



Self Disconnection Survey Report

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Energy Action Scotland Self Disconnection Survey

Introduction and background

There have been many debates and discussions around the topic of self disconnection. It is a subject which has a high profile amongst many advice agencies and those working with low income families. It is a modern day phenomenon which sees the householder taking themselves off supply. This causes hardship and discomfort. The effects of cold, damp homes on health and well-being can be both physical and mental and can be devastating. Health research has also demonstrated the impact of cold homes by showing the link to excess winter deaths and increases in hospital admissions for cold related problems such as strokes and heart attacks.

It is against this background that Energy Action Scotland (EAS) conducted a survey of households using prepayment meters (PPMs) for the purchase of domestic fuel. Previous surveys by and for a number of fuel suppliers had suggested that those households using fuel paid for by the PPM method were happy to do so and that for the largest majority of those customers the use of the PPM caused no significant disadvantage or hardship.

However, EAS noted from these studies that there was a significant minority of households, around 6%, where the customer was dissatisfied with this payment method and where other problems were present.

This view was backed by an Ofgem/MORI survey 'Experience of the Competitive Market', which showed that 94% of PPM customers were satisfied with their payment method. Many of these satisfied consumers will have chosen to use PPMs by making a legitimate and informed choice. However, it still showed a minority who were not satisfied.

EAS took the view that a number of the dissatisfied customers may be households disadvantaged by paying for fuel via PPM and therefore wanted to conduct its own independent survey. The survey would set out to understand the reasons for dissatisfaction, for self disconnection and to identify possible solutions to prevent further periods of self disconnection.

EAS proposed to undertake the survey with the assistance of two of its member organisations. These organisations would identify householders who may have fuel debt or payment problems or who approached the organisations for energy advice. The surveys would seek to establish whether there was dissatisfaction with PPMs, the reasons for dissatisfaction, whether there was self disconnection and, if so, the frequency of self disconnection, understand the reasons for these and then to provide advice to alleviate problems.

The reasons for dissatisfaction with PPMs have not been easily understood nor are reasons for periods of self disconnection. These reasons can range from genuine poverty, where the householder has no money available to buy a token, to the inability of the householder to use their heating and appliances appropriately. It was hoped that the survey would provide better insight.

EAS approached ScottishPower to fund the research and this report. The company was also keen to gain more information on PPM customers and EAS is very grateful for their support.

Conducting the survey

EAS approached two of its member organisations – The Wise Group and West Lothian Advice Shop – to identify householders and to carry out the surveys.

The survey was conducted in two parts: the first was a simple questionnaire which was used to gather information from PPM customers identified by the two EAS members. The second part was a more detailed survey of 20 households. This detailed survey took the form of a level three NHER survey and

so was able to assess the energy efficiency of the home. It then calculated what improvements could be made via the current range of energy efficiency schemes to make the home more energy efficient and cheaper to run. The households selected for the second, more detailed survey were taken from those who had agreed to take part in it and who had also expressed some difficulties with the use of the PPM or who had self disconnected from supply at some point.

EAS then designed a survey form for use with identified households by its two members. (A copy of the survey form used is attached as appendix 1)

The Wise Group and West Lothian Advice Shop both provide face to face energy advice to the public across all housing tenures. The Wise Group operates in a number of areas across Scotland but for the purposes of this survey chose the areas of Glasgow and East Ayrshire. They provide home visits in these areas in conjunction with projects undertaken on behalf of the local authorities and the Glasgow Housing Association (GHA). Glasgow City Council has transferred its housing stock to GHA.

The West Lothian Advice Shop operates across West Lothian, from their base in Bathgate, offering both outreach services and a drop in facility to residents. The energy advice team within the Advice Shop were the partners for the purpose of this survey.

The Wise Group undertook surveys in Glasgow as part of a door to door energy advice project which they were delivering as part of ongoing work with GHA. Where the householder was identified as using a PPM, they were asked if they would participate in the survey. In East Ayrshire, surveys were again conducted as part of a door to door project undertaken with East Ayrshire Council. Again, where the householder was identified as using a PPM, they were asked to participate in the survey.

The West Lothian Advice Shop undertook surveys by two means: firstly where a resident had called into the Advice Shop seeking advice either on energy or money matters and secondly where a home visit was being made in response to a request from a resident seeking energy advice.

Between the two organisations 180 surveys were undertaken. The results were then analysed and the details are contained in the next part of this report, the conclusions from the first survey. The second batch of the 20 households to have more detailed surveys was chosen and these were then surveyed using NHER level 3 software. These surveys were conducted by Alembic Research. The results of these surveys are also given in a later section of this report; in the second survey this is shown.

Conclusions from the first survey

A full breakdown of the results of the first survey is given in appendix 2. This section summarises the results of the first stage survey and gives EAS's initial conclusion, and where appropriate, a recommendation.

With 83 (46%) of those participating in the survey reporting that their PPM was in the house when they moved in, there is evidence to suggest that not all of those who have PPMs have made a positive or informed choice to have them. There were only 15 (8%) who had had a PPM installed by their supplier as a means of recovering debt.

Recommendation 1

There is an opportunity to inform consumers of their choices when they move home and this could be done by the fuel supplier when the consumer registers as the new occupant of the home. A welcome pack which includes information on payment methods and tariffs could provide a useful means of ensuring that new occupants make the right choice for them at this time. Suppliers could also work with social housing providers to provide information on payment methods and tariffs which could be included in social housing providers' information services to tenants. 71 (39%) of those surveyed had asked for the PPM as a means of budgeting or preventing debt. This suggests that many people do not wish to get into debt and want to manage their finances. This goes against the view held by some commentators that there are a significant number of consumers who can pay but won't pay.

The greatest majority of people (131 or 73%) reported that they had been advised or made aware of alternative payment methods by their fuel supplier. However, 70 (39%) of all respondents stated that they would consider changing their payment method if it could save money in the long run and if they were given advice about how to do so.

