



Environmental
Change Institute
UNIVERSITY OF OXFORD



Campaigning for Warm Homes

Fuel Poverty Research Centre scoping study

Sponsored by the ESRC

July 2005

Written by

Jane Palmer (jane.palmer@ouce.ox.ac.uk), ECI

Ron Campbell (ron.campbell@nea.org.uk), NEA

Brenda Boardman (brenda.boardman@ouce.ox.ac.uk), ECI

Jenny Saunders (jenny.saunders@nea.org.uk), NEA

Acknowledgements

The work in this report was supported by a grant from the Economic and Social Research Council, whose support we gratefully acknowledge.

We are also grateful to all participants in the scoping study survey and workshop for providing valuable input and comments.

Environmental Change Institute
Oxford University Centre for the Environment
South Parks Road
Oxford OX1 3QY

Tel: 01865 275848
E-mail: administrator@eci.ox.ac.uk
Website: www.eci.ox.ac.uk

© Environmental Change Institute, 2005

July 2005

Contents

The Fuel Poverty Research Centre scoping study	iii
Executive Summary.....	4
1 Setting the context for a Fuel Poverty Research Centre.....	6
1.1 Why fuel poverty?	6
1.2 Why a research centre?	7
1.3 Summary	8
2 The case for further fuel poverty research	10
2.1 Fuel poverty research.....	10
2.2 Fuel poverty.....	11
2.3 Definition of fuel poverty	11
2.4 Factors in fuel poverty	13
2.5 Government intervention.....	14
2.6 Government policy and legislation	14
2.7 Public Service Agreements	15
2.7.1 <i>Housing - The Office of the Deputy Prime Minister</i>	15
2.7.2 <i>Cold Conditions - The Department of Health</i>	16
2.7.3 <i>Fuel poverty – the Department for Environment, Food and Rural Affairs</i>	17
2.7.4 <i>Energy prices and regulation – the Department of Trade and Industry</i>	18
2.7.5 <i>Heating subsidies and other financial assistance – the Department for Work and Pensions</i>	18
2.8 Summary	20
3 Fuel Poverty Research Centre survey.....	21
3.1 Background	21
3.2 Respondent information.....	21
3.3 Current state of fuel poverty research	21
3.4 Support for a Centre	23
3.5 Functions of a Centre	24
3.6 Areas covered by a Centre	26
3.7 Research priorities	28
3.8 Use of a Centre	30
3.9 Funding of a Centre	31
3.10 Summary	32
4 Fuel poverty research opportunities	33
4.1 Causes	33
4.2 Symptoms.....	34
4.3 Impacts	34
4.4 Data, definitions and identification	35
4.4.1 <i>Data required</i>	35

4.4.2	<i>Definitions</i>	35
4.4.3	<i>Identification</i>	35
4.5	Evaluation: effectiveness of existing policies and programmes	36
4.6	Targeting	36
4.7	Future solutions	37
4.8	Summary	37
5	Proposal for a Fuel Poverty Research Centre	38
5.1	Structure of a Network	38
5.2	Location of the Network	39
5.3	Role and functions of the Network	39
5.4	Staffing of a Network	41
5.5	Outline budget for a Fuel Poverty Network	41
5.6	Extending to a Fuel Poverty Research Centre	42
5.7	Outline budget for a Research Centre	42
5.7.1	<i>Fixed research partners</i>	42
5.7.2	<i>Pool of researchers</i>	43
5.8	Funding options	43
5.9	Next steps	44
6	References	45
	Appendix I – Literature review	46
	Appendix II – Stakeholder survey	68
	Appendix III – Survey respondents	76
	Appendix IV – Workshop participants	78

The Fuel Poverty Research Centre scoping study

The eradication of fuel poverty by 2016-18 is both a major objective of UK energy policy and a legal obligation. The Government has confirmed the importance of this task through the development of a Fuel Poverty Strategy with associated indicators.

