



Housing Research Summary

Interim Evaluation of the New Home Energy Efficiency Scheme for Wales



Introduction

The National Assembly for Wales commissioned this study as an interim evaluation of the Home Energy Efficiency Scheme (HEES) for Wales. HEES has been in operation since November 2000 and is the Assembly Government's primary vehicle for meeting its Fuel Poverty Strategy commitments. HEES grants are directed at vulnerable low-income households, in receipt of a number of "passport" benefits. The prevailing assumption has been that most of these households are fuel-poor.

The aims of the study are:

- To assess the appropriateness of the eligibility criteria
- To assess the adequacy of the assistance given to the fuel-poor recipients
- To assess the vulnerability to fuel price increases of those lifted from fuel poverty
- To establish the effect of introducing greater assistance in terms of increased SAP

Methodology

The measure of Fuel Poverty used was total running costs (for space and water heating, cooking, lights, appliances and standard charges) as a percentage of household income, with 10% being the threshold above which fuel poverty was said to occur. Total running costs were estimated using BREDEM 12 (The Building Research Establishment's preferred method for calculating running costs). Three different heating pattern options were used: Full (assumes householders are in all day), Standard (assumes householders are out during the day) and Mixed (some are in, some are out and some under-occupy their dwellings).

The method for income estimation was based upon the approach used by the UK government for poverty estimation and for Households Below Average Income (HBAI) statistics. Some items of expenditure (council tax, maintenance payments and parental contributions to students), that are deducted from the income estimates in HBAI approach, were not deducted in this study. This was necessary in order to remain consistent with the English definition of fuel poverty which has been accepted by the Assembly as a means of monitoring changes in the number of people in fuel-poverty. Two ways of defining income were considered – Full Income (including Housing Benefit) and Basic Income (excluding Housing Benefit).

The HEES Sample

A total of 24,124 households received a HEES grant between March 2001 and January 2004. As part of the grant process, properties were surveyed by EAGA Ltd and packages of improvements were recommended. Of the 24,124 properties, the EAGA files for 6,031 had no accurate occupancy information and a further 5,053 files had insufficient information to calculate fuel running costs pre- and post-HEES intervention. A questionnaire was sent to each adult in the 13,040 remaining households. In total 18,500 questionnaires were sent out. The questionnaire collected information on income and had been piloted through face-to-face interviews on a sample of 50 households.

Two thousand, seven hundred and ten questionnaires were returned, of which 698 were rejected due to the respondent claiming not to have received a grant or the respondent not filling in the questionnaire to an extent where it could

provide useful information. 2,012 questionnaires from 1,680 properties were input into a database for analysis. Cross-checks were carried out on date of birth and gender to ensure that multiple forms from the same household were not duplicates.

Each of the household types eligible for HEES were well represented in the survey returns although, as expected, the proportion of survey returns from pensioners was higher than the proportion of known pensioners in the overall HEES sample. Each of the main qualifying benefits were well represented in the survey returns. Post stratification population weights were calculated in an attempt to eliminate the sampling bias by household type.

Of the 2,012 valid survey returns 1,842 respondents answered an individual income question and 1,737 answered a household income question. A banded income question was used in accordance with the recommendations of the Office for National Statistics and research has shown that reliable and accurate information on individual and household income can be obtained by this method.

After weighting to allow for sampling bias and non-response the average weekly full household income (includes housing benefit) was £204. The average weekly basic household income (excludes housing benefit) was £196.

It was agreed to use for the main analysis: (a) income including housing benefit (b) a mixed heating pattern and (c) grossing up of the survey results on the basis of household type.

Results

The key findings of the report were:

- 29% of the HEES recipients were fuel-poor pre-intervention.
- Half of these were removed from fuel poverty after the intervention of HEES.
- A large proportion of the fuel-poor were single pensioners or single adult only households (47%). They were owner-occupiers using gas as their main heating fuel.
- 18% of households qualifying through an Attendance Allowance, and 16% qualifying through Working Family Tax Credit were fuel-poor pre-intervention.
- Only 1% of households with an income of more than £300 a week were fuel-poor pre-intervention.
- Installing all measures needed to raise the SAP of the property to 70 would reduce the percentage of recipient households which were fuel-poor post-intervention from 14% to 7%.
- It will not be possible to eradicate fuel poverty by energy efficiency measures alone.