This would seem to demonstrate that some consumers do not read or perhaps do not understand the literature sent to them by their supplier. It does not seem to lead them to a natural conclusion of using this information to make changes in their method of payment, despite being interested in doing so.

Recommendation 2

Information on payment methods and tariffs should be reviewed by suppliers with a view to providing more consumer friendly information to encourage consumers to take payment methods and tariffs more suited to their individual need.

When it came to reporting difficulties the majority of those surveyed (101 or 56%) reported that they had no difficulties with their PPMs. This falls into line with the results of other surveys which show that most people do not have a problem with the use of a PPM. However the other 79 (44%) did report problems and many of these were multiple problems. Some of these problems could be seen as fairly minor, such as with the position of the meter. However, when this is out of reach for an elderly person who then requires standing on a chair, there is a serious health and safety issue. The main issues or problems recorded included: lack of money to purchase tokens, having to use a high number of tokens, difficulty in getting to the outlet that sells the tokens and the outlet not being open when it was needed.

Some of these difficulties could easily be resolved if, for example, the consumer was on the supplier's Priority Services Register and applied to have the meter moved to a more user friendly height and position. There is also evidence to suggest that a number of the problems were simply due to low household income or poverty with reported problems such as "having trouble paying for tokens" and "having to pay for meter and arrears."

Recommendation 3

Ensuring that consumers are using the right payment method undoubtedly helps to reduce bills. However a benefits health check is also a tried and tested way of increasing the income of low income families. Suppliers should consider offering benefits health checks to anyone who pays for fuel via a PPM and who is on a low income or is already on a benefit. This could be offered via the Priority Services Register (PSR) or via other literature as described in recommendation 1. Suppliers should also consider how vulnerable customers are made aware of the PSR and how they can provide clearer information on this to customers.

Respondents were then asked if, as a result of these difficulties, they had ever disconnected from supply. 25 (14%) answered that they had and 155 (86%) answered that they had not. Of the 25 who had reported disconnecting from supply, 7 gave no stated time, 11 stated up to 4 hours, two between 4 and 8 hours, three up to 12 hours, one up to a day and one respondent stating a fortnight.

Those consumers who reported having disconnected and some of those who reported multiple problems with paying for fuel where then selected to be included in the second survey. The results of these surveys are shown in a later section; the second survey results.

Even with 101 people reporting that they had no problems with their PPM and 155 stating that they had never disconnected from supply, 103 (X%) 57% respondents answered that they regularly used the emergency credit facility on the PPM. One respondent noted that they "use it all the time in the winter". This would suggest that using the emergency credit facility is seen as a normal state of affairs for many consumers.

Recommendation 4

The high or regular use of the emergency credit facility for PPMs further demonstrates the underlying poverty issue experienced by a number of low income consumers. Smarter metering solutions enabling better debt management and repayment are required for the benefit of vulnerable consumers. Companies such as Polymeters Response International offer intelligent metering systems which have been successfully trialled in over 90,000 homes in Northern Ireland reducing self disconnection and allowing greater debt management for the benefit of the consumer and the supplier. EAS would wish to see trials of this type of technology in Scotland and will be pressing Ofgem to support this. Poverty issues can also be tackled by ensuring that low income customers are receiving all the benefits they are entitled to. As stated in the previous recommendation, fuel suppliers should consider offering a benefits health check to customers who have or wish to move to a PPM payment method.

When asked whether they had sought advice from their fuel supplier when experiencing problems, only 7 (4%) respondents said that they had done so. Of these 7 respondents, only 1 gave positive feedback noting that "the fuel supplier is always helpful". Other comments were more negative: "told I pay so much as I'm on Comfort Plus plan – not practical advice", was one comment received.

It is clear that consumers do not see their supplier as the natural point of contact for advice on problems, choosing instead to engage with more local services, such as the advice agencies undertaking this part of the survey. More could be done by suppliers to promote their energy efficiency help lines.

Recommendation 5

Suppliers should do more to promote their energy efficiency help lines as a means of dealing with customers who are experiencing problems. Many customers seem unaware of this source of help.

When looking at the split in tenure of those taking part in the survey, the overwhelming majority, 146 or 81%, were renting their home from the local authority or housing association, 18 (10%) owned their home and the remaining 16 (9%) rented their homes privately.

The survey also tried to establish whether the house had had any energy efficiency works and if so who had paid for them. A surprisingly large number of respondents, 103 or 57%, had no idea if any work had been carried out to their homes. Twelve respondents reported that no works had been carried out, 8 gave no answer and 57 were quite specific in replying, being able to report clearly the measures installed such as radiator panels or cavity wall insulation. One respondent answered "yes, energy advice" showing at least one person recognised the value of the visit. The high level of respondents who had no idea if any work had been undertaken again might be linked to the high number of people who were resident in the house for relatively short periods of time. It is unlikely that these residents would be aware of work undertaken by or on behalf of a previous tenant unless this was a very visual measure, such as a new boiler or new windows.

Of those who had had work undertaken and ventured an answer as to who had paid for this, most thought it was the council or the company who actually carried out the work. No mention was made of actual programme names such as EEC or Warm Deal. The lack of awareness of energy measures

installed in the home would be followed up in the NHER survey to determine the energy efficiency of the dwelling to see if by adding further improvements fuel consumption levels could be reduced.

Recommendation 6

There is a continuing need to promote the availability of grants to householders and to seek their action in taking these grants up. Suppliers should continue to engage householders to offer advice on grant programmes such as EEC and to work with advice agencies to have them actively promote the availability of grants to the householders they have contact with.

Respondents were then asked what best describes their own circumstances.

33 replied that they were employed, 67 said they were unemployed, 4 stated that they were self employed, 48 replied that they were retired and 28 gave no answer. Two of the unemployed customers classed themselves as full time carers and three also noted that they were disabled.

