCHOOL. SURVEY ON BEHALF OF ENERGY MATTERS.

J011009 ENERGY EDUCATION RESEARCH 2002/3 – PILOT QUESTIONNAIRE (FINAL)

Good morning/afternoon/evening. Can I please speak to ..... My name is ..... from NFO WorldGroup. You may recall that your child recently took part in a school project called *Energy Matters*, all about energy used at home, and I believe you agreed to help with this research project by answering a short follow-up interview. Have you got time to talk to me now? It should not take more than fifteen minutes, and any information you give us will be treated in confidence and will not be used to try to sell you any goods or services. (MAKE APPOINTMENT IF NOW NOT SUITABLE)

INTERVIEWER NOTE: DO NOT INTERVIEW THE CHILDREN

Q1 Before I ask you about your children and *Energy Matters*, may I just check some background information about your home and heating. Firstly, are you.....READ OUT:

Buying your home on a mortgage
Do you own your home outright
Rent it from the Council
Rent it from a Housing Association
Rent it from a private landlord
Other
Don't know

Q2 And what type of home do you live in? Is it a... (READ OUT)

Detached house
Semi-detached house
Terraced house
Flat in a high-rise block (6 or more storeys)
Flat in a low-rise block or house (up to 5 storeys)
Maisonette
Other
Don't know

Q3 And approximately when was your home built? PROMPT IF NECESSARY

Before 1919
1919-1929
1930-1944
1945-1964
1965-1994
1995 or later
Don't know

Q4 What is your main type of heating? PROMPT IF NECESSARY

IF MORE THAN ONE MENTIONED (E.G. CENTRAL HEATING AND GAS FIRES) ASK FOR WHICH ONE USED MOST.

NB. ANSWER LIST ON MULTIPLE PAGES – CODE CAREFULLY

Central heating from boiler/back boiler or range
Communal heating system with warm air ducts or radiators provided by Council/Housing Association/landlord
Warm Air system
Electric Storage Heaters
Gas fires/room heaters (mains gas)
Bottled gas heaters
Electric fires/electric radiators/fan heaters
Open fires/coal/wood or solid fuel stove
Paraffin or oil heaters
Aga/Rayburn/range cooker (not attached to radiators)
Don't know
No heating
Other (SPECIFY)

Q5 And what is the main fuel you use for heating? Is it..... READ OUT

Mains gas
Bottled gas/LPG/Calor
Bulk LPG/Calor
Oil
Electricity
Solid fuel (e.g. coal)
Wood
Don't know
None of these/no heating
Other (SPECIFY)

Q 6 How many children do you have who took part in the *Energy Matters* project at school?

PROGRAM ALLOWS FOR MAX OF 6. IF 'DON'T KNOW' SUBSEQUENT QUESTIONS ASKED FOR ONE CHILD ONLY

1
2
3 or more (MAX 6)
Don't know how many took part

Q7 AND Q8 REPEATED FOR EACH CHILD

Q7 And what age now is/are the child (ren) who took part in the *Energy Matters* project at school? RECORD AGE SEPARATELY FOR EACH CHILD

6-8
9-11
12-14
15-18

Q8 And can you tell me roughly when it was that your child (ren) took part in the *Energy Matters* project at their school? RECORD MONTH(S) IF POSSIBLE AND YEAR FOR EACH CHILD.

PROGRAM ASKS FOR MONTH FIRST, THEN YEAR. IF OVER SEVERAL MONTHS, RECORD LAST MONTH OF PROJECT

Month(s) Jan..Dec
Year: 2000
2001
2002
Don't remember

Q9 And which of the following things did your child (ren) do as part of that *Energy Matters* project, as far as you know? (READ OUT) . DO NOT LET RESPONDENT ASK CHILDREN

	YES	NO	DK
Did they have lessons at school on energy?			
Did they do practical experiments at school on energy?			
Did they do an energy survey of your home?			
Did they bring home written recommendations on energy saving measures you could install to save energy?			
Did they suggest ways of changing your behaviour in order to save energy? (e.g. how you cook or control your lights, heating or appliances)			
Did they tell you how much you might save on your fuel bills through any of these measures?			
Did they design a brochure on energy saving as part of their schoolwork?			
Did they design a TV commercial on energy saving as part of schoolwork?			
Did they design a website?			
Did they make any draught excluders (like snakes or sausage dogs)?			
Were they awarded a Certificate of Energy Awareness by the school?			
Anything else? (SPECIFY)			

Q10 Since your child (ren) took part in the *Energy Matters* project at school, have you started doing any of the following things at home?