More detailed results are set out below.

The appropriateness of the eligibility criteria - Is HEES reaching the vulnerable low-income fuel-poor?

The percentage of HEES recipients in fuel poverty is estimated at between 29% and 36%, depending upon the definitions used for income and heating pattern. The approach assumed in the main analysis estimates that 7,103 households (29%)

were fuel-poor pre-intervention. Of these, only 874 households (4%) were in severe or extreme fuel poverty.

The groups with the highest proportions and numbers of the fuel-poor were:

- Single pensioners, those living in owner occupied homes, under occupying their homes and using gas as their main fuel.
- Those qualifying for HEES due to their receipt of Income support (44%) and Council tax benefit (39%). These two groups made up 27% of all recipient households.

The groups with the lowest proportions and numbers of fuel-poor were:

- Families with two non-pensioner adults and one or more children.
- Those qualifying for HEES due to their receipt of Working Families Tax Credit (16%) and Attendance Allowance (18%). These two groups made up 21% of all recipient households.
- Households with a weekly income of more than £300.

The proportion of fuel-poor households qualifying because of Disability Living Allowance (DLA) was lower than the overall proportion of fuel-poor. DLA accounts for 29% of all HEES grants but only 26% of those who qualified because of DLA were fuel-poor, compared to the overall of 29%, based on full income.

The current eligibility criteria aim to reach the fuel-poor living in vulnerable low income households. Many of the current recipients are neither on a low income nor are they fuel-poor. In fact, 15% of

recipients have a weekly income of more than £300 and of these, only 1% are fuel-poor. 41% of recipients have an income of more than £200 a week – and less than 6% of these are fuel-poor.

Groups of the HEES population with a low incidence of fuel poverty were:

- Households with 2 adults and 2 or more children (10% of them were fuel-poor).
- Households with a weekly income of more than £200 a week (6%).
- Households using attendance allowance (18%) or working family tax credit (16%) as their qualifying benefit.
- Households in a property with a SAP of 65 or more (3%).

By contrast, groups of the HEES population with a high incidence of fuel poverty were:

- Households with single pensioners or single adults (at least 40% of these groups were fuel-poor).
- Households in a property with a SAP of 40 or less (50%).
- Households relying on room heaters (48%).
- Households relying on direct electric for their fuel supply (72%).

The current criteria also miss out on the fuel-poor who are not on benefit. The eligibility criteria will certainly have to be extended or amended if the proportion of recipient households which are fuel-poor is to be substantially increased, and the report examines a number of options.

Adequacy of the assistance given by HEES

The HEES measures brought down the percentage of fuel-poor amongst HEES recipients from 29% to 13%, so that just over a half of the fuel-poor recipients were lifted out of fuel poverty. This leaves an estimated 3,232 households (13%) still in fuel poverty post HEES. The measures increased the average SAP of all dwellings treated from 44 to 58, an increase of 14 SAP points.

Almost 3,000 (12% of all) households were fuel-poor pre-intervention and relied on room heaters as their main method of heating, HEES lifted 70% of these households out of fuel poverty. A quarter of all fuel-poor households before HEES intervention used direct electric heating, 78% of these were lifted out of fuel poverty by the HEES grant.

Sensitivity to Fuel Prices

A fuel price increase of 30% would return almost all of the households moved out of fuel poverty back to fuel poverty. A 5% increase raises the percentage of still fuel-poor up from 13% to 15%, a 10% increase in fuel costs increases the fuel-poor to 18% and a 20% increase to 23%.

Impact of greater Assistance

It would be impossible to raise all of the households out of fuel poverty using energy efficiency measures alone. If the SAP of all properties were increased to 65, the percentage still in fuel poverty would drop from 13% to 8%. The percentage of fuel-poor would drop to 4% if all properties were lifted to SAP 80 and to 1% at SAP 100. However, it is not practically feasible nor cost-effective to raise SAPs to these high levels in all dwellings.