The first survey asked how long the respondent had lived at their present address. Fuller details are included in appendix 2 but the longest reported time was 68 years, while the shortest reported time was a few months. Just over one third of respondents reported being in the home less than 5 years and half less than 10 years.

Of the 180 surveyed 113 answered that they would be willing to take part in the follow up survey.

The second survey results

Following the first survey, 20 homes were selected to participate in the more detailed second survey. This survey was based around a full Level 3 National Home Energy Rating (NHER) survey of the house and a further interview with the householder. The NHER scheme gives individual domestic dwellings an energy score, on a scale of 0 to 10. The lower the score, the less energy efficient the dwelling, and so a house scoring 2 is considerably more expensive to run than a house that scores 8. The NHER is site specific, taking into account the location of the home, that is to say a house in Glasgow is more costly to run than a similar house in Devon because of the variation in climate. Unlike other energy rating programmes, NHER also takes into account the total fuel use of the household, that is space and water heating, cooking, lights and appliance use. It can accurately predict the running costs of the dwelling. It can also model changes to running costs which would occur with the installation of energy efficiency measures or changes to the heating system.

Initially 20 households were selected and approached to take part in this second survey and of these nine agreed to take part. The results from these second surveys are shown in detail in appendix 3. The NHER Surveys showed that only two homes scored less than a 6 with the highest scored home recording an NHER of 9, ie. a very efficient home. The house with the NHER score of 9 had an estimated annual fuel bill of £429, well below the Scottish average fuel bill of £707 as shown in the Scottish Social Statistics Report 2001. The average NHER in Scotland is currently around 5.4 with the mean score being reported in the Scottish House Condition Survey 2002 as 6. Seven of the nine second survey homes scored above the current Scottish average and would therefore require less than the Scottish average expenditure on fuel.

With the majority of these dwellings scoring well above the Scottish average on the NHER, the second survey found that there was little that could be done to improve their energy efficiency. However, that is not to say these households cannot be assisted; income maximisation programmes could increase benefit take up and provide a greater disposable income. Changes to payment methods could provide better budgeting on fuel costs while advice on the effective use of heating systems could reduce the overall running costs of the home.

Although the second survey showed that the energy efficiency of these homes was good, the householders were still experiencing problems and difficulties.

- In one household the tenant had a debt of £1,700. This was caused by the used power cards used not being registered to the householder. The problem occurred when the householder and partner split up.
- Another householder had a £300 debt and the customer accepted a meter to pay the debt off. However, it appears that when the meter was installed it was not calibrated to repay the debt. This was only brought to light when the client asked to go back to an ordinary credit meter and discovered that the original debt was still outstanding.
- In a third house the householder is still living with a problem that was created five years ago. The client did not receive a fuel bill for around 18 months and during this time a large debt was gathered. The client then used a PPM to pay off the bill but now has difficulty in changing back to a normal credit meter as the supplier 15 refusing their request.
- A fourth householder now has a very big credit which dates from a time when they were on direct debit. Their then supplier continued to take money out of their account after the householder had changed supplier. In addition, the PPM breaks down fairly regularly and this causes difficulties for the householder.
- For a fifth householder, their behaviour and use of the heating system contributes to their size of the bill. The fitting of additional energy measures would certainly improve the overall energy efficiency of the dwelling, but the householder also requires a high level of energy advice to change behaviour. This is also the case in other households where the householder simply opens the window when it gets too warm rather than turning the heating down or off. In these homes the central heating systems have recently been installed but the advice given has not had any impact on the householder. These households may yet have to face the impact of their behaviour via large fuel bills, which may in turn lead them to self disconnect, as they may not be able to pay for the fuel they use.

The homes below NHER Scottish average, the two homes below the national average were 3.9 and 4.2 respectively.

The house with an NHER of 3.9 was a seven-roomed bungalow situated in West Lothian which was heated with a pre-1985 oil-fired boiler. It had 100mm of loft insulation, no cavity wall insulation, upvc double glazed windows and a well-insulated hot water tank. The total annual fuel cost for the house was $\pounds1,315$.

Using the NHER software, the house was modelled for improvements using a new oil-fired condensing boiler, cavity wall insulation, a further 150mm of loft insulation and further insulation of the hot water cylinder. This reduced the overall fuel expenditure by £537 to £778, a significant saving and very close to the expected Scottish average. The NHER score of the house also increased from 3.9 to 7.3, again showing a significant impact.

The householder in this case had noted many difficulties in using a PPM for electricity. However, the real difficulty had been the high total expenditure on the fuel bills. This householder is a private sector tenant who had been in the home for four years. They had also been topping up the heating with the use of a variety of portable appliances.

The house with the NHER of 4.2 was a mid terraced house in West Lothian and had an annual fuel bill of \pounds 991. The house was reasonably well-insulated with cavity wall insulation installed, 150mm of loft insulation, upvc double glazing and a well-insulated hot water tank. The fuel bills were high due to the heating system which consisted of electric modern slim-line storage heaters installed in the last two years. The householder was a lone parent with three children. The survey found that they were spending more than they could afford but they needed to heat the home fully due to the children having asthma.

The householder reported problems paying for tokens and also with having to use so many tokens. The electric central heating system was being run via the PPM. The householder reported using emergency credit all the time in the winter. They had contacted their supplier for advice but had found this to be unhelpful.

Conclusion

The results of these surveys support the view that advice and education for customers is important in managing debt and the size of fuel bills. The issue of poverty and fear of debt is also one that needs to be addressed through income maximisation strategies. The need to ensure customers are on the right payment method and tariff is also important.

A better liaison with customers when they sign up with a new supplier, or even when they remain with the same supplier but change address, would ensure that consumers make informed choices about the right payment method for them. It would also help the supplier in providing the most appropriate service for individual customer needs.

The fuel poverty-proofing of homes via better insulation measures and modern high efficiency central heating systems will help to reduce the overall cost of running a home. However, the underlying problem of poverty meaning that householders just cannot afford to pay for fuel is very real. This can be mitigated by a combination of education, income maximisation, increased insulation and higher heating standards.