Have you started.....READ OUT.	YES	NO	DK	
Discussing how to save energy at home?				
Keeping a record of energy consumption used (e.g. as shown on your bills)?				
Looking at your gas or electricity meters more often? (if you have access to them)				NO ACCESS TO METERS
Trying to save energy by turning off lights which aren't needed?				
Trying to save energy by changing your habits when using the cooker, kettle, refrigerator or other appliances?				
Controlling your heating more carefully?				
Controlling your hot water more carefully?				
Closing your curtains or blinds earlier to keep heat in?				
Not leaving appliances on "standby"?				
Rewarding your children for any energy savings they make?				

Q11 Now I'd like you to think about any energy efficiency measures you may have bought or had installed in your home since your child (ren) took part in *Energy* Matters. INTERVIEWER NOTE: IF RESPONDENT IS TENANT EXPLAIN THAT THEY MAY NOT BE RESPONSIBLE FOR SOME/ALL OF THESE MEASURES, BUT YOU HAVE TO READ OUT THE FULL LIST. Have you installed any of the following energy efficiency measures in your home since then (please don't mention things that were already there before). READ OUT FROM LIST BELOW.

Q 12 And are you planning to install any of those measures within the next six months? DO NOT READ OUT WHOLE LIST AGAIN, BUT PROMPT AS NECESSARY. DO NOT READ OUT

Q12 ANSWER LIST. DO NOT SHOW MEASURES MARKED WITH AN ASTERISK IF THEY HAVE ALREADY BEEN MENTIONED AT Q11

ASK Q13 FOR EACH MEASURE RESPONDENT SAID THEY HAVE INSTALLED SINCE *Energy Matters* OR PLAN TO IN NEXT SIX MONTHS. IF NONE AT Q11 AND Q12 GO TO Q14

Q 13 And who paid/or will pay for ..... (MEASURE FROM Q11 OR Q12)? Did you/will You pay? Or have you/will you get a Grant? Or did you/will your Landlord pay?

	Q 11 Done since *EM*	Q12 Plan in next 6 months	Q13- Who paid? Will pay? We paid/ will pay	Grant	Land lord
Block gaps around skirting					
Bought any energy efficient appliances					
Cavity wall insulation*					
Double glazing					
Draughtproofing on doors or windows					
External wall insulation					
Floor insulation	LONG LIST OF MEASURES BUT READ OUT CAREFULLY				
Heating programmer/timer*					
Hot water tank jacket*					
Hot water tank thermostat*					
Hot water timer*					
Internal wall insulation (e.g. dry lining)					
Loft hatch draughtproofing*					

Loft hatch insulation*					
Loft insulation					
Low energy light bulbs					
New central heating boiler*					
Pipe insulation					
Radiator foil					
Radiator shelves					
Room thermostat*					
Secondary glazing					
Thermostatic radiator valves					
None of these					
Others (SPECIFY)					
Don't Know					

Q 14 IF "None" INSTALLED AND PLANNED (NONE AT Q11 AND Q12) ASK:
Why haven't you recently installed, or planned to install, any of these energy efficiency measures?
DO NOT PROMPT

FINANCE: Lack of money/can't afford it	
High cost of products or installation/high quotations	
Problems finding the money/getting a loan	
Problems getting a grant/time taken to get grant work done	
Not convinced of savings/won't make a difference	
PRACTICALITY: Problems finding reliable supplier/installer	
Problems finding reliable products	
Can't do ourselves/not good at DIY	
Problem with design of home/makes it impractical	
Too disruptive/too much mess/hassle	
Planning to move house/won't be here long enough	
Not our house/landlord should do it	
Will do it when replacement needed/when doing other building work	
INFORMATION: Lack of information/not enough information from school project	
Difficulty understanding information provided through school	
Information sent was unreliable/inaccurate	
ATTITUDE/KNOWLEDGE: Happy as we are/done enough already/assume we don't waste energy/house warm	
Done everything already/can't save more/don't know what more we could do	
Lack of time to do it/arrange it/ not got around to it	
Just not thought about it/lazy/apathetic	
Already have the recommended measures installed	
Others (SPECIFY)	
None/nothing stopping us	
Don't know	

NB. ANSWER LIST ON MULTIPLE PAGES – CODE CAREFULLY

ASK ALL

Q 15a Have you asked anyone else for advice on energy efficiency since your child (ren) took part in the *Energy Matters* project at school? (IF "Yes": Who have you asked for advice?) MAY MULTICODE

Gas company
Electricity company
Energy Efficiency Advice Centre
Citizens Advice Bureau
Builder/heating/insulation installer
Friends/relatives/work colleagues
Council / HECA Monitoring
None
Don't know
Other (SPECIFY).....

Q 15b Have you been given advice on energy efficiency since your child (ren) took part in the *Energy Matters* project at school? (IF "Yes": Who gave you the advice?) MAY MULTICODE

Gas company
Electricity company
Energy Efficiency Advice Centre
Citizens Advice Bureau
Builder/heating/insulation installer
Friends/relatives/work colleagues
Council / HECA Monitoring
None
Don't know
Other (SPECIFY).....

