Fuel Poverty in the United Kingdom

A review of statutory energy efficiency programmes for low-income households

NEA
Campaigning for Warm Homes

ENERGY ACTION SCOTLAND

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CALOUSTE GULBENKIAN FOUNDATION

Introduction

The Warm Homes and Energy Conservation Act 2000 imposed a statutory duty on the Westminster Government to eradicate fuel poverty by 2016. The Scottish Parliament and the Assemblies of Wales and Northern Ireland have also adopted this objective. Although the fuel poverty strategies of the individual countries cite action to reduce energy prices and raise household income as important components in achieving affordable warmth, fuel poverty campaigners maintain that the only permanent and sustainable solution to the problem is to improve the efficiency of heating systems and the standards of insulation in the homes of low-income households.

This is generally recognised at Government level and the main programmes to tackle fuel poverty involve grant schemes to fund energy efficiency improvements for low-income householders – those who could not reasonably be expected to fund this work themselves. Whilst the programmes for all four countries are broadly similar, there are sufficient differences to make comparative judgements possible and to determine the merits and failings of the existing schemes.

NEA, in partnership with its offices in Wales and Northern Ireland, and with Energy Action Scotland, has undertaken a review of the main energy efficiency schemes in each country in order to identify best practice. If we can reach a consensus on best practice in existing schemes, this can be advocated on a UK-wide basis and consideration given to how further improvements can be made to ensure that the schemes do represent a significant contribution to tackling fuel poverty.

CALOUSTE GULBENKIAN FOUNDATION

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Introduction

Although the preconditions for fuel poverty – poor housing and heating standards, low household income and unaffordable energy prices have probably always existed for the most disadvantaged households; it was not until the 1970s that researchers and campaigners began to identify fuel poverty as a serious, and developing social problem. The early years of that decade saw the first national survey of elderly people with a view to assessing hypothermia risk[1] and, shortly afterwards, awareness of the issue of unaffordable energy became more general. The quadrupling of oil prices between 1973 and 1974 was followed by a Government decision to end price controls on domestic energy and to return to full economic pricing. Whilst the reality of cold, damp housing and unaffordable energy prices was not new, the concept of a discrete social problem linked to energy deprivation had been identified and named – fuel poverty.

The Characteristics of Fuel Poverty

Fuel poverty is a multi-faceted issue. Clearly where household income is sufficiently high it can accommodate the energy costs resulting from inadequate thermal insulation and uneconomic and inefficient heating systems (albeit wastefully); similarly, where a dwelling meets extremely high standards in heating and insulation provision, energy charges may be manageable within a comparatively modest income.

Some additional factors must be considered as contributing to, or exacerbating, fuel poverty. Not all households have access to a mains gas supply, for example, and will therefore be excluded from what is currently the most economical and efficient method of space heating. Many households contain one or more individuals who, because of age (the elderly and the very young) or disability need higher temperatures for health and comfort, compounded by spending longer periods in the home than more active (both physically and economically) occupants. Climatic conditions are not uniform across the United Kingdom with severe winters, for example, more common in northern Scotland than in the south west of England. Finally, even the apparently insignificant matter of how fuel is paid for can be an issue, with significant differentials in energy charges between direct debit (lowest charges) and prepayment meter use (highest charges).

Thus, fuel poverty is an issue affected by:

- household income
- the characteristics of households (elderly, lone parent etc)
- housing standards (insulation, heating and ventilation) and state of repair
- occupancy issues (both occupancy levels and occupancy patterns)
- the operation of energy markets and the disadvantage faced by many low-income consumers.

[1] Old and Cold: Hypothermia and Social Policy, Malcolm Wicks, Heinemann, 1978

The Scale of Fuel Poverty

Early attempts to quantify the extent of fuel poverty were largely educated guesswork. In the absence of reliable information, researchers were obliged to use data gathered from a wide range of sources; data that inevitably concentrated on evidence of difficulty in paying for fuel – typically these were related to debt and disconnection and covered: disconnection from supply; installation of a prepayment meter; or households having direct deductions for energy charges taken from their Supplementary Benefit (subsequently Income Support) and paid to energy supply companies. This approach focused on the income aspect of fuel poverty.

In other analyses the condition of the dwelling would be considered paramount. Frequently this would simply involve quantifying the extent and severity of condensation dampness in the housing stock since this problem was seen as a manifestation of inadequate heating, insulation and ventilation provision. Whilst there was other relevant information available on insulation standards and heating facilities this information could not be related to household income.

Defining Fuel Poverty

These indicators could not be used coherently to provide an accurate picture of the national scale of fuel poverty. A further rather simplistic method adopted was to look at the number of households dependent on means-tested benefits on the assumption that, since only a small minority would occupy energy efficient homes, the remainder could be considered fuel poor.

The general definition of fuel poverty, and one that is now accepted and used by Government, is where more than 10% of household income is needed to meet a standard heating regime of 21^{o}C in the living room and 18^{o}C in other heated areas of the dwelling. The figure of 10% was originally based on Family Expenditure Survey data showing that the poorest 30% of households spent, on average, 10% of income on fuel. Whilst this level of expenditure was deemed affordable it did not, of course, guarantee sufficient warmth for health and comfort.

Although there was now a generally accepted definition of fuel poverty, the extent of the problem could only be quantified through a large-scale quantitative survey that would encompass both housing conditions and the financial circumstances of households. Unfortunately there has never been a consistent approach to the collection of such data across the United Kingdom and the detail and reliability of statistical information is highly variable.

Defining Fuel Poverty in England

The first reliable information on the extent of fuel poverty in England was based on an analysis of energy-related data from the 1991 English House Condition Survey. This analysis supplied the first accurate picture of fuel poverty in England, although the survey preferred to employ the euphemism “lacking affordable warmth”.

As a consequence, authorities in England had adopted a definition recommended by fuel poverty campaigners, which covered needed spend to reach an agreed thermal comfort standard and for additional energy services – lighting, cooking etc.

There is still debate on the treatment of household income. The three main options are:

- To include all income after tax *including* all benefits and subsidies;
- To include all income after tax and all benefits *except* Housing Benefit and Income Support for Mortgage Interest (ISMI);
- To include only income after tax and after *excluding* all housing costs.

The table below sets out the effects of these different definitions.

Number of fuel poor households in England 1996 – by income definition	
Full income (including housing subsidies)	4.3 million
Basic income (excluding housing subsidies)	5.3 million
Disposable income (after housing costs)	6.9 million

English House Condition Survey 1996: Energy Report

NB: In assessing progress towards the elimination of fuel poverty the Government intends to publish statistical data using both of the first two definitions.

A subsequent follow-up survey[2] of the housing stock and modelling of fuel price and income changes suggests that there has been a considerable reduction in fuel poverty in recent years.[3] These latest analyses suggest that fuel poverty in England now totals between 2.8 million and 3.9 million.