Appendix 1 (Form used for First Survey)

Prepayment meter and self disconnection survey

You are being asked to take part in this survey as you have intimated that you have some difficulties or dissatisfaction with your prepayment meter. Please help us by answering the following questions as honestly as you can.

Section 1

Why did you choose/not choose to have a prepayment meter? Was it (tick one)

- □ In the house when you moved in
- Installed by the fuel company as a result of outstanding debt or arrears
- □ Asked for by you as a means of budgeting/ preventing debt occurring.
- □ Some other reason, please state

Section 2

Have you been advised or made aware by your fuel supplier of other payment methods and the possible benefits of these alternatives; i.e. direct debit, standing order, quarterly or monthly billing.

🖵 Yes 🗳 No

Would you consider a change of payment method if it could save you money in the long run and were given advice on how to do this?

🗅 Yes 🗳 No

Section 3

What is the difficulty or problem you are currently experiencing? (tick all that apply)

- □ Have trouble paying for tokens through lack of money
- Having to use so many tokens
- □ Find it difficult to get to the outlet that sells the tokens
- □ The outlet that sells the tokens is not open when you need it
- □ Other problem, please give details

Section 4

As a result of these difficulties have you ever self disconnected from your supply

If so for how long (please circle relevant time) up to 4 hrs, between 4 and 8 hrs, up to 12 hours, up to one day, longer than a day. If longer then one day, how long

Is this something which happens regularly? (please tick)

🖵 Yes 🗳 No

Do you use the emergency credit facility regularly when in difficulty? (please tick)

🗅 Yes 🗅 No

Section 5

Have you ever sought advice from your fuel supplier for this problem? (please tick)

🗅 Yes 🗳 No

If yes what advice did they offer and was it useful and practical

Please provide details:

Section 6

What is the status of your home, do you; (please tick one)

- 🖵 Own it
- □ Rent if from the local authority or a housing association
- Rent it privately

Section 7

Have you ever had any energy efficiency works carried out to your home for example had the loft insulated, if so can you tell us what you had done and who paid for this work

Details:

What best describes your own circumstances (please circle one);

are you employed unemployed self employed or retired.

We would like to undertake a few follow up surveys where we will carry out an energy audit of the home to determine if there are any measures which could be installed that would help keep homes warmer. Would you be willing to have a further short survey of your home undertaken.

🛛 Yes 🗳 No

Although the survey might show up things that would make your home warmer we might not be able to offer these to you if you are ineligible for a grant.

We would like to record your name and address for verification of our research is this okay.

Your name

Your address

How long have you lived at this address

Appendix 2

First survey results

The initial survey was in seven sections. The following shows the responses.

In **Section 1** householders were asked why they chose or did not choose to have a prepayment meter. The results were as follows:

- ◆ 83 stated that it was in the house when they moved in
- ◆ 15 stated it was installed by the fuel company as a result of outstanding debt or arrears
- ♦ 71 had asked for a PPM as a means of budgeting or preventing debt occurring.

Other reasons given:

- In one case to replace old coin meter
- an advisor noted that one customer had severe mental health problems
- Nine respondents answered 'chose to have' but gave no further details.

In **Section 2** householders were asked if they had been advised or made aware by the fuel supplier of other payment methods and the possible benefits of these alternatives: i.e. direct debit, standing order, quarterly or monthly billing.

- ♦ Yes = 131
- ♦ No = 48
- Don't know = 1

When asked if they would consider a change of payment method if it could save them money in the long run and they were given advice on how to do this, the responses were:

- ♦ Yes = 70
- ◆ No = 107
- Possibly = 2
- Don't know = 1

In Section 3 householders were asked about the difficulty or problem they were experiencing.

- 22 reported having trouble paying for tokens through lack of money
- 16 reported a problem with having to use so many tokens
- 18 found it difficult to get to the outlet that sold the tokens
- 15 reported that the outlet that sold the tokens was not open when needed
- 101 reported having no problems.

Respondents were also asked to detail any other problem they might be experiencing and gave the following answers:

- paying too much
- fuel company not responding to calls for assistance (£20 per week)
- tokens not punching through the meter x 3. Some tokens do not work + if bought from corner shop sometimes they do not work. Cards not working properly and not able to work the meter, sometimes card does not register x 2. Cannot use certain power cards as system does not recognise them and one instance of failure of meter to record payments
- meter sited too high difficult to reach x 5
- meter situated too low or too high x 5
- meter needs recalibrated, payments too high
- faulty meter x 2 one resulting in a £400 bill

- one customer partially blind and did not know the meter had run out of credit (now changing to direct debit)
- standing charge too high x 2
- having to pay for meter and arrears x 2
- budgeting problems
- disabled and having trouble getting to the shops x 2
- finding suppliers (outlets)
- one customer said "other places don't do the right receipts and get you all mixed up"
- running out at inconvenient times x 2 and forgetting to buy them
- don't always know if it will run out
- just moved in had not yet had to recharge the meter
- one unspecified problem with a quantum meter (client unable to say).

In **Section 4** respondents were asked if, as a result of these difficulties, they had ever self disconnected from supply and if so for how long. This was a multiple-choice question.

- Regularly self disconnect = 25
- Do not self disconnect = 155

The periods of time over which they self disconnected were reported as:

- up to 4 hours = 11
- between 4 and 8 hours = 2
- up to 12 hours = 3
- up to one day = 1
- ♦ 14 days = 1
- no time stated = 7

When asked if the emergency credit facility was used regularly when in difficulty:

- ♦ Yes = 103
- ♦ No = 75
- No reply = 2
- one respondent who used the emergency credit facility regularly stated that they "use all the time in the winter"

In **Section 5** respondents were asked if they had ever sought advice from their fuel supplier for this problem.