The causes and evidence of fuel poverty are multi-faceted and range from the energy efficiency of the housing stock, household income levels and the effect of fuel pricing mechanisms, to the extent of excess winter deaths, cold related illness, fuel debt and disconnection from supply. As a result, formal academic study of fuel poverty is based in a wide spread of institutions and disciplines throughout the UK and includes the wider community working on related issues such as poverty, social exclusion, environmental and social justice.

The net effect is a collection of initiatives, all individually important, but poorly co-ordinated. This means that the full benefits of the research are unlikely to be obtained, that synergies are lost and the potential for overlap and duplication is exacerbated. As a result, policy is weaker and the identification of practical solutions is delayed

In order to address these issues, National Energy Action (NEA) proposed a scoping study, in collaboration with the Environmental Change Institute (ECI), to determine how to maximise the focus and influence of research into fuel poverty. Funding for this project was secured from the ESRC. One of the key goals of the study was to establish whether a Fuel Poverty Research Centre is needed. A Research Centre would involve capturing research findings across the range of disciplines and channelling outcomes into constructive policy-making by the Government, as well as possibly commissioning and undertaking research.

The aims of the scoping study were to:

- assess the current state of the research agenda;
- gather the views of key stakeholders on the need for a Centre via an on-line questionnaire and a one-day workshop;
- identify the major funders;
- provide recommendations to research councils, Government and others.

This report summarises the main findings of the scoping study. The first chapter sets the context by outlining the case for a Fuel Poverty Research Centre, highlighting why fuel poverty is an issue that merits further investigation and research, and why a research centre is necessary, using evidence from the current state of fuel poverty research. The second chapter summarises the key findings from the on-line stakeholder survey undertaken in April as part of the scoping study. The results from the survey are built upon in the third chapter which provides an outline proposal for a Fuel Poverty Research Centre, indicating possible roles, functions and funding requirements. [to be completed following the workshop]

For more information about the scoping study, please visit the ECI website: <http://www.eci.ox.ac.uk/lowercf/fuelpovertycentre.htm>

Executive Summary

- Eradication of fuel poverty by 2016-18 is both a major objective of UK energy policy and a legal obligation, making achievement and monitoring of progress crucial
- Progress towards achieving this goal is currently not sufficient and more needs to be done, particularly given rising fuel prices
- Fuel poverty is a complex, multi-faceted social issue, influenced by a multitude of factors and covering a number of disciplines
- Responsibility for fuel poverty is split between a number of Government departments, covering the issues of energy efficiency, housing, health, energy prices and regulation, and welfare benefits
- Funding for research to deliver the four goals of the Energy White Paper has so far been extremely limited in relation to affordable warmth
- Current research in fuel poverty is poorly co-ordinated, lacking in focus and not translated into policy effectively
- Research is spread across a wide range of institutions and specialities, with the opportunities for building links and synergies currently under-exploited
- High quality objective research is crucial in assisting the Government to identify how best to attain the fuel poverty targets and in monitoring and evaluating progress towards these goals
- There are important gaps in existing fuel poverty research – more research is required and this needs to be better co-ordinated and of higher quality, with an emphasis on translation into both policy and practice
- Research opportunities can be considered in terms causes, symptoms impacts and solutions, the main emphasis for additional research being on solutions (in relation to causes rather than symptoms), with a key focus on the evaluation of existing policies and programmes
- A survey of key players in fuel poverty and the wider community demonstrated strong support for establishing a Fuel Poverty Research Centre for the UK
- Establishing a Fuel Poverty Research Centre would fulfil a number of roles:
 - More efficient spending of funds
 - Better networks and communication
 - Enhancing synergies
 - Avoiding duplication
 - More co-ordinated research
 - Stronger and more effective policy
- The Centre would be based in an existing academic institution and would be mainly virtual in nature, with a UK focus, bringing together knowledge and practice from the devolved administrations and specialist agencies