IF DONE/PLANNED ANYTHING AT Q10, Q11 OR Q12 ASK Q16. OTHERS GO TO Q18

Q 16 I would now like you to think about all the factors that have influenced your decisions to install or plan energy efficiency measures in your home or to change your behaviour to save energy. Please can you tell me, on a scale of 1 to 5, how much each of the following have influenced you, where 5 means it has influenced you a lot and 1 means it has not influenced you at all. Firstly, ...READ OUT. ROTATE ORDER

	Not at all				A Lot	Don't
	1	2	3	4	5	Know
Newspapers or radio						
Your children and the *Energy Matters* project they did						
Advice from friends, work colleagues or relatives						
Advice from a fuel company						
Advice from an Energy Efficiency Advice Centre						
Television						
Books/Magazines						

Q 17 IF CHILDREN INFLUENCED AT ALL (SCORE OF 2-5 FOR MEASURE 2 ABOVE)

INTERVIEWER: START TAPE RECORDER. READ OUT RESPONDENT SERIAL NUMBER THEN READ OUT QUESTION.

You say that you have been influenced by your children to take measures to save energy at home. In what ways have they influenced you? DO NOT PROMPT. PROBE FULLY

NB. RESPONDENTS ARE ASKED THIS QUESTION EVEN IF NOT INFLUENCED BY CHILDREN THAT MUCH

INTERVIEWER: STOP TAPE RECORDER AT THE END OF THIS QUESTION.

ASK ALL

Q18 How interested do you think your child who did the *Energy Matters* project is in saving energy at home? READ OUT.

Q19 And how interested are <u>You</u> in saving energy at home now? READ OUT

	Q18 - Child	Q19-Respondent
Very interested		
Fairly interested		
Not very interested		
Not at all interested		
Don't know		

Q20 Do you think that since your child learnt about saving energy at home through the *Energy Matters* project, they are more interested in saving energy at home, less interested in saving energy at home or have about the same interest as before?

Q21 And how about You? Are you more interested, less interested or about the same as before?

	Q20 - Child	Q21 - Respondent
More interested		
Less interested		
About the same as before		
Don't know		

Q22 ALL INSTALLING MEASURES/MAKING BEHAVIOURAL CHANGES (Q10,11). OTHERS GO TO Q25

Thinking of all the things you have done since *Energy Matters* to help save energy at home, do you think your fuel bills have been lower or higher, or about the same since taking these measures?

Bills lower	
Bills the same	
Bills higher	
Too early to tell yet	
Don't know	

IF LOWER ASK Q23. IF HIGHER ASK Q24. OTHERS GO TO Q25

Q23 IF LOWER: How much lower per quarter do you think your total household fuel bills are now? Please include your electricity bills, gas bills and bills for any other fuels you use in the home?

PROMPT IF NECESSARY: FOR PREPAYMENT METERS ESTIMATE QUARTERLY SAVINGS FROM WEEKLY SAVINGS. IF RESPONDENT ANSWERS IN MONTHS OR YEARS, REFER TO CONVERSION SHEET TO WORK OUT QUARTERLY VALUE.

Up to £5.00 less per quarter	
£5.01-£10.00 less per quarter	
£10.01-£15.00 less per quarter	
£15.01-£20.00 less per quarter	
£20.01-£30.00 less per quarter	
£30.01-£40.00 less per quarter	
£40.01-£50.00 less per quarter	
£50.01-£60.00 less per quarter	
£60.01-£70.00 less per quarter	
£70.01-£80.00 less per quarter	
Over £80.01 less per quarter	
Don't know	

Q24 IF HIGHER: How much higher per quarter do you think your total household fuel bills are now? Please include your electricity bills, gas bills and bills for any other fuels you use in the home?

PROMPT IF NECESSARY. FOR PREPAYMENT METERS ESTIMATE QUARTERLY INCREASES FROM WEEKLY INCREASES. IF RESPONDENT ANSWERS IN MONTHS OR YEARS, REFER TO CONVERSION SHEET TO WORK OUT QUARTERLY VALUE.

Up to £5.00 more per quarter	
£5.01-£10.00 more per quarter	
£10.01-£15.00 more per quarter	
£15.01-£20.00 more per quarter	
£20.01-£30.00 more per quarter	

£30.01-£40.00 more per quarter	
£40.01-£50.00 more per quarter	
£50.01-£60.00 more per quarter	
£60.01-£70.00 more per quarter	
£70.01-£80.00 more per quarter	
Over £80.01 more per quarter	
Don't know	

ASK ALL

Q 25 About how much do you now spend on fuel per year? Please include your electricity bills, gas bills and bills for any fuels you use at home, but do not include your motoring bills. IF RESPONDENT ANSWERS IN MONTHS ORQUARTERS, REFER TO CONVERSION SHEET TO WORK OUT ANNUAL VALUE.