- ♦ Yes = 7
- ♦ No = 172
- No reply = 1

When asked to provide details of the advice given answers included:

- Fuel company not responding to call for assistance
- ScottishPower provided no help with PCM problems
- Pay £190 up front to get my meter changed
- Told I pay so much as I'm on Comfort Plus plan not practical advice
- The fuel supplier is always helpful
- Not received my payment card yet
- Not really.

In Section 6 respondents were asked about the status of their home:

- Home owner = 18
- Rented it from the local authority or a housing association = 146
- Privately rented = 16

In **Section 7** respondents were asked if they had ever had any energy efficiency works carried out to their home and if so could they say what had been done and who had paid for the work.

- No works carried out = 12
- Radiator panels installed = 2
- Radiator panels and cavity wall insulation = 4
- Draughtproofing and loft insulation = 19
- Draughtproofing only = 18
- Loft insulation = 13
- Energy advice = 1
- 103 did not know if any work had been carried out or were unaware of any work being carried out
- No response = 8

No-one could state what programme or scheme had paid for the work. Those who gave an answer thought it was the company who installed the measures or the local council who paid for the work.

Respondents were then asked what best describes their own circumstances:

- Employed = 33
- Unemployed = 67
- Self employed = 4
- Retired = 48
- No reply = 28

2 unemployed customers classed themselves as full time carers and 3 also noted that they were disabled.

The survey then asked if they would be willing to participate in a follow up survey which would involve an energy audit of their home to determine if there were any measures which could be installed to keep their homes warmer.

- ♦ Yes = 113
- ♦ No = 60
- No reply = 7

Finally people were asked how long they had lived at their current address:

- Between 0 and 2 years = 16
- Between 2 and 5 years = 46
- Between 5 and 10 years = 33
- Between 10 and 15 years = 18
- Between 15 and 20 years = 9
- Between 20 and 30 years = 13
- Between 30 and 40 years = 9
- Between 40 and 50 years = 7
- Over 50 years = 4 (the longest reported residence was 68 years)
- Two respondents answered several years
- 23 gave no answer.

Appendix 3 Results from Follow-Up NHER Level 3 Surveys

1. Coxton Place, Glasgow

| House Details House type: House age: House size: Total floor area: | ground floor flat 1950–1963 lounge 2 bedrooms kitchen bathroom hallway 67.8m ² |
|---|---|
| Insulation Details Floor construction: Floor insulation: Wall construction: Wall insulation: Roof insulation: Windows: | solid none cavity CW insulation not applicable upvc double glazing – 20mm gap |
| Space and Water H Primary space heat gas-fired condensing (SEBDUK efficiency S | eating t ing: g combi boiler 90.7%) |
| gas price: 1.65p/kWh standing charge: £40 | n (inc. VAT)) per year (inc. VAT) |
| | |
| Water heating: from | i combi boiler |
| Water heating: from Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 | ariff: 2 per year (inc. VAT) |
| Water heating: from Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 Location Details Degree day region: | ariff: 2 per year (inc. VAT) 4 West of Scotland |
| Water heating: from Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 Location Details Degree day region: Wind speed region | ariff: 2 per year (inc. VAT) 4 West of Scotland 5.0 m/s |
| Water heating: from Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 Location Details Degree day region: Wind speed region Site exposure: | ariff: 2 per year (inc. VAT) 2 West of Scotland 5.0 m/s average |
| Water heating: from Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 Location Details Degree day region: Wind speed region Site exposure: Height above sea lo | ariff: 2 per year (inc. VAT) 2 West of Scotland 2 5.0 m/s average evel: 80m |
| Water heating: from Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 Location Details Degree day region: Wind speed region Site exposure: Height above sea lo Number of sides st | ariff: 2 per year (inc. VAT) 2 West of Scotland 2 5.0 m/s average evel: 80m heltered: 2 sides |
| Water heating: from Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 Location Details Degree day region: Wind speed region Site exposure: Height above sea le Number of sides sh Occupancy: 1 adult | ariff: 2 per year (inc. VAT) 2 West of Scotland 3 Scotland 3 Scotland 4 West of Scotland 5.0 m/s 5.0 m/s 5 average 5 vel: 80m 5 neltered: 2 sides 5 and 3 children |
| Water heating: from Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 Location Details Degree day region: Wind speed region Site exposure: Height above sea lo Number of sides sh Occupancy: 1 adult Heating pattern: wh standard heating pat | ariff: 2 per year (inc. VAT) 2 West of Scotland 3 Scotland 3 Scotland 4 Scotland 4 Scotland 5.0 m/s 5.0 m/s 5.0 m/s 6 Average 6 Vel: 80m 6 Note the store of the |
| Water heating: from Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 Location Details Degree day region: Wind speed region Site exposure: Height above sea le Number of sides sh Occupancy: 1 adult Heating pattern: wh standard heating pat Percentage of Zone | ariff: 2 per year (inc. VAT) 2 West of Scotland 3 West of Scotland 3 Scotland 4 Storm/s 5.0 m/s 5.0 m/s 5 average 5 vel: 80m 6 eltered: 2 sides 5 and 3 children 5 nole house heating 5 tern 5 2 heated: 100% |

18° elsewhere

| NHER rating: | 9.0 |
|---|---|
| SAP rating: | 87 |
| Total annual fuel costs: of which space heating water heating cooking lights and appliances standing charges | £429 per year £112 £53 £25 £158 £82 |

Breakdown space heating costs: before improvements



Options Assessed

Heating:

 no options assessed – central heating recently installed

Insulation:

 no options assessed – all Warm Deal measures already installed or not applicable

Comment

Householder has a large debt (£1,700) to Power company because Powercards used were not registered to householder. Problems when partner separated.

New central heating installed in February 2004. Previously direct electric fire (which is when huge bills incurred). Would like some advice on operating new heating system effectively and efficiently.