- A resource centre would be at the core of the Centre, with research dissemination and co-ordination flowing from this strong base
- The Centre would take an inter-disciplinary 'whole systems' approach, building on and working with existing capabilities, and making links to areas relevant to fuel poverty such as health, welfare, housing and economics
- The Centre would help draw down funding for research towards meeting a key goal of the Energy White Paper in delivering affordable warmth
- The Centre would have the potential to set a new agenda for research, building on the evaluation of existing policies and programmes and taking this forward
- The emphasis on interconnections between the social, economic, environmental and technological dimensions within the Centre would be in keeping with the UK's Sustainable Development Strategy
- The Centre would have the hallmarks of impartiality, academic rigour and high quality research
- A peer-review process would be an important feature of a Centre in order to ensure quality of research
- A minimum annual budget of £230,000 would be required to establish a Fuel Poverty Network, essentially a network and resource centre, with a limited research synthesis role
- A Network would require a staff of four, covering the roles of Director, Co-ordinator, Researcher and Communications Manager
- With an annual budget of £530,000, the Network could be further developed into a Fuel Poverty Research Centre, with its own primary research programme, spread across a range of partners and institutions
- Research could either be distributed amongst a limited number of fixed partners or across a more flexible pool of partners, or some combination of the two, depending on the required outputs
- Involvement of, and consultation with, key players in the design and remit of the Centre is important to ensure proper engagement and effectiveness and to limit duplication of effort and resources
- The Centre needs to be established for a minimum of five years, preferably ten to tie in with Government targets

1 Setting the context for a Fuel Poverty Research Centre

1.1 Why fuel poverty?

It has taken many years for fuel poverty to be officially recognised as an issue by the Government, the landmark being Angela Eagle's speech as Minister for Energy Efficiency to the annual conference of the National Right to Fuel Campaign in May 1998 which set a clear statement and intention to "*develop a coherent strategy to eliminate fuel poverty*" (Boardman 1998). Since then, the profile of this issue has gained considerable ground, culminating in being identified as one of the four key goals of the UK Government's Energy White Paper (DTI 2003) and with the eradication of fuel poverty by 2016 becoming a firm commitment in Northern Ireland and a legal obligation in England (UK Government 2000) and Scotland, with a target date of 2018 in Wales (Defra 2004). However, despite this rise in status and the recognition that fuel poverty is a serious social issue, it still appears to be somewhat neglected in terms of investment in time and money, particularly in comparison to the other three White Paper goals (carbon dioxide emissions reductions, security of supply and competitive markets).

To some extent this is understandable – fuel poverty is a complex and multi-faceted social issue, exacerbated by a wide range of factors. There is no simple one-off 'quick fix'. There is also confusion about which Government department has responsibility for fuel poverty – at the moment it is split between Department of Trade and Industry (DTI) and Department for Environment, Food and Rural Affairs (Defra) as well as some overlap with the Department of Health (DoH), Department for Work and Pensions (DWP), Office of the Deputy Prime Minister (ODPM) and devolved administrations – making it difficult to establish a clear, co-ordinated approach.

Some progress has been made in reducing the number of households in fuel poverty – the most recent estimate being around 2 million households lacking affordable warmth in the UK in 2003, down from around 4.5 million in 1996 (DTI 2005). However, much of this reduction has been due to a drop in fuel prices following liberalisation and relatively low unemployment and therefore do not represent permanent solutions to the problem (Boardman et al 2005). With rising fuel prices in 2004 and 2005, levels of fuel poverty have increased, emphasising the urgent need to address this problem in an enduring and effective way if the Government targets are to be achieved.

Although the complexities of fuel poverty present many challenges on the one hand, solutions to the problems can provide a corresponding range of benefits. For instance, eradicating fuel poverty not only means that every home is 'adequately and effectively heated' (DTI 2003), thus improving quality of life for almost 10% of the population in terms of both comfort and financial savings, but will also contribute towards carbon dioxide emissions reductions and achievement of the UK Government's Kyoto targets. In addition, there will be significant health benefits – both physical and psychological – as well as other less obvious effects, such as improved educational performance

amongst children from previously fuel-poor households. Addressing the issue of affordable warmth is also in line with the goals of the UK's Sustainable Development Strategy (UK Government 2005a), which has 'Ensuring a strong, healthy and just society' as one of its five guiding principles, aiming to promote 'personal wellbeing, social cohesion and inclusion, and creating equal opportunity for all'. Clearly, eliminating fuel poverty is an essential part of building such a society, emphasising the interconnections between the social, economic, environmental and technological dimensions.