Defining Fuel Poverty in Scotland

In Scotland two working definitions of fuel poverty were used in analysing the 1996 Scottish House Condition Survey:

- Households that spend 10% or more of income on all fuel use
- Households that spend 10% or more of income on heating

Assessment of household income was restricted to that of the head of the household and their partner and was net of tax and national insurance. No account was taken of other occupants' income. Scotland differed from England in that the figures for expenditure on fuel referred to actual spend rather than to a hypothetical spend needed to meet a predetermined heating regime.

[2] English House Condition Survey: Follow Up Survey, DTI and DEFRA, 2001

[3] Fuel poverty in England in 1999 and 2000, DTI and DEFRA, 2002

Fuel Poverty in Scotland 1996		
All energy costs	*Heating costs only*	*All households*
738,000	220,000	2,093,000

However the Scottish Fuel Poverty Statement[4] indicates that in future most of the assumptions and definitions adopted in England will also apply to Scotland with the exception that income will be defined as total income from all members of the household and the satisfactory heating regime will be set at different levels.

Satisfactory heating regime - Scotland	
Elderly or infirm households	*Other households*
23°C in the living room and 18°C in other rooms, this temperature to be achieved for 16 hours in every 24 hours.	21°C in the living room and 18°C in other rooms for a period of 9 hours in every 24 (or 16 in 24 over the weekend) with two hours being in the morning and seven in the evening.

Defining Fuel Poverty in Wales

The National Assembly for Wales subscribes to the parallel definitions of fuel poverty used in England. However data collection through Welsh House Condition Surveys has been insufficient to provide an accurate assessment of the scale of fuel poverty. In Wales, the response to the paucity of reliable data has been to use eligibility for grants under the Home Energy Efficiency Scheme as a proxy for fuel poverty.

Clearly this is a poor substitute for reliable information on housing conditions and the financial circumstances of their occupants. Research by NEA has demonstrated a surprising disparity between fuel poverty and Warm Front eligibility in England.[5] However, on the basis of findings from the 1997/98 Welsh House Condition Survey, an estimated 222,000 households meet the eligibility criteria for New HEES.

Defining Fuel Poverty in Northern Ireland

Northern Ireland uses expenditure of 10% or more of household income, in order to achieve a satisfactory heating regime, as the formula to define a fuel-poor household. The heating regime varies slightly from that of England in that the temperature specified for the living room is 20°C as opposed to the figure of 21°C for England. Since the 1996 Northern Ireland House Condition Survey did not collect data on disposable income and expenditure on fuel, it proved necessary to use data from the Northern Ireland Family Expenditure Surveys 1995-1998 to assess the extent of fuel poverty. These sources suggested that some 170,000 households in Northern Ireland might be fuel poor.

The high incidence of fuel poverty in Northern Ireland is attributed to:

- High fuel costs

[4] Scottish Fuel Poverty Statement:Consultative Draft, Scottish Executive, 2002

[5] NEA research in Camden and North Tyneside indicated that approximately 50% of fuel-poor households did not qualify for Warm Front assistance whilst some 40% of beneficiaries of the scheme were not fuel poor.

- Lack of access to mains gas supply
- Low household income and high benefit dependency
- Poor energy efficiency standards

The Case for a Uniform Definition

Without a consistent definition of fuel poverty it is difficult to quantify just how many households in the United Kingdom are fuel poor. The definitions cited above can only be used as broad indicators. Similarly the figures cited below should be treated with some reservation. It is not realistic to claim that the incidence of fuel poverty in Scotland is nearly twice that of Wales.

The Extent of Fuel Poverty in the United Kingdom – individual country definitions [6]

	Fuel-poor households	*% of all households*
England	4,500,000	22.3%
Scotland	738,000	35.3%
Wales	222,000	19.2%
Northern Ireland	170,000	28.0%
United Kingdom	5,630,000	23.5%

Environment Minister, Michael Meacher MP, has confirmed the Government's intention of moving towards a common definition of fuel poverty in the medium term once Wales and Scotland have completed a consultation exercise.[7]

Income

There is a lack of consistency across the four constituent countries in how household income is treated. In NEA's view the only rational assessment of income for the purpose of assessing fuel poverty will use disposable income. Consequently relevant income should cover:

- Income of head of household and spouse net of tax and national insurance i.e. the income of any other occupant should be ignored
- Subsidies paid to defray housing costs should not be classed as income i.e. Housing Benefit, Council Tax Benefit and Income Support for Mortgage Interest should be disregarded
- Money paid out as fixed and unavoidable costs should not be classed as income i.e. income should be that amount remaining after housing costs

Clearly the definition is crucial in determining the number of fuel-poor households and campaigners argue that disposable income is the only rational choice. The first definition inflates the nominal household income despite its having no beneficial effect on the available spending power; for example, in 2001 average weekly Housing Benefit for private sector tenants in London was £98.70 whilst in Wales it was £53.80. The second definition assumes the same spending power for households with similar incomes despite the potentially enormous disparity in their unavoidable expenditure on housing costs; for example whilst the cost of private rented accommodation in London averaged £141 per week in 2000 the figure for Wales was £70. Only the third definition enables the incidence of fuel poverty to be calculated on a consistent and rational basis.

[6] The UK Fuel Poverty Strategy: consultation draft, DTI and DETR, 2001
[7] House of Commons Hansard, March 6 2002, Col 360

These last two points are particularly important since otherwise households in high rent/mortgage areas such as London will have their hypothetical income artificially inflated. Disproportionately high housing subsidies through the benefits system will distort the theoretical income or, in the latter case, there will be no recognition of the fact that high expenditure on housing severely depletes disposable income.

Fuel Expenditure

Whilst space and water heating are more directly related to fuel poverty than other aspects of energy use: lighting, cooking, appliance use, it is rational to consider all energy use as a factor in maintaining a decent and comfortable lifestyle and, accordingly, to incorporate this in the fuel poverty formula. The formula should cover the "needed spend" to meet health and comfort criteria rather than examine the proportion of income actually spent on energy consumption.

Regional climatic variations within the United Kingdom are sufficient to result in significantly higher heating demand in certain areas. The Building Research Establishment Domestic Energy Model can be used to assess relative theoretical heating costs in different regions of the United Kingdom. In the example below Bristol is taken as the base (100).

Comparative Needed Fuel Expenditure on Heating in UK Cities – Bristol = 100 [8]

Cardiff	0%	Belfast	+19%
Birmingham	+13%	London	-1%
Plymouth	-13%	Manchester	+16%
Edinburgh	+28%	Newcastle	+17%
Aberdeen	+41%	Leicester	+17%
Brighton	-3%	Norwich	+10%

In spite of the disparities in needed spend there is surprisingly little variation in actual expenditure across the constituent countries of the United Kingdom, even where all households and not just the fuel poor are concerned.