Up to £50.00 per year	
£50.01-£150.00 per year	
£150.01-£250.00 per year	
£250.01-£350.00 per year	
£350.01-£450.00 per year	
£450.01-£550.00 per year	
£550.01-£650.00 per year	
£650.01-£750.00 per year	
£750.01-£850.00 per year	
£850.01-£950.00 per year	
£950.01-£1050.00 per year	
£1050.01-£1150.00 per year	
£1150.01-£1250.00 per year	
£1250.01-£1350.00 per year	
£1350.01-£1450.00 per year	
Over £1450.00 per year	
Don't know	
Refused	

Q 26 How would you describe the typical temperature in your home this winter? Would you say it was ....READ OUT

Sometimes too hot	
Always warm enough	
Usually warm enough but sometimes too cold	
Often too cold	
Always too cold	
Don't know	

Q27 How easy or difficult would you say it is nowadays for you to find the money to pay your fuel bills? Would you say it is ...? READ OUT

Very easy	
Quite easy	
Neither easy nor difficult	
Quite difficult	
Very difficult	
Don't know	

Q28 IF ANY ACTIONS TAKEN AT Q11 SINCE *Energy Matters* PROJECT ASK Q28. OTHERS GO TO Q33. IF ACTION TAKEN AT Q10 ONLY, GO TO Q29.

Thinking of any energy saving measures you have installed since your child did *Energy Matters*, about how much have you spent on them altogether? Please don't include any grants you may have received in this figure. IF NOTHING, CHECK WHETHER ANYTHING PAID FOR BY GRANT/SOMEONE ELSE OF IF ONLY COST-FREE MEASURES TAKEN

Up to £50	
£51-£100	
£101-£200	
£201-£300	
£301-£400	
£401-£500	
£501-£700	
£701-£1000	
£1001-£1500	
£1501-£2000	
£2001+	
Nothing - all cost free-measures	
Nothing spent myself/all paid for by grant/by someone else	
Don't know	
Don't remember installing/doing anything in last 12 months	

Q 29 And thinking about all the things you've done recently to save energy, is it any warmer or more comfortable in your home now, is it colder or less comfortable, or about the same?

Yes – warmer/more comfortable	
No – about the same/no warmer or more comfortable	
No – colder/less comfortable	
Too early to tell yet	
Don't know	

Q 30 Have you turned your heating up or had it on for longer, turned it down and had it on for less time or left it about the same since your child did *Energy Matters*?

Not put heating on yet	
Turned heating up/had it on for longer/heated more rooms	
Turned heating down/had it on for less time/heated less rooms	
Left heating about the same	
Too early to tell yet	
Other (Type in)	
Don't know	

Q 31 Have you used your lights and electrical appliances more, less or about the same since your child did the *Energy Matters* project?

Used lights/appliances more	
Used lights/appliances less	
Used lights/appliances about the same	
Don't know	

Q 32 And have you noticed any of these other benefits since installing the energy efficiency measures or changing your behaviour? READ OUT. MAY MULTICODE.

Less condensation	
Less mould	
Less damp	
Fewer health problems, such as coughs, colds or asthma	
Better light	
Less draughty	
Others (TYPE IN)	
None of these	
Don't know/ too soon to tell	

ASK ALL

Q33 Can I just check, do you or any other members of your hous
benefits? READ OUT. MAY MULTICODE

Q33-36 THIS INFORMATION IS REQUIRED TO HELP US ANALYSE THE RESULTS BY DIFFERENT TYPES OF PEOPLE. ANSWERS NOT RELATED TO INDIVIDUALS

Income support or income based job seekers allowance	
Housing benefit	
Family credit	
Council tax benefit	
Disabled Person's tax credit	
Disability living allowance	
Attendance Allowance	
War Disablement Pension (with Mobility Allowance or Constant Attendance Allowance)	
Industrial Injuries Disablement Benefit (must include Constant Attendance Allowance)	
None of these	

Q34 Is there anyone in the household aged 60 or over? Yes
No

Q35 We are talking to a number of people and we do find that people's opinions vary with a number of things like where they live and their household income. As I read out the following categories, could you please tell me which band your total household income falls into - that is the income of all members of your household, from all sources.

Up to £5,000 a year	
£5,001 to £7,500 a year	
£7,501 to £10,00 a year	
£10,001 to £15,000 a year	
£15,001 to £20,000 a year	
£20,001 to £25,000 a year	
£25,001 to £30,000 a year	
More than £30,000	
Refused	
Don't know	

Q36 CODE SEX FROM NAME/VOICE Male
Female

Thank you very much for your help. Can I just confirm my name is ..... from NFO in London, and that your answers will be kept confidential and not passed on to anyone for any selling purposes. (GIVE NFO OR MRS PHONE NUMBERS IF NECESSARY)

ENERGY EDUCATION RESEARCH
SUPPLEMENTARY ANALYSIS

Background

Following a presentation on 7th May, 2003 of the results of the Centre for Sustainable Energy's evaluation research on the *Energy Matters* Home Energy Resource, a question was raised by Shell's representative as to whether the effects *Energy Matters* varied depending on the income, tenure or gender of parental respondents. To answer this question New Perspectives (who conducted the Telephone Survey of parents) has conducted some supplementary analysis (attached) and we have the following findings, which should be treated with caution because of the small sub-samples involved.