It is evident that fuel poverty is an area that requires greater attention. The Government and utilities already spend substantial amounts of money through programmes to insulate the homes of the fuel poor, such as Warm Front. However, whilst this is of great value, these initiatives are not reaching all those in need – better understanding of why people resist such measures is required and represents one of many areas where applied and focused research is needed to inform the necessary practical solutions. If fuel poverty is to be eradicated as swiftly and cost-effectively as possible then a more co-ordinated and strategic approach must be taken, bringing together the wealth of knowledge and experience that is already in existence.

1.2 Why a research centre?

If the Government target is to be reached, there are, at most, only 11 years remaining in which to tackle fuel poverty comprehensively. This represents an enormous challenge within such a short space of time, especially given that fuel prices are rising, and will require a clear and focused approach. The key question is how to ensure that money is spent most effectively and efficiently in working to eradicate the problem of fuel poverty, building on what has already been done but avoiding duplication of work and 're-inventing the wheel'. There is also a need to redress the balance of current research funding to reflect the importance and urgency of delivering affordable warmth.

There is a great deal of work available in the field of fuel poverty, spread across a range of disciplines and institutions, including the wider community working on related issues such as poverty and social exclusion. As well as formal academic study of various aspects of the issue, there is also much important work done by practitioners and campaigners. However, whilst much of what is done is extremely valuable, it is poorly co-ordinated, often short-term with a narrow focus and lacking in an overarching strategy. Links and synergies within the academic community, both amongst the fuel poverty field and across disciplines, are not always used effectively. The links between academic researchers and people on the ground are often weak, meaning that useful interactions between research and practice are lost – both these groups could benefit through learning from each other. The fuel poverty lobby holds a special place in ensuring that academic research remains focused on the actual situation, is practical and relevant and that findings are acted upon and subsequently evaluated.

It is clear that the present situation is sub-optimal in terms of achieving maximum benefit from current research and to continue in this vein may well hinder the effective delivery of the Energy White Paper goal of affordable warmth. The question is, what would represent a constructive step forwards, building on the strengths of what is already in existence and taking this further? It is crucial that any investment results in advances in the eradication of fuel poverty, whether this is through primary research or through a more strategic approach of improved co-ordination and building of networks. What no-one wishes to see is money being spent ineffectively when it could have been directly invested in lifting households out of fuel poverty.

The establishment of a Fuel Poverty Research Centre represents one way of improving linkages and bringing about a more co-ordinated research approach, reducing boundaries and building on synergies which are currently under-utilised. A Centre could also be effective in helping to draw down the research funds available into the area of affordable warmth, to the same extent as for other Government energy targets. The ultimate aim would be to strengthen policy through the identification of practical solutions based on robust, high-quality research and thereby ensure that the Government targets are met. The Centre would be a focal point to bring together the wide range of players in this field, establishing a strong network through which experience and knowledge can be shared. Consolidating existing research would be an essential first step in order to draw fully on the lessons that can be learnt from what has already been done. This process would also help identify where the research gaps are and who would be best placed to undertake the research required. A Centre could also play a useful role in the distribution of available funds and commissioning of research, in parallel or in conjunction with institutions such as the Eaga Partnership Charitable Trust, Joseph Rowntree Foundation and the utilities.

A key function of a Centre would be to strengthen links, not just within the fuel poverty community, but with the wider research network in other relevant fields such as social exclusion, poverty, environmental and social justice, health, energy markets, energy efficiency and energy technologies. Through such an inter-disciplinary 'whole systems' approach, the Centre could enhance the current research arena, bringing together a wide range of social scientists with engineers, environmental scientists and health researchers, amongst others, as appropriate within the broader context of the UK Government's Sustainable Development Strategy.