2. Torogay Street, Glasgow

| House Details | | | |
|--|--|--|--|
| House type: House age: House size: Total floor area: | semi-detached 1950–1963 lounge 3 bedrooms kitchen bathroom hallway 97.2m ² | | |
| Insulation Details Floor construction: Floor insulation: Wall construction: Wall insulation: Roof insulation: Windows: | solid none 'lawrence' cavity 65mm of phenolic foam external cladding 200mm upvc double glazing – 6mm gap | | |
| Space and Water Heating Primary space heating: gas-fired combi boiler (SEBDUK efficiency 79.6%) | | | |
| gas price: 1.65p/kWh standing charge: £40 | i (inc. VAT) per year (inc. VAT) | | |
| Water heating: from | combi boiler | | |
| Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 | ariff: 2 per year (inc. VAT) | | |
| | | | |
| Location Details Degree day region: West of Scotland | | | |
| Wind speed region: | : 5.0 m/s | | |
| Site exposure: | average | | |
| Height above sea le | evel: 70m | | |
| Number of sides sheltered: 1 side | | | |
| | | | |
| Occupancy: 1 adult | and 3 children | | |
| Heating pattern: wh standard heating patt | ole house heating tern | | |

Percentage of Zone 2 heated: 100%

Demand temperature: 23° in lounge 20° elsewhere

| NHER rating: | 8.3 |
|---|---|
| SAP rating: | 83 |
| Total annual fuel costs: of which space heating water heating cooking lights and appliances standing charges | £621 per year £230 £61 £25 £223 £82 |

Breakdown space heating costs: before improvements



Options Assessed

Heating:

no options assessed – central heating recently installed

Insulation:

 no options assessed – all Warm Deal measures already installed or not applicable

Comment

New central heating and external cladding recently installed. Problem is size of gas bill. Would like advice on operating new heating system effectively and efficiently. Says house is too warm, opens windows to cool house. Boiler thermostat set at maximum.

3. Cochrane Street, Bathgate

| House Details | und floor flot | NHER rating: | 7.5 |
|---------------------------|-------------------|---|----------------------------|
| House age: 193 | 30–1949 | SAP rating: | 76 |
| House size: Iour | nge | Ū | |
| 2 b | edrooms | Total annual fuel costs: | £461 per year |
| KIIC bat | throom | water beating | £200 £42 |
| hall | lwav | cooking | £42 £19 |
| Total floor area: 65. | 5m ² | lights and applian | ices £112 |
| | | standing charges | £82 |
| Insulation Details | | | |
| Floor construction: sus | spended limber | Breakdown space heating | costs: before improvements |
| Wall construction: cav | vity | Walls | |
| Wall insulation: CW | / insulation | Roofs | |
| Roof insulation: not | applicable | Floors | |
| Windows: woo | od double glazing | Windows | |
| - 01 | mm gap | Draughts | |
| Space and Water Heatin | ng | Hta Anni Loss | |
| Primary space heating: | : | Hta Controls Loss | |
| gas-fired combi boiler | | | r r r |
| (SEBDUK efficiency 73.05 | %) | 0 10 2 | 20 30 40 50 |
| gas price: 1.65p/kWh (inc | , VAT) | Ar | inual Cost (£/yr) |
| standing charge: £40 per | year (inc. VAT) | | |
| | | Options Assessed | |
| Water heating: from con | nbi boiler | Heating | |
| Electricity tariff | | no ontions assessed – | - central heating recently |
| Standard domestic tariff: | | installed | ochiral fielding feeenity |
| 7.02p/kWh (inc. VAT) | | | |
| standing charge: £42 per | year (inc. VAT) | Insulation: | |
| | | no options assessed – | - all Warm Deal measures |
| Location Details | | | |
| Degree day region: Eas | st of Scotland | | |
| | | Comment | |
| Wind speed region: 5.0 | m/s | Householder is currently ha | ppy with PCR and |
| Site exposure: ave | Prane | powercards. | |
| | Jugo | | |
| Height above sea level: | :160m | | |
| Number of sides shelte | ered: 2 sides | | |
| | | | |
| Occupancy: 2 adults | | | |
| | | | |
| Heating pattern: whole h | house heating | | |
| extended heating pattern | | | |

Percentage of Zone 2 heated: 100%

Demand temperature: 21° in lounge 18° elsewhere 7.5

4. Nigel Rise, Livingston

| <i>House Details</i> House type: House age: | end terrace 1964–1975 | NHER rating: SAP rating: | 7.5 77 | |
|---|--|---|--|--|
| House size: Total floor area: | lounge 2 bedrooms kitchen bathroom hallway w.c. 84.8m ² | Total annual fuel costs: of which space heating water heating cooking lights and appliances standing charges | £542 per year £293 £59 £16 £93 £82 | |
| Insulation Details | | | | |
| Floor construction: Floor insulation: Wall construction: Wall insulation: Roof insulation: Windows: | suspended timber none cavity CW insulation 200mm insulation upvc double glazing – 20mm gap | Breakdown space heating costs: A Walls Roofs Floors Windows Draughts | before improvements | |
| Space and Water H | eating | Htg. Appl. Loss | | |
| Primary space heat gas-fired fan assisted (SEBDUK efficiency 7 | ting: d standard boiler 79.1%) | 0 10 20 30 40 Annual Cost | 50 60 70 80 (£/yr) | |
| gas price: 1.65p/kWh | n (inc. VAT) | | | |
| standing charge: £40 |) per year (inc. VAT) | Options Assessed | | |
| Water heating: from 80L cylinder with 25m | n boiler nm cylinder jacket | Heating: no options assessed – central last couple of years | heating installed in | |
| Electricity tariff: Standard domestic ta | ariff | Insulation: | | |
| 7.02p/kWh (inc. VAT) | | new 80mm cylinder jacket – all other Warm Deal | | |
| standing charge: £42 | 2 per year (inc. VAT) | measures already installed or | not applicable | |
| Location Details Degree day region: | East of Scotland | After improvements NHER rating: | 7.6 | |
| Wind speed region | : 5.0 m/s | SAP rating: | 79 | |
| Site exposure: | below average | Total annual fuel costs: | £534 per year | |
| Height above sea le | evel: 150m | of which space heating water heating | £300 £43 | |
| Number of sides sh | neltered: 2 sides | lights and appliances | £10 £93 £82 | |
| | | a saving | of £8 per year | |
| Occupancy: 1 adult | | | | |
| Heating pattern: wh sheltered heating pat | nole house heating ttern | Comment Householder currently happy with P Disliked direct debit – ex supplier to | PCR. Large credit. | |
| Percentage of Zone 2 heated: 100% account after changing. Quantum meter breaks down regularly. Not happy with breakdowned | | | neter breaks down | |
| Demand temperatu | re: 23° in lounge 20° elsewhere | | | |