Supplementary Findings

The Influence of Children and *Energy Matters*

All respondents were asked to what extent their children and *Energy Matters* had influenced their decisions to install energy efficiency measures or change their behaviour in order to save energy. They were asked to rate this factor (and several others) on a scale of 1 to 5, where 1 meant it had influenced them *not at all*, and 5 meant it had influenced them *a lot*. Respondents answers were then allocated scores between 100 for *a lot*, and 0 for *not at all*. The average influence of children and *Energy Matters* was rated at 52 (out of 100) on this basis – almost twice as influential as all other factors.

When we now look at the influence of children and *Energy Matters* analysed by tenure, income and gender of the parents answering these questions, we do find some differences. The influence of children and *Energy Matters* does seem to be slightly **higher** than average on parents who don't own their own homes (57), on parents with incomes below £20,000 p.a. (66) or between £20,000 and £30,000 (62), and on mothers (57). The influence of children and *Energy Matters* is reported to be slightly **lower** on owner occupiers (51), on parents with incomes over £30,000 (43) and on fathers (43).

(See Table 1, attached)

Behavioural Changes by Tenure, Income and Gender

76% of all 148 households in our sample had made some behavioural changes following their children's involvement in *Energy Matters.* Although similar numbers of owner occupiers and others had made *any behavioural changes*, people who aren't owner occupiers seem to have made more changes in their attempts to save energy – 4.2 changes each on average, compared to 3.3 per owner occupied household. Households in the lowest income band also seem to have made more changes each on average (4.7), compared to 3.6 per home on middle incomes, and 3.2 per home in the highest income bracket. Women also recalled making more changes (3.9 each on average) than did men (2.8 changes each on average) – See also Table 2.

BEHAVIOURAL CHANGES		TENURE		INCOME			GENDER	
	ALL	**Owner Occupiers**	**Others**	**Up to £20,000**	**£20,001-£30,000**	**Over £30,000**	**Male**	**Female**
Bases: (100%)	148	113	33	29	35	71	26	116
Any Behavioural Change since *Energy Matters*	76%	75%	79%	86%	80%	75%	69%	81%
Av. Changes per Home	3.6	3.3	4.2	4.7	3.6	3.2	2.8	3.9

Measures installed by Tenure, Income and Gender

Overall just over half (54%) of the parents whose children had been educated through *Energy Matters* had installed any energy efficiency measures since that time. In these supplementary analyses we also looked at whether this varied much by tenure, income or gender of the parents interviewed, and we found that there were some subtle differences.

Overall we found that more owner occupiers had installed some measures (57%) since *Energy Matters* than had those who rented their homes (45%) and that owner occupiers had installed more measures each on average (1.6) than households which did not own their home (1.0) – just as we might expect, given that tenants are unlikely to invest in improvements to a home which is not their own. But we also found that more measures had been installed by middle income (2.0) and low income households (1.5) than by high income households (1.2), which suggest that when lower income households do own their home, they are more likely to invest in energy efficiency.

Men also tended to recall installing slightly more measures (1.8) than did women (1.4) and more men (64%) recalled installing *any* energy efficiency improvements since *Energy Matters* than did women (1.4). This may be because some men take the initiative to install various measures themselves without drawing attention to it; we found that more men than women recalled the installing measures such as blocking gaps around skirting, double glazing, draughtproofing, heating programmers, hot water timers, loft hatch draughtproofing and loft hatch insulation – i.e. all measures which could require some DIY skill – whereas marginally more women recalled installing CFLs (low energy light bulbs) which simply require replacement of an old incandescent bulb.

On balance therefore it seems that women are slightly more likely to adopt (or at least recall) *behavioural changes* following their children's involvement in *Energy Matters*, while men are more likely to install (or recall installing) *energy efficiency measures*, with the exception of low energy light bulbs, which may be installed slightly more often by women.