1.3 Summary

It has taken some time for the issue of fuel poverty and affordable warmth to be officially acknowledged, but it is now both a key goal of the Energy White Paper and a legal obligation. Achieving the Government targets is a major challenge given the complexities and multi-disciplinarity of fuel poverty and is further complicated by the number of Government departments involved. However, this inter-disciplinarity also represents an opportunity to take a comprehensive 'whole systems' approach to achieve long-term solutions, in keeping with the UK's Sustainable Development

Strategy – ‘ensuring we get the full environmental, social and economic dividend of every pound that we spend’ (UK Government 2005a).

In terms of research funding, fuel poverty remains marginalised and the links between academics and the wider fuel poverty community are poor. As a result, programmes and policies are not as effective as they could be.

Establishment of a Fuel Poverty Research Centre has the potential to address many of these issues, improving co-ordination and networks and helping to draw down funds with the aim of achieving more efficient expenditure towards actually reducing fuel poverty with targeted research. The following chapters discuss whether such a Centre is needed and what role it might take.

2 The case for further fuel poverty research

Fuel poverty may be unique as a social problem in that Parliament has legislated to abolish it. Whilst Government targets are ubiquitous and cover myriad aspects of Government policy, these are normally underpinned by less binding commitments, such as Public Service Agreements, which are effectively statements of good intent and without any legislative force. This is not the case with fuel poverty since the Warm Homes and Energy Conservation Act 2000 commits Government to: 'prepare and publish...a strategy setting out the authority's policies for ensuring, by means including the taking of measures to ensure the efficient use of energy, that as far as reasonably practicable persons do not live in fuel poverty' (UK Government 2000). The UK Fuel Poverty Strategy 2001 committed Government to compliance with the provisions of the Warm Homes and Energy Conservation Act by 2016 (DTI/Defra 2001).

The legislative force behind fuel poverty action makes the achievement, and monitoring, of progress crucial. Whilst there is a consensus across all main political parties that the problem of fuel poverty must be resolved, party political capital is still made based on perceptions of success or failure in maintaining progress. Fuel poverty has become politicised.

High quality objective fuel poverty research is needed for five main reasons:

1. To verify the progress made by Government.
2. To assess the effectiveness of fuel poverty programmes.
3. To advocate alternative or priority action in pursuit of fuel poverty targets.
4. To assist Government in attaining the objectives of the Warm Homes and Energy Conservation Act.
5. To demonstrate how Government can fully eradicate fuel poverty and obviate the need for the 'as far as reasonably practicable' clause.

2.1 Fuel poverty research

The only valid objective in researching fuel poverty is to work towards its eradication. Studies may centre on quantifying fuel poverty and associated problems; assessment of the effectiveness of remedial action; or recommendations for future policy and practice but, provided findings are robust and objective, any such research will make a contribution to the understanding and resolution of fuel poverty. All fuel poverty research, provided it does not simply replicate earlier work, is purposeful and constructive, strengthens the argument for action, improves effectiveness of action and reinforces the political will.

A detailed literature review, giving an overview of the current state of the research agenda, is provided in Appendix I. This builds upon the work commissioned by the DTI in 2002 (Chesshire 2002).

2.2 Fuel poverty

Fuel poverty is different from general poverty. Within fairly narrow parameters, household need for food, clothing and other goods and services is uniform. In the case of fuel, household need varies as a consequence of geographical location, economy and efficiency of any heating system and fuel used, thermal insulation standards of the property and age or infirmity of household members. This variable degree of need means that a welfare benefits system that is not responsive to such variety is failing many of the fuel poor.

General poverty can be addressed through increasing income levels. Whilst the symptoms of fuel poverty (such as cold homes) can be tackled in a similar way, the underlying causes of fuel poverty are a consequence of a lack in capital investment. Fuel poor households are not only buying the most expensive warmth for the hardest to heat homes, but lack the capital (and the opportunity, if in rented accommodation) to switch fuels or invest in the energy efficiency of the home.