Properties with a low SAP are more likely to contain households in fuel poverty. 80% of households receiving a HEES grant in a property with a SAP of less than 20 were fuel-poor, compared to just 20% in properties with a SAP of over 50. The eligibility criteria could be tightened up by making dwellings with a high SAP value ineligible. If those properties examined in this study that had a SAP of 65 or more had been deemed ineligible for a HEES grant the percentage of fuel-poor households would only have gone up from 29% to 30%. To make a significant difference, a lower SAP threshold would be required. If a threshold of SAP 50 had been in operation the percentage of fuel-poor households assisted would have risen from 29% to 37%. A SAP threshold would clearly therefore make a difference but not a significant one. This is because the SAP is only a crude indicator of fuel poverty as it does not take into account the size or occupancy of the property, let alone household income. For example, 13% of the properties with a SAP of 50 or more in the study contained households deemed to be fuel-poor. A SAP threshold of 50 would have excluded these households. The only way to markedly reduce the percentage of HEES recipients who are not fuel-poor would be to use measures of both energy efficiency and of income. If this is to be done, the obvious measure to use is running costs as a percentage of income (which is the basis of the accepted fuel poverty definition). If an additional eligibility criteria were to be introduced, regardless of its nature, this would require a quality assurance framework not currently in place within HEES. It would also lead to a drop in the number of households being assisted, so that a way would be needed to increase the pool of applicants.

The Future of HEES

How might HEES reach the fuel-poor who are not currently eligible?

Households in this group fall into the following categories:

- Not registered for benefits to which they are entitled, and fuel-poor.
- Not quite eligible for benefits but fuel-poor because they live in very energy inefficient homes.
- Not in the vulnerable low-income category, but fuel-poor.
- In reasonably energy efficient homes but still suffering from fuel poverty.

Benefit Health Checks can help those not claiming benefit to become eligible for HEES. A significant percentage of those reached will however not be fuel-poor, as with current HEES recipients.

The fuel-poor living in energy efficient dwellings can be helped with good quality energy advice. These households could include those who have already had a HEES grant, as well as those not currently deemed eligible. More extensive advice could be provided during the survey and after the measures have been installed. Others could be assisted by providing advice to those who apply for a grant but are not eligible.

It is difficult to see how the fuel-poor who are not currently eligible for HEES can be reached without an individual fuel poverty assessment being carried out. The Assembly Government's current strategy commits to the eradication of fuel poverty among all households by 2018. A simple way of starting this process might be to establish a discretionary budget for extreme cases.

How could the effectiveness of the HEES scheme be improved in future?

The report's main recommendations can be summarised as follows:

Scheme Managers to:

- Be set targets based on the average SAP improvement, as well as number of households reached.
- To collect income band data from householders, and report quarterly on the numbers of fuel-poor households reached and the extent to which they were removed from fuel poverty.
- Apply a quality assured methodology to SAP assessment, so that the SAP calculation can be used as an additional criterion for eligibility and for estimating total running costs.

Further work be undertaken to:

- Assess the viability of extending the range of measures and budget available, including income measures to raise all households assisted out of fuel poverty.

- Review promotional activities for HEES to see if more use can be made of community networks to locate households in fuel poverty and consider a fast track system for treating these homes.
- Consider a discretionary HEES budget for cases where there is clear evidence that a household is experiencing fuel poverty but which is not eligible for HEES under the current eligibility criteria.
- Assess the viability of using fuel poverty assessment based on running costs as a percentage of income, as an alternative to SAP assessment, in (a) setting targets for scheme managers and (b) as an eligibility criterion instead of the SAP.
- Assess the viability of changing the eligibility criteria to be based solely on assessing the level of fuel poverty. This seems the only option for reaching non-vulnerable fuel-poor households.

The full report is available electronically at www.housing.wales.gsi.gov.uk. If you would like a print out please contact Helen Wyatt at the following address:

Helen Wyatt
Research and Information Unit
Social Justice and Regeneration Department
Welsh Assembly Government, Cathays Park
CARDIFF CF10 3NQ

Telephone: (029) 2082 1718

E-mail: helen.wyatt@Wales.gsi.gov.uk

Website: <http://www.housing.wales.gsi.gov.uk>

ISBN 0 7504 3779 0

© Crown Copyright 2005

March 2005