MEASURES INSTALLED		TENURE		INCOME			GENDER	
	ALL	**Owner Occupiers**	**Others**	**Up to £20,000**	**£20,001-£30,000**	**Over £30,000**	**Male**	**Female**
Bases: (100%)	148	113	33	29	35	71	26	116
Any Measures installed since *Energy Matters*	54%	57%	45%	62%	60%	51%	62%	55%
Av. Measures installed	1.4	1.6	1.0	1.5	2.0	1.2	1.8	1.4

(See also Table3)

Benefits noticed since taking action by Tenure, Income and Gender

Of the 118 households which have taken action since their children were involved in *Energy Matters*, we also found that several of the *benefits of taking action* were more often noticed by those who rented their homes or were on low or middle incomes, and also by slightly more men than women – e.g. lower fuel bills, warmer homes, less damp and fewer health problems. But slightly more higher income households noticed better light and fewer draughts. These differences are summarised in the table overleaf, and shown in full in Table 4 (attached).

BENEFITS NOTICED		TENURE		INCOME			GENDER	
	ALL	**Owner Occupiers**	**Others**	**Up to £20,000**	**£20,001-£30,000**	**Over £30,000**	**Male**	**Female**
Bases: All taking action	118	92	26	27	29	56	20	98
No. noticing benefits of:								
Lower fuel bills	40%	36%	54%	56%	28%	38%	45%	39%
Warmer homes	41%	38%	50%	44%	41%	32%	45%	40%
Less draughty	37%	38%	35%	33%	31%	41%	45%	36%
Less condensation	25%	26%	19%	19%	24%	25%	35%	22%
Better light	16%	14%	23%	15%	7%	21%	25%	14%
Less damp	13%	11%	19%	22%	17%	4%	15%	12%
Less mould	9%	9%	12%	11%	14%	4%	15%	8%
Fewer health problems	14%	11%	23%	30%	14%	7%	15%	13%

Recall of what children did as part of *Energy Matters* by Tenure, Income and Gender

To try and explain some of these apparent differences, we have also analysed which of the children's *Energy Matters* activities were recalled by these different sub-samples of respondents. Results are shown in Table 5.

We find few major differences between owner occupiers and those who rent their homes, but we do find that parents on low and middle incomes tend to recall more of what their children did than do parents on high incomes – e.g. practical experiments at school, the home energy survey, written recommendations, suggestions for changing behaviour and ideas about how much might be saved. Female respondents (i.e. the children's mothers) also recalled more activities that their children were involved in than did the fathers who were interviewed. This explains why mothers seemed to think their children more influential (see Table 1) than did fathers.

To some extent some of the apparent differences which we are seeing between male and female respondents may therefore be a product of the fathers' lower level of involvement in the *Energy Matters* process, rather than real differences between these homes. It really needs a bigger sample than we have here, and more detailed questioning of respondents, to clarify this situation. But there do seem to be some real differences between the responses from different income and tenure groups, although the sub-samples are really too small for this to be conclusive.

(See Table 5)

TABLE1 **Influence of Children and Energy Matters by Tenure/Income/Gender**

	TOTAL	Tenure/Income/Gender						
		Owner Occupiers	Others	Up to £20,000 p.a.	£20,001-£30,000	Over £30,000	Male	Female
Base – All taking action after EM	126	95	31	28	29	57	20	100
Mean	52	51	57	66	62	43	43	57
Q16 Factors influencing decisions to install measures/change behaviour: Children & Energy Matters								
A lot (100)	21	10	11	7	7	4	2	19
	17%	11%	35%	25%	24%	7%	10%	19%
.....(75)	32	28	4	12	6	13	4	27
	25%	29%	13%	43%	21%	23%	20%	27%
..... (50)	31	25	6	3	11	16	5	26
	25%	26%	19%	11%	38%	28%	25%	26%
..... (25)	22	19	3	4	4	12	4	17
	17%	20%	10%	14%	14%	21%	20%	17%
Not at all (0)	17	11	6	2	-	11	4	10
	13%	12%	19%	7%	-	19%	20%	10%
DK	3	2	1	-	1	1	1	1
	2%	2%	3%	-	3%	2%	5%	1%