2.3 Definition of fuel poverty

This issue is becoming increasingly contentious, with concern that the true scale of the fuel poverty will not be recognised because revisions to the way in which it is defined result in minimising the extent of the problem.

Early estimates of the incidence of fuel poverty were originally based on numbers of households dependent on social security benefits for a large proportion of their income. Effectively this assumed that such households were fuel poor. In fact the overall number turned out to be reasonably accurate (whilst the actual and estimated totals were similar they did not necessarily refer to the same households – some money-poor households would not be fuel poor and vice versa), although it was not until the publication of the Energy Report of the 1996 English House Condition Survey that fuel poverty was genuinely quantifiable. Since then, fuel poverty has been a feature of major house condition surveys and also subject to interim modelling.

The original definition of fuel poverty was based on the assumption that what people actually spent on energy was, in the case of low-income households, governed by what they could afford. Since the level of spending on fuel was around 10% of income for the poorest 30% of households this was established as a benchmark beyond which energy costs were considered unaffordable. This figure reflected the actual fuel expenditure of these households in 1988.

The introduction of 'needed spend' as an element of the fuel poverty formula was a significant advance in assessing fuel poverty. It introduced an element of technical validity to the subject. Subsequently, this definition became universally accepted as the defining indicator of fuel poverty in the United Kingdom. The current definition used by the UK Government identifies a fuel poor household as one which needs to spend

more than 10% of its income on all fuel use and to heat its home to an adequate standard of warmth.

In recent years, however, this simple definition has been subject to considerable revision and discussion. The number of households deemed to be fuel poor varies depending on which type of income is used as the basis for the definition (Table 1). Full income includes housing subsidies, such as Housing Benefit and Income Support for Mortgage Interest, whereas these are excluded under the basic income definition. Disposable income refers to household income after housing costs have been taken into account.

Table 1 *Fuel Poverty trends in England, 1996-2002*

	Number of fuel poor households (millions)			
	1996 ¹	1998 ²	2001 ³	2002 ⁴
Full income	4.3	3.3	1.7	1.4
Basic income	5.3	4.3	2.4	2.0
Disposable income	6.9	-	-	-

Sources: 1 – DETR 2000, 2 – DTI/Defra 2001b, 3 – DTI/Defra 2003, 4 – Defra 2004

Much discussion has centred on the treatment of household income for the purpose of assessing fuel poverty, an issue that is of crucial importance in determining progress in addressing the problem. For instance, with the current Government definition based on full income, an increase in rent (and therefore a corresponding increase in housing benefit) can lead to a household coming out of fuel poverty (according to the definition), although the situation for the household has not actually changed. This is clearly problematic.

It may also be questioned whether the 10% of income figure is still valid. Average expenditure on domestic energy is now down to less than 3% of income, and relative fuel poverty (ie the proportion spent on fuel relative to other households) rather than absolute fuel poverty (ie the 10% figure) may become a new issue of equity. The Department for Trade and Industry included in one of its 2002 Public Service Agreement Technical Annexes the aspiration that the poorest three deciles of the population should see their energy costs reduced to below 5% of income by 2004.

A further issue is the case for employing disposable income in the assessment and revising the 10% expenditure figure upwards in recognition that expenditure will represent a higher proportion of disposable income. Many fuel poverty campaigners believe that this will provide more reliable data on the extent of fuel poverty.

There is also a practical element to identifying an appropriate definition – if there is to be effective delivery and targeting of programmes, there must be a straightforward ‘doorstep definition’ that enables practitioners to easily assess if a household is in fuel poverty when making house-to-house calls. However, given the expensive and intrusive nature of fuel poverty assessment in individual homes it may be that it is

necessary to adopt a 'proxy' for fuel poverty related to the energy efficiency standards of any given property. This approach was adopted for the Thermal Comfort element of the Decent Homes Standard which was intended to address fuel poverty in social housing.