5. Hillview Place, Broxburn

House Details
House type:mid terrace with
passageHouse age:
House size:1964–1975Bourge
3 bedrooms
kitchen
bathroom
hallwayTotal floor area:90.7m²

Floor construction: suspended timber

Wall insulation: CW insulation

none

150mm insulation

– 20mm gap

upvc double glazing

Insulation Details

Floor insulation:

Roof insulation:

Windows:

Water heating:

Electricity tariff:

Off peak tariff: day rate

7.49p/kWh (inc. VAT) Off peak tariff: night rate

3.12p/kWh (inc. VAT)

Location Details

Wall construction: cavity

Space and Water Heating

portable LPG heater in lounge

110L cylinder with 37.5mm spray foam

standing charge: £57 per year (inc. VAT)

Primary space heating: modern slimline storage heaters

single immersion off peak

| NHER rating: | | 4.2 |
|--------------|-----------------------|---------------|
| SAP rati | ng: | 52 |
| Total and | nual fuel costs: | £991 per year |
| of which | space heating | £494 |
| | water heating | £194 |
| | cooking | £64 |
| | lights and appliances | £183 |
| | standing charges | £57 |

Breakdown space heating costs: before improvements



Options Assessed

Heating:

 no options assessed – central heating installed in last couple of years

Insulation:

 no options assessed – all Warm Deal measures already installed or not applicable

Comment

Needs heat because of asthma. Storage heating very expensive – costs more than householder can afford.

Wind speed region: 5.0 m/s

Degree day region: East of Scotland

Site exposure: average

Height above sea level: 100m

Number of sides sheltered: 2 sides

Occupancy: 1 adult and 3 children

Heating pattern: whole house heating extended heating pattern

Percentage of Zone 2 heated: 100%

Demand temperature: 21° in lounge 18° elsewhere

6. Newlands Drive, Kilmarnock

| <i>House Details</i> House type: House age: | semi-detached 1930–1949 | NHER rating: SAP rating: | 6.4 67 |
|--|--|---|---|
| House size: Total floor area: | lounge 2 bedrooms kitchen bathroom hallway 70.4m ² | Total annual fuel costs: of which space heating water heating cooking lights and appliance | £530 per year £263 £48 £19 es £118 |
| Insulation Details Floor construction Floor insulation: | : suspended timber | Breakdown space heating co | costs: before improvements |
| Wall construction: Wall insulation: Roof insulation: Windows: | cavity CW insulation 200mm insulation upvc single glazing: no DP | Walls Roofs Floors Windows Draughts | |
| Space and Water H Primary space hea pre-1998 gas-fired fa boiler (SEBDUK effic | leating ting: an assisted combi siency 65%) | Htg. Controls Loss | |
| gas price: 1.65p/kWl standing charge: £40 | h (inc. VAT) 0 per year (inc. VAT) | 0 10 20 30 Anr | 40 50 60 70 80 nual Cost (£/yr) |
| Water heating: from | n boiler | Options Assessed | |
| Electricity tariff: Standard domestic t 7.02p/kWh (inc. VAT) standing charge: £42 | ariff:) 2 per year (inc. VAT) | no options assessed – c Insulation: draughtproof windows a Deal measures already in | entral heating installed nd doors – all other Warm nstalled or not applicable |
| Location Details Degree day region | : West of Scotland | After improvements NHER rating: | 6.7 |
| Wind speed region | 1: 5.0 m/s | SAP rating: | 69 |
| Height above sea l | evel: 70m | Total annual fuel costs: of which space heating | £511 per year £245 |
| Number of sides sl | heltered: 1 side | water heating cooking lights and appliance | £48 £19 es £118 |
| Occupancy: 2 adult | S | standing charges a s i | £82 aving of £19 per year |
| Heating pattern: whe standard heating pattern | nole house heating ttern | Comment Debt of £300 with gas supplie | r. Accepted Quantum meter |
| Percentage of Zon | e 2 heated: 100% ure: 21° in lounge 18° elsewhere | to help pay off debt. Appears installed, it was not calibrated discovered when householde standard meter. Still owe £300 | that when meter was to repay debt. Only r asked to go back to). |
| | | L | |