TABLE 2 **Behavioural Changes by Tenure/Income/Gender**

	TOTAL	Tenure/Income/Gender						
		Owner Occupiers	Others	Up to £20,000 p.a.	£20,001-£30,000	Over £30,000	Male	Female
Base – All Households	148	115	33	29	35	71	26	116
Q10 Things YOU have started doing since your children took part in Energy Matters.								
Discussing how to save energy at home?	80	63	17	19	20	37	11	69
	54%	55%	52%	66%	57%	52%	42%	59%
Keeping a record of energy used (e.g. as shown on your bills)?	16	10	6	6	-	9	4	12
	11%	9%	18%	21%	-	13%	15%	10%
Looking at your gas or electricity meters more often? (If you have access to them)	24	15	9	9	4	9	3	21
	16%	13%	27%	31%	11%	13%	12%	18%
Trying to save energy by turning off lights which aren't needed?	86	66	20	17	24	40	12	74
	58%	57%	61%	59%	69%	56%	46%	64%
Trying to save energy by changing your habits when using the cooker, kettle, refrigerator or other a	60	43	17	13	18	24	8	52
	41%	37%	52%	45%	51%	34%	31%	45%
Controlling your heating more carefully?	66	50	16	18	17	28	11	55
	45%	43%	48%	62%	49%	39%	42%	47%
Controlling your hot water more carefully?	46	34	12	15	13	14	8	38
	31%	30%	36%	52%	37%	20%	31%	33%
Closing your curtains or blinds earlier to keep heat in?	61	41	20	17	13	27	5	56
	41%	36%	61%	59%	37%	38%	19%	48%
Not leaving appliances on "standby"?	62	50	12	13	14	30	7	55
	42%	43%	36%	45%	40%	42%	27%	47%
Rewarding your children for any energy savings they make	23	13	10	9	3	8	3	20
	16%	11%	30%	31%	9%	11%	12%	17%
No access to meters	2	-	2	1	1	-	-	2
	1%	-	6%	3%	3%	-	-	2%
DK	3	3	-	-	-	3	-	3
	2%	3%	-	-	-	4%	-	3%
Nothing done	35	28	7	4	7	17	8	21
	24%	24%	21%	14%	20%	24%	31%	18%
ANY BEHAVIOURAL MEASURE	112	86	26	25	28	53	18	94
	76%	75%	79%	86%	80%	75%	69%	81%

TABLE 3 **Measures installed by Tenure/Income/Gender**

	TOTAL	Tenure/Income/Gender						
		Owner Occupiers	Others	Up to £20,000 p.a.	£20,001-£30,000	Over £30,000	Male	Female
Base – All Households	148	115	33	29	35	71	26	116
Q11 Energy efficiency measures installed since EM:.								
Block gaps around skirting	11	10	1	2	4	3	4	7
	7%	9%	3%	7%	11%	4%	15%	6%
Bought any energy efficient	22	19	3	6	4	11	4	18
appliances	15%	17%	9%	21%	11%	15%	15%	16%
Cavity wall insulation*	4	4	-	1	1	1	1	3
	3%	3%	-	3%	3%	1%	4%	3%
Double glazing	15	13	2	3	4	8	4	11
	10%	11%	6%	10%	11%	11%	15%	9%
Draughtproofing on doors or	17	14	3	4	6	7	4	13
windows	11%	12%	9%	14%	17%	10%	15%	11%
External wall insulation	5	5	-	1	3	1	2	3
	3%	4%	-	3%	9%	1%	8%	3%
Floor insulation	9	8	1	3	2	4	1	8
	6%	7%	3%	10%	6%	6%	4%	7%
Heating programmer/timer*	14	12	2	2	6	4	3	11
	9%	10%	6%	7%	17%	6%	12%	9%
Hot water tank jacket*	3	3	-	-	2	1	1	2
	2%	3%	-	-	6%	1%	4%	2%
Hot water tank thermostat*	4	4	-	-	1	2	-	4
	3%	3%	-	-	3%	3%	-	3%
Hot water timer*	8	7	1	1	2	4	3	5
	5%	6%	3%	3%	6%	6%	12%	4%
Internal wall insulation	3	2	1	1	2	-	1	2
(e.g. dry lining)	2%	2%	3%	3%	6%	-	4%	2%
Loft hatch draughtproofing*	6	6	-	-	3	3	2	4
	4%	5%	-	-	9%	4%	8%	3%
Loft hatch insulation*	7	7	-	-	4	3	2	5
	5%	6%	-	-	11%	4%	8%	4%
Loft insulation	10	10	-	-	6	4	4	6
	7%	9%	-	-	17%	6%	15%	5%
Low energy light bulbs	59	45	14	13	16	26	10	49
	40%	39%	42%	45%	46%	37%	38%	42%
New central heating boiler*	5	3	2	2	2	1	1	4
	3%	3%	6%	7%	6%	1%	4%	3%
Pipe insulation	4	4	-	1	1	2	1	3
	3%	3%	-	3%	3%	3%	4%	3%
Radiator foil	5	3	2	2	1	2	-	5
	3%	3%	6%	7%	3%	3%	-	4%
Radiator shelves	3	1	2	1	1	-	-	3
	2%	1%	6%	3%	3%	-	-	3%
No loft	13	11	2	4	4	5	2	11
	9%	10%	6%	14%	11%	7%	8%	9%
None installed	61	49	12	10	14	35	9	52
	41%	43%	36%	34%	40%	49%	35%	45%
ANY "ENERGY EFFICIENCY"	80	65	15	18	21	36	16	64
MEASURE INSTALLED	54%	57%	45%	62%	60%	51%	62%	55%