The Government recently commissioned the Building Research Establishment to undertake a review of the method for assessing fuel poverty. The review brought a sceptical response from many fuel poverty campaigners who felt that the recommendations would artificially deflate the scale of fuel poverty. Consequently, a further review of the methodology is currently being undertaken by Professor John Chesshire and Dr Tom Sefton.

2.4 Factors in fuel poverty

The Government distinguishes between vulnerable and non-vulnerable households when assessing and quantifying fuel poverty. This rational approach is built into the UK Fuel Poverty Strategy which commits the Government to the eradication of fuel poverty for vulnerable households by 2010 (and to ending fuel poverty for all households by 2016). In assessing fuel poverty, vulnerable households are those with older members, families with young children and where a member of the household suffers from a disability or chronic ill health.

The energy-efficiency of the house is one of the key underlying causes of fuel poverty – an inefficient home combined with a lack of capital to invest in improving the efficiency is a major contributory factor. Housing-related studies of fuel poverty have focused on the inadequacy of heating and insulation standards and the extent to which remedial works can provide affordable warmth. This has included the problems faced by those in solid-walled houses and hard-to-heat homes. In recent years research in this area has expanded to include wider issues such as connection to the mains gas network and the problems of fuel poverty faced by households occupying properties that are too big for their needs and means.

Low household income is clearly a factor in fuel poverty, both in terms of lack of capital and difficulties in meeting high running costs associated with expensive fuel and inefficient homes. The latter is recognised in the development of grant programmes where receipt of means-tested benefits has long been used as the basic criterion for eligibility for assistance. Prior to 1988, the welfare benefits system provided assistance with heating costs to households on Supplementary Benefit (Income Support) on grounds of age, infirmity, housing conditions and where a heating system was disproportionately expensive to operate.

The social security system in Great Britain makes no distinction (other than housing subsidies, which approximate to rental costs) between the different needs of, for example, rural dwellers or households in colder areas of the country despite the fact that such households will generally incur higher heating costs. There have been intermittent campaigns to introduce some form of differential premium within the

benefit system in the form of a Cold Weather Credit, but these have made no progress.

Currently, assistance with fuel costs is limited to the Winter Fuel Payment (a universal benefit for persons aged 60 or over) and the Cold Weather Payment (payable during periods of exceptionally severe weather to vulnerable households on some form of Income Support). The Government has resisted the case for extending the Winter Fuel Payment to additional categories of household such as those with a disability or low-income families with young children.

In terms of energy prices, these are basically cost-reflective in that charges reflect the cost of supply. This underlines the disparity in charges between prepayment customers and those consumers paying by Direct Debit. However, energy suppliers are able to offer preferential tariffs to certain categories of customer (frequently older households) provided that the tariff is justified on economic grounds. Most energy suppliers offer some form of social tariff directed at 'vulnerable' customers.

2.5 Government intervention

Prior to formal Government recognition of the problem of fuel poverty as a distinct social problem there was awareness of the need to address individual symptoms. Over the years a number of Government initiatives has been developed to alleviate some of these causes and symptoms:

- Assistance to improve the fabric of the dwelling through thermal insulation and heating improvements – grant programmes ranging from the Homes Insulation Scheme in 1978 to the imminent revisions to Warm Front in England (UK Government 2005b)
- Assistance with the cost of domestic heating through discounts and subsidies – from exercises in tariff-tilting to Heating Additions, Cold Weather Payments and Winter Fuel Payments.
- Recognition of the 'merit good' status of energy supply and the Government role as mediator on the part of disadvantaged consumers in terms of debt and disconnection protocols and imposition of social obligations on energy suppliers.
- Establishment of successive agencies with the remit to protect the interests of energy consumers

2.6 Government policy and legislation

Since 1995 a number of pieces of legislation have addressed fuel poverty and domestic energy efficiency. The most relevant of these have been the Home Energy Conservation Act 1995 and its 1996 amendment; the Warm Homes and Energy Conservation Act 2000; the Utilities Act 2000; the Housing Act 2004; and the Energy

Act 2004. Scrutiny of the effectiveness of these Acts is a key factor in evaluating fuel poverty programmes and policies.