Expenditure on fuel, light and power 1997-2000 (£ per week and as % of all expenditure) [9]

England	*Scotland*	*Northern Ireland*	*Wales*	***United Kingdom***
£11.60 (3%)	£12.90 (4%)	£15.60 (5%)	£12.60 (4%)	**£11.90 (3%)**

The Department of Trade and Industry, as one of its public service agreements has set a social target of reducing fuel expenditure for the three lowest income deciles to 5% by 2003-2004 (expenditure in 2000-2001 was 7%).[10]

[8] House of Commons Hansard, February 23 1995, Col 263

[9] Regional Trends 2001

[10] House of Commons Hansard, April 10, 2002, Col 378

The Roles and Policies of the Devolved Administrations

In November of last year the Government, in conjunction with the devolved administrations of Scotland, Wales and Northern Ireland, published the UK Fuel Poverty Strategy. This document set out the range of programmes and measures that were to result in the eradication of fuel poverty within a 15-year period. Since fuel poverty is a devolved responsibility, the strategies in Scotland, Wales and Northern Ireland are to be implemented by, respectively, The Scottish Executive, The National Assembly for Wales and the Department for Social Development in Northern Ireland. Within England, implementation of the strategy is overseen by the Department for Environment, Food and Rural Affairs.

These arrangements give rise to some anomalies in that the multi-faceted nature of fuel poverty inevitably covers a wide range of subject areas, some of which are reserved to Westminster. As a consequence, whilst responsibility is devolved, the powers to meet that responsibility may not be.

Devolution and Legislative Powers					
United Kingdom	*Great Britain*	*England*	*Scotland*	*Wales*	*Northern Ireland*
-	-	Energy Efficiency	Energy Efficiency	Energy Efficiency	Energy Efficiency
-	-	Health	Health	Health	Health
-	-	Environment	Environment	Environment	Environment
Social Security		-	-	-	
-	Energy Regulation	-	-	-	Energy Regulation
-	-	Economic Development	Economic Development	Economic Development	Economic Development
-	-	Housing	Housing	Housing	Housing
-	Energy Policy	-	-	-	Energy Policy
-	-	Fuel Poverty Strategy	Fuel Poverty Strategy	Fuel Poverty Strategy	Fuel Poverty Strategy

In addition, the division of responsibilities within Westminster has resulted in the separation of housing issues, now the province of the Department of Transport, Local Government and the Regions, from primary responsibility for fuel poverty issues. The issue is further complicated by the over-arching role of the Department of Trade and Industry in determining most areas of energy policy including regulation of the energy supply industries for Great Britain.

The mix of reserved and devolved responsibilities makes it more difficult to devise the kind of integrated strategy needed to address fuel poverty in a structured and coherent manner. Nevertheless, autonomy does generally allow development of a strategy that reflects the circumstances of each country, for example:

- Limited access to mains gas supply in Northern Ireland
- The high incidence of rural dwellers in Wales
- The traditional housing stock in Scotland

Energy Efficiency Programmes in the United Kingdom

Fuel poverty campaigners have consistently maintained that the long-term solution to the problem lies with efforts to improve the energy efficiency standards of the housing stock so it is appropriate that there is scope for variation in the design and priorities of the main energy efficiency programmes in each country.

The principal schemes to improve the energy efficiency of homes occupied by low-income households identified in the Strategy are:

- Warm Front in England and equivalent schemes in Scotland (Warm Deal and the Scottish Executive's Central Heating Scheme for Pensioners), Wales (New Home Energy Efficiency Scheme) and Northern Ireland (Warm Homes Scheme).

- Local authority (Housing Executive in Northern Ireland) capital programmes for public sector housing.

- Fuel suppliers' Energy Efficiency Commitment programmes (Energy Efficiency Levy in Northern Ireland).

Other fuel supplier initiatives

NEA and its partners have consistently supported energy efficiency as the most rational and sustainable approach to a solution to fuel poverty, but has serious reservations about the adequacy of these programmes to deliver this objective. Although the schemes are diverse in eligibility, measures available and grant maxima, the similarities are sufficient to make much of the following critique of the scheme in England applicable to the other programme.

England Warm Front

England	*Eligibility*	*Measures*	*Grant maximum*
Warm Front	Means-tested benefit and child under 16 or expectant mother	Loft, tank and pipe insulation	
		Heating controls	£700
	Disability benefit	Cavity wall insulation	
	Owner-occupier and private rented sector only	Energy advice and low energy lightbulbs	
		Package including heating appliance (in cases of expensive existing heating method)	
			£1500
Warm Front Plus	Means-tested benefit	Insulation package as above and	
	and	central heating system	£2500
	householder or spouse is aged 60 or over		

Warm Front provides grants for insulation measures and heating system improvements to households in receipt of a means-tested benefit and with children under the age of 16, or expectant mothers. Grants are also available for households claiming one of a range of long-term sickness or disability benefits. In addition, householders of pensionable age (60 or over), and in receipt of a means-tested benefit, may be eligible for a new central heating system. Consequently, even within households categorised as vulnerable, only older individuals and couples can benefit from this significant assistance.

The Warm Front scheme offers grant aid of up to £2,500 for eligible households of pensionable age (Warm Front Plus) whilst vulnerable non-pensioner households are entitled to a maximum grant of £700 or £1500 depending on heating provision in the property. Warm Front Plus can fund installation of full central heating, in addition to a range of insulation measures; the lower rates of grant also fund a range of insulation improvements but, at best, provide only more efficient and economic heating appliances rather than full heating systems.

Whilst there is an understandable case for these special provisions for the elderly fuel poor, a substantial number of households in the other vulnerable categories will also require this level of assistance in order to ensure affordable warmth. In effect, it would be better if the two-tier eligibility criteria were to be abandoned and to accept that all vulnerable households should receive the maximum assistance.

Nor is it apparent to what extent Warm Front actually removes households from fuel poverty although the recently increased grant levels will make a positive contribution. Currently the scheme managers only collect information to enable an assessment of the improvement of the SAP rating of properties improved. Indeed the level of information collected is insufficient to allow an accurate analysis of the change in individual dwellings. It is sufficient, however, to identify average increases in SAP ratings across large numbers of properties. Since no income data are collected, it is not possible to assess the number of recipients of Warm Front grants removed from fuel poverty.

Whilst collection of household income data would be intrusive and complex DEFRA could and should commission research to assess a statistically valid sample of grant recipients to determine the extent to which the Warm Front scheme does lift households out of fuel poverty.

Recent work by NEA[10] suggests that a significant proportion of those households in receipt of Warm Front grants are not in fuel poverty even before the work has been carried out. Whilst this work undoubtedly provides a benefit to these households (and to subsequent occupants many of whom may be fuel poor) such grants do not contribute to the Government's fuel poverty reduction targets. The interim targets in the Strategy are set in terms of properties treated. There is a concern that relying on this simplistic approach may result in serious slippage which will prove difficult to retrieve in later years.

It would be valuable to know the level of take-up of grants by non-fuel-poor households and this can be determined by the research proposed above. It may be necessary to adjust the administration of the scheme to ensure that grants are targeted more effectively on households in fuel poverty rather than those in receipt of "passport" benefits.