7. Treesbank Road, Kilmarnock

| House Details | | NHER rating: | 6.0 |
|--|--|---|--|
| House type: | upper floor | | |
| | 4-in-a-block flat | SAP rating: | 62 |
| House age: House size: | 1930–1949 lounge 2 bedrooms kitchen bathroom hallway | Total annual fuel costs: of which space heating water heating cooking lights and appliand | £655 per year £364 £82 £19 ces £108 |
| Total floor area: | 57.3m ² | standing charges | £82 |
| Insulation Details Floor construction Wall construction: Wall insulation: Roof insulation: Windows: | : assumed sheltered cavity none 100mm insulation upvc double glazing – 20mm gap | Breakdown space heating of Walls Roofs Floors Windows | costs: before improvements |
| Space and Water H Primary space hea post-1998 gas-fire an (SEBDUK efficiency | leating ting: nd back boiler 60%) | Draughts Htg. Appl. Loss Htg. Controls Loss 0 5 10 | 15 20 25 30 |
| gas price: 1.65p/kWl | h (inc. VAT) | Anr | ual Cost (£/yr) |
| standing charge: £40 | 0 per year (inc. VAT) | Ontions Assessed | |
| Water heating: from 110L hot water cylind Electricity tariff: Standard domestic t 7.02p/kWh (inc. VAT) standing charge: £42 | n back boiler der: 25 spray foam ariff: 2 per year (inc. VAT) | Heating: no options assessed – within last 5 years Insulation: cavity wall insulation, 1 draughtproof loft hatch cylinder jacket | new central heating installed 50mm loft insulation, , and 80mm hot water |
| Degree day region | : West of Scotland | After improvements | |
| Wind speed region | :: 5.0 m/s | NHER rating: | 8.4 |
| Site exposure: | average | SAP rating: | 82 |
| Height above sea l | evel: 40m | Total annual fuel costs: of which space heating | £563 per year £364 |
| Number of sides sl | heltered: 1 side | water heating cooking | £75 £19 |
| Occupancy: 1 adult | and 1 child | lights and appliand standing charges a | ces £108 £82 saving of £92 per year |
| standard heating pat | ttern | | |
| Percentage of Zon Demand temperatu | e 2 heated: 100% ure: 21° in lounge 18° elsewhere | Comment Household behaviour increa would help reduce fuel bill. L increases household fuel bill | ses fuel costs. Energy advice ower flat empty which |
| | | | |

8. Elm Grove, Blackburn

| House Details House type: House age: House size: | detached bungalow 1983–1990 lounge 2 bedrooms kitchen bathroom hallway | | NHI SAF Tota of w |
|---|--|---|----------------------------------|
| Total floor area: Insulation Details Floor construction: Floor insulation: Wall construction: Wall insulation: Roof insulation: Windows: | 121.6m ² suspended timber none cavity U-value 0.6 (as built) 150mm insulation upvc double glazing – 16mm gap | | Brea |
| Space and Water He Primary space heat pre-1998 floor gas bc (SEBDUK efficiency 6 | eating ing: biler 66.6%) | | Htg. Htg. Co |
| gas price: 1.65p/kWh (inc. VAT) standing charge: £40 per year (inc. VAT) | | | Ont |
| Water heating: from 110L hot water cylind | boiler er: 25 spray foam | | Неа |
| Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 | ariff: Per year (inc. VAT) | | Insi • |
| Location Details Degree day region: Wind speed region: | East of Scotland | | Cor Did Usir now |
| Site exposure: | average | | met nee |
| Height above sea le | evel: 200m | | |
| Number of sides sh | eltered: 1 side | | |
| Occupancy: 1 adult | |] | |
| Heating pattern: wh standard heating patt | ole house heating tern | | |
| Percentage of Zone | 2 heated: 100% | | |

Demand temperature: 21° in lounge 18° elsewhere

| NHER rating: | 6.4 |
|---|--|
| SAP rating: | 66 |
| Total annual fuel costs: of which space heating water heating cooking lights and appliances standing charges | £702 per year £451 £60 £16 £92 £82 |

kdown space heating costs: before improvements



tions Assessed

ating:

٦

no options assessed - central heating installed

ulation:

no options assessed – all Warm Deal measures already installed or not applicable

nment

not receive gas bill for 18 months some 5 years ago. ng Quantum meter to pay off debt. Has been paid off / for some time but gas supplier refusing to change er to standard meter. Householder unhappy. May d to be referred to 'energywatch'.

9. East Mains, East Whitburn

| House Details House type: | detached bungalow | NHER rating: | 3.9 |
|---|---|--|--|
| House age: | 1964–1974 | SAP rating: | 37 |
| Total floor area: | 3 bedrooms kitchen bathroom hallway 1 other 129.8m ² | Total annual fuel costs: of which space heating water heating cooking lights and applia standing charge | £1315 per year £869 £133 £53 ances £219 es £42 |
| Insulation Details | | Breakdown space heating | g costs: before improvements |
| Floor construction: Floor insulation: Wall construction: Wall insulation: Roof insulation: Windows: | suspended timber none cavity none 100mm insulation upvc double glazing – 20mm gap | Walls Roofs Floors Windows Draughts | |
| Space and Water He | eating | Htg. Controls Loss | |
| Primary space heating: pre-1985 oil boiler (SEBDUK efficiency 60.0%) open fire in lounge oil price: 20.55p/litre (inc. VAT) | | 0 50 100 |) 150 202 250 300 35 Annual Cost (£/yr) |
| | | | |
| 80L hot water cylinde | er: 25 spray foam | new oil condensing s | standard boiler assessed – |
| Electricity tariff: Standard domestic ta 7.02p/kWh (inc. VAT) standing charge: £42 | ariff: 2 per year (inc. VAT) | Insulation: ● cavity wall insulation, draughtproof loft hate cylinder jacket | 150mm loft insulation, ch, and 80mm hot water |
| Location Details | East of Scotland | After improvements | |
| Degree day region. | | NHER rating: | 7.3 |
| wind speed region | 5.0 m/s | SAP rating: | 72 |
| Site exposure: | average | Total annual fuel costs: | £778 per year |
| Height above sea le | evel: 200m | of which space heating water heating | £377 £85 |
| Number of sides sh | eltered: 0 sides | cooking lights and applia | £53 ances £221 |
| Occupancy: 1 adult | and 2 children | standing charge | es £42 a saving of £537 per year |
| Heating pattern: wh standard heating pat | ole house heating tern | Comment | |
| Percentage of Zone | e 2 heated: 100% | Keeps loft hatch open to li central heating as system | sten for leaking roof. Needs new is 'clapped out'. It does still and system itself leaks. Bolico |
| Demand temperature: 21° in lounge | | on various portable device | es for heating. Son is asthmatic. |

350

18° elsewhere

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