TABLE 4 **Benefits noticed from taking action by Tenure, Income Gender**

	TOTAL	Tenure/Income/Gender						
		Owner Occupiers	Others	Up to £20,000 p.a.	£20,001-£30,000	Over £30,000	Male	Female
Base – All taking action since EM	118	92	26	27	29	56	20	98
Q22 Effects on Fuel Bills of things done since EM								
Bills lower	47	33	14	15	8	21	9	38
	40%	36%	54%	56%	28%	38%	45%	39%
Bills the same	48	39	9	9	10	27	6	42
	41%	42%	35%	33%	34%	48%	30%	43%
Bills higher	2	2	-	-	2	-	1	1
	2%	2%	-	-	7%	-	5%	1%
Too early to tell yet	16	13	3	3	8	5	3	13
	14%	14%	12%	11%	28%	9%	15%	13%
DK/REF	5	5	-	-	1	3	1	4
	4%	5%	-	-	3%	5%	5%	4%
Q29 Effects on home comfort of things done since EM								
Yes - warmer/more comfortable	48	35	13	12	12	18	9	39
	41%	38%	50%	44%	41%	32%	45%	40%
No - about the same/no warmer or more comfortable	65	52	13	13	16	36	10	55
	55%	57%	50%	48%	55%	64%	50%	56%
No - colder/less comfortable	3	3	-	1	1	1	1	2
	3%	3%	-	4%	3%	2%	5%	2%
Too early to tell yet	1	1	-	-	-	1	-	1
	1%	1%	-	-	-	2%	-	1%
DK	1	1	-	1	-	-	-	1
	1%	1%	-	4%	-	-	-	1%
Q32 Benefits noticed since installing measures/taking action:								
Less condensation	29	24	5	5	7	14	7	22
	25%	26%	19%	19%	24%	25%	35%	22%
Less mould	11	8	3	3	4	2	3	8
	9%	9%	12%	11%	14%	4%	15%	8%
Less damp	15	10	5	6	5	2	3	12
	13%	11%	19%	22%	17%	4%	15%	12%
Fewer health problems, such as coughs, colds or asthma	16	10	6	8	4	4	3	13
	14%	11%	23%	30%	14%	7%	15%	13%
Better light	19	13	6	4	2	12	5	14
	16%	14%	23%	15%	7%	21%	25%	14%
Less draughty	44	35	9	9	9	23	9	35
	37%	38%	35%	33%	31%	41%	45%	36%
Sun heats room - stays warm	1	1	-	-	1	-	1	-
	1%	1%	-	-	3%	-	5%	-
Money saving - bought less oil	1	1	-	-	-	1	-	1
	1%	1%	-	-	-	2%	-	1%
Lightbulbs last longer	1	1	-	-	1	-	1	-
	1%	1%	-	-	3%	-	5%	-
DK/NS/Too soon to tell	56	43	13	14	16	24	8	48
	47%	47%	50%	52%	55%	43%	40%	49%

TABLE 5 **Things done as part of Energy Matters - by Tenure, Income, Gender**

	TOTAL	Tenure/Income/Gender						
		Owner Occupiers	Others	Up to £20,000 p.a.	£20,001-£30,000	Over £30,000	Male	Female
Base – All Households	148	115	33	29	35	71	26	116
Q9 Things done as part of "ENERGY MATTERS"...								
Lessons at school on energy?	123	99	24	27	28	61	21	102
	83%	86%	73%	93%	80%	86%	81%	88%
Practical experiments at school on energy?	89	67	22	22	21	40	12	77
	60%	58%	67%	76%	60%	56%	46%	66%
An energy survey of your home?	94	76	18	20	27	42	12	82
	64%	66%	55%	69%	77%	59%	46%	71%
Bring home written recommendations on energy saving measures you could install to save energy?	95	70	25	23	24	41	13	82
	64%	61%	76%	79%	69%	58%	50%	71%
Suggest ways of changing your behaviour in order to save energy? (e.g. how you cook or control your	92	72	20	21	25	42	13	79
	62%	63%	61%	72%	71%	59%	50%	68%
Tell you how much you might save on your fuel bills through any of these measures?	24	18	6	6	10	7	4	20
	16%	16%	18%	21%	29%	10%	15%	17%
Design a brochure on energy saving as part of their schoolwork?	63	50	13	16	15	28	8	55
	43%	43%	39%	55%	43%	39%	31%	47%
Design a TV commercial on energy saving as part of schoolwork?	5	3	2	-	1	3	1	4
	3%	3%	6%	-	3%	4%	4%	3%
Design a website?	10	7	3	4	1	2	3	7
	7%	6%	9%	14%	3%	3%	12%	6%
Make any draught excluders (like snakes or sausage dogs)?	23	17	6	4	3	14	3	20
	16%	15%	18%	14%	9%	20%	12%	17%
Awarded a Certificate of Energy Awareness by the school?	45	32	13	10	12	22	5	40
	30%	28%	39%	34%	34%	31%	19%	34%
DK	12	6	6	1	1	4	4	2
	8%	5%	18%	3%	3%	6%	15%	2%