The work carried out by NEA in Camden and North Tyneside and the figures from the Stockton Warm Zone also indicate that there are significant numbers of fuel-poor households who are not eligible for Warm Front Grants. There are a number of reasons for this including:

- Those not claiming benefits to which they are entitled
- Those with incomes marginally above the eligibility threshold
- Benefit recipients not in one of the "vulnerable" categories

The first two groups will clearly contain many households from the "vulnerable" categories. Whilst it may be possible to address the first difficulty through take-up campaigns, the second requires a different approach. This may require greater flexibility in the eligibility criteria for grant schemes. As a first step it will be necessary to quantify the extent of this problem. Certainly research is needed into the issue of fuel-poor households not eligible for any assistance.

[10] Assessing Fuel Poverty in Camden and North Tyneside, NEA, 2001

Scotland -Warm Deal and Scottish Executive Central Heating Programme

Scotland	*Eligibility*	*Measures*	*Grant availability*
Warm Deal	Means-tested benefit	Cavity wall insulation	
	Disability benefits	Loft insulation	
	All tenure groups	Draughtproofing	£500 (grant maximum)
		Tank and pipe insulation	
		Low energy lightbulbs and energy advice	
Scottish Executive Central Heating Programme	Social housing tenants	Insulation package and central heating	
	Pensioner households lacking any form of central heating		£2500 (average grant)
	Private sector households where existing system is beyond repair		

The Warm Deal was introduced by the Scottish Executive in July 1999. At this point it represented a significant advance over insulation programmes in the rest of the United Kingdom as it could provide a maximum grant of £500 in contrast to the previous £315 under the Home Energy Efficiency Scheme. This advantage was only temporary as England, Wales and Northern Ireland subsequently devised their own schemes which were altogether more ambitious, mainly because they introduced grant aid for heating installation and heating improvements.

Warm Deal provided eligible households in receipt of a means-tested benefit with a range of energy assistance including:

- Loft, tank and pipe insulation
- Cavity wall insulation
- Draughtproofing
- Energy advice and low energy lightbulbs

A unique feature of Warm Deal was the requirement that delivery of the programme should involve New Deal trainees who would benefit from access to quality work experience and training in the installation of home insulation measures. A downside to this dual-purpose approach is that it militates against the maximum efficiency and effectiveness of the programme. The maximum grant payable under Warm Deal is £500.

Scotland - Scottish Executive Central Heating Programme

This programme entails the provision of a central heating and insulation package for households categorised as vulnerable who do not have the benefits of central heating. Over a five-year period to the end of March 2006 it is intended to install the package in:

- All local authority and housing association properties
- 40,000 private sector homes occupied by pensioner households
- private sector properties where an existing system does not work and is beyond repair

The central heating programme for social rented properties has been brought forward to ensure that all properties have central heating by the end of 2004. The average grant payable under this scheme is £2,500.

Inadequacies of Warm Deal and the Central Heating Initiative

Since some 29% of Scottish housing is of solid wall construction or other non-traditional building type many households will be eligible for limited improvement or no improvement in the insulation standards of their dwelling. In the case of many of these households, installation of central heating without improving the fabric of the property may actually increase the amount spent on fuel. Non-cavity wall properties include those of solid wall construction, tower blocks, concrete walls, “no fines” build, steel-framed buildings and others unsuited to cavity wall insulation or, indeed, loft insulation. In many parts of Scotland these house types are sufficiently common to be considered standard e.g. sandstone tenements in Glasgow or the granite block flats and houses in Aberdeen.

In some cases grant assistance is duplicated rather than being complementary. Warm Deal grants and Energy Efficiency Commitment funding (energy saving investment by fuel utilities within which 50% of the savings must be achieved for low-income households) cover almost identical measures to almost identical client groups. It can be argued that this represents a wasted opportunity for innovative approaches, and for the use of at least some of these resources to be diverted to alternative measures, such as solar heating or solid wall insulation, to the benefit of fuel-poor households in properties without a cavity wall.

Northern Ireland – Warm Homes Scheme

Northern Ireland	*Eligibility*	*Measures*	*Grant maximum*
Warm Homes Scheme	Means-tested benefits or Disability benefits Owner-occupied and private- rented sectors	Property-specific range of insulation measures including cavity wall and loft insulation	£750 (can be augmented by Energy Efficiency Levy funding)
Additional assistance for older householders	Householder or spouse is aged 60 or over and in receipt of means-tested benefit Owner-occupied and private-rented sectors	As above with addition of central heating system	£2,700 (can be augmented by Energy Efficiency Levy funding)

The Domestic Energy Efficiency Scheme operated in Northern Ireland from 1995 until it was superseded in April 2001 by the Warm Homes Scheme. The earlier scheme provided a package comprising loft insulation, tank and pipe insulation, draughtproofing and energy advice to households in receipt of a means-tested benefit.

The new scheme provides a package of measures as before but includes cavity wall insulation (radiator foil where the property had solid walls), and low energy lightbulbs. The enhanced grant maximum was raised to £750.

In recognition of the increased health risks faced by older households: their occupation of the least energy efficient properties; and the likelihood that their comparatively low and fixed income would otherwise cause them to remain in fuel poverty, further assistance is provided for these households. Owner-occupied and private-rented properties, occupied by a householder aged 60 or over, can benefit from an enhanced grant programme that funds conversion of existing solid fuel heating systems to controlled oil or gas systems, or installation of such a system where the property had previously lacked central heating. This grant also covers insulation measures. The maximum grant payable for the basic and enhanced schemes is, respectively, £750 and £2,700. Private sector householders who had received assistance under the predecessor scheme, the Domestic Energy Efficiency Scheme, can receive further assistance under the new programme.

Whilst the Warm Homes Scheme can be used to fund fuel switching from solid fuel to mains gas this is of limited use since the great majority of domestic premises have no access to a gas supply. It is projected that, by 2004, a third of all households may have the opportunity of connection to a mains gas supply.[11]

[11] Liberalisation of electricity supply and fuel poverty: lessons from Great Britain for Northern Ireland, Environmental Change Institute, University of Oxford, 2002

Whilst possible skills shortages may initially pose difficulties in implementing the Warm Homes Scheme these are expected to be mitigated by development of the natural gas industry in Northern Ireland.

Wales – The New Home Energy Efficiency Scheme

Wales	*Eligibility*	*Measures*	*Grant maximum*
The New Home Energy Efficiency Scheme	Means-tested benefits Owner-occupied and private-rented sectors	Loft, tank and pipe insulation Cavity wall insulation Energy advice and low energy lightbulbs Package of insulation measures including heating appliance Heating controls	£1500
The New Home Energy Efficiency Scheme Plus	Means-tested benefits or Disability benefits and Householder or spouse is aged 60 or over or Lone parent household with child under 16 years of age	Insulation package as above and Central heating system	£2,700
Additional assistance	Householders aged 60 or over who are otherwise ineligible for grant assistance	Measures contained in the above packages	25% contribution towards the cost of the works

The New Home Energy Efficiency Scheme (HEES) in Wales contains most of the features of the scheme in England but with significant improvements. The basic grant for heating and insulation improvements provides assistance of up to £1,500 for eligible households; but the enhanced grant, which can fund central heating installation and is up to a maximum of £2,700, is available to lone parent and sick or disabled households in addition to older households. As in Northern Ireland, the scheme can be used to fund fuel-switching from solid fuel to mains gas.

The main area in which the scheme in Wales can be considered superior is in the eligibility criteria. Single parents are disproportionately represented in fuel poverty statistics and including these households as a category eligible for the central heating grant is a highly positive move. The 25% grant has not been retained in England so the Welsh scheme has the unique distinction of offering some assistance simply on the grounds of age with no other criteria to be met. This adds a general energy efficiency dimension to the scheme making it rather more than a fuel poverty programme.
As with Northern Ireland, the more generous funding provisions of the scheme should avoid difficulties encountered in England of lengthy backlogs of work resulting from a pricing regime that is not competitive with private sector work.

National Programmes and Fuel Poverty

Warm Front grants are estimated to raise the energy efficiency of a dwelling by between 12 and 18 SAP points (scale 1-100)[12] from an average baseline of 40 points. Given the similarity of the schemes in the other countries it can be assumed that in many cases the intervention will result in affordable warmth for occupants. The maximum annual energy saving as a result of the grant-aided work is estimated to be in the region of £200 although, given that some of the potential saving will be taken in increased comfort levels, this projection is reduced to between £110 and £155.[13]

In Scotland, Warm Deal is estimated to raise the average SAP by 5 points. However the starting point is not uniform. Properties in the private rented sector have an original SAP of only 29 (raised to 35 as a result of the work) whereas Housing Association properties have a starting point of SAP 50 but are only improved by an average 3 points.

Since the Warm Front programme in England is the most developed of the major schemes it provides more reliable evidence of the extent to which households are removed from fuel poverty as a result of grant assistance (at least in England). NEA research cited above in Camden and North Tyneside indicated that only half of all fuel-poor households are eligible for assistance, and that some 40% of those eligible for the grant are not, in fact, fuel poor. This mismatch between eligibility and need raises a major problem. The simplistic approach of using social security benefits as a passport to assistance is inaccurate and, more important than the fact that grants go to those not in need, is the issue of those fuel-poor households who are excluded from the scheme.

The NEA research also demonstrated that Warm Front would remove only one third of eligible households from fuel poverty. This is not necessarily because of the inadequacy of the grant maximum but is a result of low household income and a consequence of the structure of the scheme, where the conventional measures funded under the scheme cannot accommodate unconventional circumstances such as solid-walled properties; those without loft spaces; and those possessing a central heating system which, regardless of how inefficient, uneconomic or ineffective the system might be, cannot be replaced.

[12] The Standard Assessment procedure (SAP) is an indicator of the energy efficiency of a dwelling – the higher the rating the higher the standard

[13] House of Commons Hansard, March 26, 2002, Col 834

A pilot study of the potential for Warm Front to address fuel poverty was prepared by the Energy Saving Trust [14] shortly before the introduction of Warm Front. These findings largely supported the earlier research in suggesting that the majority of grant-aided households were not taken out of fuel poverty. This failure was mainly attributed to:

- ineligibility for Warm Front Plus
- unsuitable properties (solid walls)
- no access to mains gas

The research concluded that, where the full range of energy efficiency measures could be installed, virtually all properties could be improved sufficiently to remove occupants from fuel poverty.

Energy Audits

As part of the evaluation of the UK programmes a series of hypothetical case studies was devised. The purpose of the modelling exercise was to determine the extent to which the grant schemes would remove (or fail to remove) certain households in specific circumstances from fuel poverty. Accordingly the models featured characteristics intended to cover a range of property types and householder characteristics with a view to determining whether affordable warmth would be the outcome of energy efficiency improvements. In order to avoid complex financial calculations involving benefits such as Working Families Tax Credit, Housing Benefit and Council Tax Benefit all of the case studies hypothesised receipt of Income Support or Income-based Jobseeker's Allowance. This also avoided any discussion of the difficult issue of how to treat housing subsidies in assessing income.

All of the examples featured difficult, and to some extent, untypical cases. The purpose was to evaluate how the schemes could assist those in the worst circumstances since it is conceded that the programmes will, in the main, be effective. It should be noted, however, that without valid data on fuel poverty, before and after intervention, it is not possible to make a rigorous assessment of the benefits of programmes in terms of fuel poverty reduction.

[14] Testing Some Aspects of the proposed New Home Energy Efficiency Scheme, EST, 2000

Case study 1

General Data

Household Type	Single pensioner (70 years old)
Dwelling Type	Low-rise flat
Date of Construction	1900-1929
Size of Property	56.7 m²
Tenure	Private rented
Wall Construction	Masonry 9 inch solid
Accommodation (number of rooms)	Six rooms (two bedrooms)
Household Income	£98.15 per week (£5103 per annum)
Fuel Payment Method(s)	Quarterly credit
Heating Regime	Standard
Space Heating Provision	2 gas room heaters
Water Heating Provision	On-peak immersion
Ventilation Provision	No additional provision

Energy Efficiency Data

Wall Insulation	None (solid wall)
Loft Insulation	None (no loft)
Hot Water Tank Insulation	None
Draughtproofing	None
Double-glazing	None
Window Frames	Soft wood
Heating Controls	None
Low Energy Lighting	None

Case study 1 Energy Efficiency Improvement Options

Basic measures	**Heating**		**Insulation**			**Lighting**	**Controls**
	Install gas multipoint						
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original[15] fuel poverty	New fuel poverty	
21	60	£710	£503	£550	Marginal (13.9%)	Not fuel poor (9.8%)	
Enhanced measures	*Install gas multipoint*		*Draughtproofing*			*Low energy lighting*	
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
21	61	£710	£491	£700	Marginal (13.9%)	Not fuel poor (9.6%)	
Comprehensive measures	*Gas condensing boiler*		*Draughtproofing*			*Low energy lighting*	*Programmable room thermostat and thermostatic radiator valves*
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
21	79	£710	£297	£2500	Marginal (13.9%)	Not fuel poor (5.8%)	

Commentary

This case is a particularly striking example of the failings of the statutory energy efficiency programmes in the United Kingdom. The absence of both loft space and cavity walls means that these basic insulation options are not available. Whilst these measures combined would certainly have provided affordable warmth, in this instance, their unavailability could have been readily compensated for by replacing the existing on-peak immersion with a gas multipoint heater. The result of this measure would have been an immediate transition from fuel poverty to affordable warmth. However there is no provision within statutory programmes for this straightforward and rational improvement, despite NEA's consistent support for this measure in recommendations to Government departments, during consultation processes.

Whilst improved water heating (alone) would have removed this household from fuel poverty there would have remained a problem of inadequate space heating, and this can be remedied within the existing structure of grant programmes. Clearly the purpose of domestic energy efficiency programmes should be more than to nudge fuel spend below 10% of disposable income; the purpose should be to achieve the optimal outcome for eligible households in improved energy efficiency and reduced expenditure.

The comprehensive package recommended in this case will reduce needed spend below 6% of disposable income resulting in manageable energy costs and a home environment conducive to health and comfort.

Although variations in the schemes operating in England, Scotland, Wales and Northern Ireland may seem minimal there are significant differences in this particular instance. The costing of the

[15] Initially the Government assessed the degree of fuel poverty in relation to needed spend as % of income:
Over 10% - fuel poverty; over 20% severe fuel poverty; over 30% extreme fuel poverty. Revised descriptions are currently in use:
10-15% - marginal fuel poverty; 15-20% moderate fuel poverty; over 20% - severe fuel poverty.

recommended measures means that the maximum grant in Warm Front will be needed and any excess on this figure would have to be met by the client. Where a client contribution towards the excess is not possible the likelihood is that the major central heating work will not be undertaken and only minimal assistance provided.

The more generous grant maxima in the other three countries mean that this is unlikely to be an issue in this particular case. The maximum grant in Northern Ireland is higher and can be augmented through funding from Consumer Levy sources. In Scotland the figure of £2500 for energy efficiency works refers to an *average* figure rather than a maximum and there is scope within this programme to accommodate cases of special need. In Wales the marginally higher grant also means that in this case at least, the cost of the package can be met within the maximum grant figure.

Case study 2

General Data

Household Type	Adult couple (non-pensioner)
Dwelling Type	Three bedroom semi
Date of Construction	1945-1964
Size of Property	84 m²
Tenure	Local authority
Wall Construction	Cavity wall
Accommodation (number of rooms)	Seven rooms (three bedrooms)
Household Income	£84.65 per week (£4401 per annum)
Fuel Payment Method(s)	Prepayment
Heating Regime	Standard
Space Heating Provision	Electric storage heating
Water Heating Provision	Immersion heater
Ventilation Provision	No additional provision

Energy Efficiency Data

Wall Insulation	None
Loft Insulation	50 mm
Hot Water Tank Insulation	None
Draughtproofing	None
Double-glazing	None
Window Frames	Soft wood
Heating Controls	None
Low Energy Lighting	None

Case study 2 Energy Efficiency Improvement Options

Basic measures	**Heating**		**Insulation**			**Lighting**	**Controls**
			Hot water tank jacket, Cavity wall insulation, Draughtproofing, Loft insulation			*Low energy lighting*	
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
31	55	£1474	£964	£700	Extreme (33.5%)	Severe (22%)	

Alternative measures	*Gas condensing boiler*						*Programmable room thermostat and thermostatic radiator valves*
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
31	72	£1474	£809	£2200	Extreme (33.5%)	Moderate (18.3%)	
Comprehensive measures	*Gas condensing combi*		*Cavity wall insulation Loft insulation Draughtproofing*			*Low energy lighting*	*Heating controls as above*
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
31	93	£1474	£589	£2900	Extreme (33.5%)	Marginal (13.4%)	

Commentary

This case study illustrates a fundamental difficulty faced by legislative bodies in endeavouring to address the multi-faceted problem of fuel poverty. Whilst there can be some intervention in energy markets to enforce equity and minimise disadvantage through, for example, the Social Action Plan, this is of limited value in a competitive and commercial energy sector. It is also clear that some properties are so fundamentally poor in structural terms that energy efficiency improvements are virtually futile.

However, the unavoidable conclusion in examining this case study is that money poverty is the crucial issue. The Government has prioritised elderly households and families with children, not only in terms of fuel poverty, but also in terms of financial support through the social security system. Consequently, this household qualifies for none of the additional premiums available to these priority groups and must exist on a minimal income.

From a fuel poverty perspective the circumstances of this household are even worse. They are ineligible for any statutory assistance to improve the energy efficiency of their property since they are categorised as “a healthy adult household” although, of course, since this particular family lives in the public rented sector they would not qualify for Warm Front assistance regardless of their household characteristics. The only current national programme that will provide assistance outside works funded by municipal landlords is the basic insulation package funded by Warm Deal in Scotland and the Scottish Executive’s Central Heating Initiative.

One source of funding available to householders regardless of tenure or household characteristics is through Energy Efficiency Commitment work undertaken by energy supply companies. NEA has been critical of this programme in the past arguing that it too closely replicated work carried out through Government schemes and that it targeted the same client group. However Energy Efficiency Commitment assistance is currently the sole available source of specific energy efficiency grant aid to all low-income households in most parts of the United Kingdom. Whilst the Energy Efficiency Commitment funds valuable energy efficiency measures it is not perceived as a fuel poverty programme and is not structured in such a way as to offer mandatory assistance to low-income households in energy inefficient housing.

The household featured in the case study has one possible advantage. The devolved Parliaments and Assemblies have, as part of their fuel poverty strategies, to eradicate fuel poverty in social housing by 2010. NEA has commented critically on proposals in England to adopt specific Thermal Comfort criteria as a proxy for affordable warmth (NEA’s objections were not to the principle of the proposal, rather they were concerned that the suggested energy efficiency standards were totally inadequate). However the issue of fuel poverty in the social rented sector will not be discussed at length here.

To reiterate the point made earlier, this particular case study is about household income. Whilst technically feasible and cost-effective investment can produce energy costs equivalent to those of the average household the low levels of benefit entitlement mean that this individual household cannot be removed from fuel poverty.

Case study 3

General Data	
Household Type	Couple with children (8 years and 9 years old)
Dwelling Type	Three bedroom semi
Date of Construction	1900-1918
Size of Property	90 m²
Tenure	Private rented
Wall Construction	Solid wall
Accommodation (number of rooms)	Eight rooms (three bedrooms)
Household Income	£166.40 per week (£8653 per annum)
Fuel Payment Method(s)	Quarterly credit
Heating Regime	Standard
Space Heating Provision	Individual gas fires in living accommodation
Water Heating Provision	Immersion heater
Ventilation Provision	No additional provision
Energy Efficiency Data	
Wall Insulation	None (solid wall)
Loft Insulation	None
Hot Water Tank Insulation	None
Draughtproofing	None
Double-glazing	None
Window Frames	Softwood
Heating Controls	None
Low Energy Lighting	None

Case study 3 Energy Efficiency Improvement Options

Basic measures	**Heating**		**Insulation**			**Lighting**	**Controls**
	Install gas multipoint						
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
18	38	£1344	£1056	£550	Moderate (15.5%)	Marginal (12.2%)	
Enhanced measures	*Gas multipoint*		*Loft insulation Draughtproofing*			*Low energy lighting*	
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
18	67	£1344	£656	£960	Moderate (15.5%)	Not fuel poor (7.6%)	
Comprehensive measures	*Full gas central heating*		*Loft insulation Draughtproofing*			*Low energy lighting*	*Programmable room thermostat Thermostatic radiator valves*

Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty
	79	£1344	£620	£2800	Moderate (15.5%)	Not fuel poor (79%)

Commentary

As in the first case study the most straightforward and economic option is not available through the national programmes. In this instance, installation of a gas multipoint water heating system would be a significant contributor to reduced fuel costs. Minimal additional intervention would be required to reduce needed energy spend below that required for affordable warmth – in this case loft insulation, draughtproofing and low energy lighting.

However only in Scotland, where there is scope for installation of economic and efficient central heating in this circumstance, can the grant programme achieve affordable warmth. The programmes of the other countries variously provide additional assistance to elderly, disabled and single parent households but provide only a basic package of measures for families with young children. It can further be seen that the cost of the combined measures (insulation and water heating improvements) are beyond the maximum grant levels for a basic package in the case of Northern Ireland and Scotland although, in the former case, additional funding may be available through the Energy Efficiency Levy.

Where families with young children do qualify for central heating installation in Scotland, the flexibility of the average grant (rather than maximum grant) makes possible the installation of efficient and economic heating, even where property size or other factors make the installation unduly expensive.

Case study 4

General Data

Household Type	Single parent (one child of 4 years)
Dwelling Type	2 bedroom terrace
Date of Construction	1850-1899
Size of Property	84 m²
Tenure	Private rented
Wall Construction	Solid masonry
Accommodation (number of rooms)	Six rooms (2 bedrooms)
Household Income	£ 103.35 per week (£5374 per annum)
Fuel Payment Method(s)	Prepayment – electricity only
Heating Regime	16 hours daily during heating season
Space Heating Provision	Open coal fire On-peak electric room heaters
Water Heating Provision	On-peak immersion
Ventilation Provision	No additional provision

Energy Efficiency Data

Wall Insulation	None
Loft Insulation	None
Hot Water Tank Insulation	None
Draughtproofing	Front and back doors
Double-glazing	None
Window Frames	Softwood
Heating Controls	None
Low Energy Lighting	None

Case study 4 Energy Efficiency Improvement Options

Basic measures	**Heating**		**Insulation**			**Lighting**	**Controls**
	Closed room heater Economy 7 hot water						
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
1	17	£3090	£2561	£900	Extreme (57.5%)	Extreme (49.3%)	
Enhanced measures	*Closed room heater Economy 7 hot water heating*			*Loft insulation Draughtproofing*		*Low energy lighting*	
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
1	35	£3090	£1801	£1200	Extreme (57.5%)	Extreme (33.5%)	
Comprehensive measures	*Storage heating Economy 7 water heating*			*Draughtproofing Loft insulation*		*Low energy lighting*	
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
1	51	£3090	£884	£1800	Extreme (57.5%)	Moderate (19.7%)	

Commentary

The starting point for this accommodation is so low in terms of energy efficiency that the needed fuel spend would absorb more than half of the household's disposable income. Even with the optimum improvement package realistically available the household remains in severe fuel poverty. Only in Wales where there is provision for single parents to benefit from central heating provision, and in Scotland where central heating may be installed, do the energy costs begin to look remotely feasible.

The fundamental problem in this property is lack of access to a mains gas supply and no grant-aided means by which it can be arranged. In many cases, of course, access to mains gas is not economically feasible and it may be that in such properties the recent revisions to programmes such as Warm Front, which allow for innovation in the use of micro-CHP and renewable energy will have a significant role.

However, for many households, connection to gas is not so problematic and should form part of energy efficiency programmes, whether the primary purpose is social or environmental. This is particularly important whilst innovations remain untested and hypothetical.

In this case study NEA (although this is not examined in the improvement package options above) considered the type of package that might remove this particular household from fuel poverty. Clearly access to gas is crucial since a package comprising:

- Gas condensing combi and controls
- Draughtproofing
- External insulation of solid walls

- Low energy lighting

- Double glazing
  and
- Funding of a mains gas connection

would approximate to affordable warmth although at extremely high cost – in the region of £10,000. This level of investment would result in a SAP rating of 100 and would reduce fuel costs to some £524 per year, marginally removing the household from fuel poverty.

In fact this is the type of case that will test the legislatures' commitment to eradicate fuel poverty to the full. It can't always be achieved for £300 (the average Warm Front grant), nor can it always be achieved for £660 (the average Warm Front Plus grant). In some, perhaps many, cases investment of the order of £10,000 per property will be needed and this will be the point where escape clauses are invoked or commitments are honoured.

The UK Fuel Poverty Strategy takes its lead from the Warm Homes and Conservation Act 2000. Whilst the Act does commit the Government to a programme to ensure the eradication of fuel poverty by 2016 this obligation is not unqualified. The text of the legislation refers to a target date by which "as far as is reasonably practicable no person will live in a home which cannot be kept warm at reasonable cost".

How the Government chooses to interpret "reasonable" will determine just how serious they are about ending fuel poverty.

Case study 5

General Data

Household Type	Pensioner couple (both 80 years old)
Dwelling Type	4 bedroom detached
Date of Construction	1930
Size of Property	130 m^2
Tenure	Owner occupied
Wall Construction	Cavity wall
Accommodation (number of rooms)	Nine rooms (four bedrooms)
Household Income	£149.80 per week (£7789 per annum)
Fuel Payment Method(s)	Quarterly credit (electricity only)
Heating Regime	Sheltered
Space Heating Provision	Solid fuel central heating – radiators in living accommodation only
Water Heating Provision	Back boiler with storage tank
Ventilation Provision	No additional provision

Energy Efficiency Data

Wall Insulation	None
Loft Insulation	50 mm
Hot Water Tank Insulation	None
Draughtproofing	Back and front doors
Double-glazing	None
Window Frames	Soft wood
Heating Controls	None
Low Energy Lighting	None

Case study 5 Energy Efficiency Improvement Options

Basic measures	**Heating**		**Insulation**			**Lighting**	**Controls**
			Hot water tank jacket *Cavity wall insulation* *Draughtproofing* *Loft insulation*			*Low energy lighting*	
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
37	60	£2687	£1707	£750	Extreme (34.5%)	Severe (22%)	
Alternative measures	*Electric storage heating Economy 7 water heating*						
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
37	38	£2687	£1996	£1400	Extreme (34.5%)	Severe (25.6%)	
Comprehensive measures	*Electric storage heating Economy 7 water heating*		*Cavity wall insulation* *Draughtproofing* *Loft insulation*			*Low energy lighting*	
Original SAP	New SAP	Original fuel spend	New fuel spend	Cost of measures	Original fuel poverty	New fuel poverty	
37	61	£2687	£1306	£2200	Extreme (34.5%)	Marginal (16.8%)	

Comment

This case study features in combination some of the most difficult and sensitive fuel poverty issues. Technically the lack of access to gas severely restricts the range of applicable measures and makes it unfeasible to achieve affordable warmth in this property using conventional methods. Even where the above analysis incorporates measures not funded under the different programmes i.e. conversion to Economy 7 water heating (not an attractive option in Northern ireland) there is no prospect of achieving affordable warmth.

Once more the key element is the practicality of connection to a mains gas supply. If this were to prove feasible then the economics would become radically different. Nevertheless an affordable warmth package for this property would cost in the region of £8000 and would comprise:

- Gas condensing boiler and controls
- Cavity wall insulation
- Draughtproofing
- Loft insulation
- Low energy lighting
- Double glazing
  and
- Connection to a mains gas supply

As with case study 4, double glazing, generally discounted in terms of energy savings and payback periods, becomes a significant element in approaching affordable warmth. This complete package is needed simply to reach the 10% fuel expenditure figure. Again the legislatures, none of whose programmes allow anything like the required level of grant aid, will have difficult decisions to take – always providing that there is greater emphasis on assessing the extent to which programmes do alleviate fuel poverty.

But this case study raises an alternative issue and one that is generally recognised as a factor in fuel poverty and an issue of great sensitivity – under-occupancy. The property featured in the study is ostensibly too large for the needs of the occupants and this clearly contributes to the extraordinary degree of fuel poverty in this case,

This is a problem of particular relevance to older householders remaining in the family home after children have long moved out. The property may be too large for their needs and may have unmanageable heating costs, since a household income based on one or more wages has reduced to, at best, a combination of state retirement and works pensions.

This issue poses a dilemma for central and local government. To what extent is it legitimate to intervene in such areas? Even with the best of intentions the answer is clear- it is no part of the remit of local or central government to direct, however sensitively, the living arrangements of any group of residents. What is required is to find out what older householders need and want in terms of housing provision, location, cost and services - and to provide it.

Conclusion

This report set out to determine the relative merits of the different statutory energy efficiency programmes in the United Kingdom. In attempting to subject them to severe scrutiny the hypothetical cases employed were much more demanding than would normally be encountered in the generality of the housing stock. However there are grounds for some optimism that even difficult cases can be removed from fuel poverty through programmes that have this as their ultimate objective, rather than simply maximising the number of households receiving comparatively modest assistance.

It is evident that none of the programmes as presently constituted can deliver affordable warmth in all cases; but a sensible starting point is to identify best practice in existing schemes, and incorporate this into a standard level of provision across the United Kingdom. So which elements of the existing schemes should be adopted in a new national programme?

Eligibility Criteria

Whilst all of the schemes share a general perception of need based on household income (means-tested) and characteristics of the occupants (priority assistance on the grounds of age and disability) there are significant differences in the programmes. The Home Energy Efficiency Scheme in Wales is most inclusive in recognising the special needs of single parent households and those with a disability and in extending to these householders the higher rate of grant. The Scottish Executive Central Heating Initiative offers assistance to tenants in the social-rented sector and Warm Deal provides a basic insulation package for this tenure group.

The Scottish scheme also recognises that where pensioner households lack central heating this is probably due to lack of resources rather than to a lifestyle choice and that inability to meet means test criteria should not be a barrier to access to assistance.

In recent evidence to the Trade and Industry Committee, during their Inquiry into Fuel Poverty, NEA presented a case for the extension of Warm Front Plus grants to all households currently eligible for any assistance under this programme; it was also argued that there was a strong case for including older pensioners (not claiming or receiving means-tested benefits) in the programme, given that lack of energy efficiency measures implied deprivation. The Government appreciates the merits of universality in the Winter Fuel Payments scheme and there is a much more compelling case for extending the benefits of an energy efficiency programme to all pensioner households.

It may be that the current two-tier grant schemes are outmoded and that it is invidious to make generalised distinctions between different categories of vulnerable households.
All eligible households should therefore:

- Qualify for a single-tier grant featuring the full range of energy efficiency measures
- Eligibility should be extended to all pensioner households
- Eligibility should be extended across all tenure groups
- Eligibility should encompass all of those currently qualifying under the different programmes e.g. expectant mothers

The Maximum Grant

This is a complex issue within a finite budget for energy efficiency works. Clearly there are competing priorities between maximising the number of households benefiting and the objective of ensuring that the optimum feasible and cost-effective measures can be funded and installed. In Scotland the adoption of an average grant rather than a maximum grant means greater flexibility and discretion in works that can be carried out. In England the view is that setting an average grant inevitably means that fewer households will benefit. But this latter view is predicated on the view of the programme as one of energy efficiency improvement rather than fuel poverty alleviation.

In Northern Ireland there has been a policy of using Energy Efficiency Levy funding to augment the theoretical maximum grant of the Domestic Energy Efficiency Scheme. Whilst it is often argued for greater cooperation between programmes and for them to be complementary rather than competitive, it is difficult to see how a Government scheme with a specific social objective can be partly dependent on a funding source that does not necessarily share this objective.
NEA's evidence to the Trade and Industry Select Committee (referred to above) put the case for all available resources to be concentrated in one programme and even the successful partnership in Northern Ireland does not change this view.

The Warm Homes and Energy Conservation Act imposes a statutory duty to eliminate fuel poverty in England and Wales by 2016. If this is to be achieved then they must allow for:

- the appropriate level of investment required to achieve affordable warmth in individual properties
- provision of an overall budget that will enable their statutory objectives to be met
- priority assessment of technical solutions that will alleviate fuel poverty where the necessary level of investment using conventional methods is prohibitive
- a grant scheme that aims to maximise the energy efficiency potential within properties
- removal of current restrictions on repeat grants where receipt of past grant aid at the lower level of a two-tier grant scheme does not allow further assistance despite changes in circumstances.

Measures to be Funded

The Government in Westminster has recognised that conventional measures may be insufficient to address difficult cases of fuel poverty. As a consequence recent amendments to scheme regulations[16] have put in place powers to grant-aid innovative technologies including micro-CHP and renewable energy technologies. It has also been recognised that there are particular problems with hard-to-heat properties (typically those with solid walls) and properties not connected to the mains gas network. However, even before addressing the more intractable problems of fuel poverty, there are certain elements that could and should have been included in the original scheme that could make significant contributions to fuel poverty reduction. As discussed in two of the case studies above the lack of provision for economic water heating is a significant omission in the schemes and should be recognised and amended.

Whilst existing measures within schemes are potentially important in fuel poverty reduction there are gratuitous limitations to existing packages e.g. within Warm Front there is an arbitrary limit on the number of radiators that can be provided in a central heating installation. In a clear intention to keep expenditure under control specifications for central heating provision do not allow for concealment of pipework either underfloor or boxed in. This level of service would not be acceptable in a normal heating system installation and should be unacceptable in Government programmes. It gives a signal that a second class service is appropriate for grant-aided work for low-income households.

[16] The Home Energy Efficiency Scheme (England) (Amendment) Regulations 2002

It is recommended that, under a national energy efficiency programme:

- Funding for individual and communal connection to the mains gas network should be made available where there is a strong social and economic case
- Water heating improvements should be a central element of a national energy efficiency programme
- The scheme should provide full central heating in keeping with the health and comfort needs of the client
- All work carried out using Government funding should conform to the highest standards of workmanship and best practice
- The scheme should, where appropriate, fund external or internal wall insulation
- All installations should seek to ensure the highest energy efficiency standards that are technically feasible and cost effective

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