The Energy White Paper, the Energy Efficiency Action Plan and the Fuel Poverty Action Plan are key to Government commitments on domestic energy efficiency and fuel poverty eradication.

2.7 Public Service Agreements

Departmental Public Service Agreements (PSAs) relevant to fuel poverty are also crucial and, whilst lacking the force of legislation, it is important that what are in effect contracts with the people are monitored and scrutinised. The most relevant Government Departments are:

- The Office of the Deputy Prime Minister
- The Department of Health
- The Department for Environment, Food and Rural Affairs
- The Department of Trade and Industry
- The Department for Work and Pensions

Detailed consideration of fuel poverty issues can be structured under responsibilities associated within these departments.

2.7.1 Housing - The Office of the Deputy Prime Minister

Housing standards are crucial to affordable warmth and, whilst Government may act to mitigate the worst effects of any energy price increases through the annual increment in welfare benefits, the most sustainable approach to fuel poverty eradication is through energy efficiency measures. Survey evidence does suggest a steady improvement in the energy efficiency of the housing stock but from such a low starting point that much of the nation's housing cannot cost-effectively be raised to acceptable energy efficiency standards.

There is scope to look at evidence linking fuel poverty to inadequate standards within the housing stock. Data on heating and insulation standards and energy efficiency ratings are readily available through datasets relating to English House Condition Surveys and other relevant ODPM publications. Progress on compliance with The Decent Homes Standard could form a main focus of study to assess achievement of targets (across all tenures) and to determine the adequacy (or otherwise) of the standard to alleviate fuel poverty. ODPM is overseeing the introduction of the Housing Health and Safety Rating (HHSRS) as a replacement for the Housing Fitness Standard. The new system, if properly policed and implemented, may have a major role in tackling the more extreme cases of fuel poverty. The hazard posed by cold homes is recognised in HHSRS guidance as the most widespread threat to household health and safety and enforcement will be the key issue.

On a wider issue, recent research suggests that only 16% of the housing stock complies with the standard at which properties would effectively be 'fuel poverty-proofed' (Hansard 2005). Some of the current stock will never achieve a SAP 65, raising the question of how and when such dwellings are demolished and rebuilt. The concept of fuel poverty-proofing the housing stock has been implemented successfully in at least one English local authority (Newark and Sherwood) and this approach may represent the most rational approach to fuel poverty in the longer term.

2.7.2 Cold Conditions - The Department of Health

Health issues related to fuel poverty range from the rather nebulous concept of 'well being' to more substantial matters of morbidity and mortality. There is a growing body of evidence linking cold homes to physical and psychological ill health yet findings are sometimes contradictory. Research into health and fuel poverty has dominated the agenda in recent years and, since cold-related illness and mortality are the most obvious malign consequences of fuel poverty, this is likely to continue. In this area it is essential that research is rigorous, objective and authoritative.

The issue of excess winter death rates is both disturbing and contentious. Contrary to expectations, some research has found weak correlation between winter mortality and material deprivation (eg Aylin 2001), with the constant factor being cold homes rather than socio-economic status (whilst the two are not synonymous, there is a high correlation between socio-economic status and deprivation), although these findings are disputed elsewhere. Even this relationship is discounted in some studies where behavioural factors (aspects of lifestyle) are considered crucial. Standard Government responses to this issue acknowledge that cold homes are a factor and tend to reiterate that excess winter death is a complex and imperfectly understood subject.

Excess winter death rates in the British Isles are invariably contrasted with seasonal mortality in comparably affluent countries but with more severe winters and this is the most sensitive element of the fuel poverty debate – the implication that heartless and ineffectual Government policies are costing the lives of pensioners. This is, in fact an area where serious research is required and more is needed than fairly simplistic presentation of seasonal mortality. Research is needed into all of the relevant factors: individual behaviour; housing standards; household income of disadvantaged households; internal temperature data; and affordability of fuel.

The relationship of cold damp homes with mental illness and physical morbidity requires much greater study, although a considerable amount of work has already been done in this area. The asthma epidemic is often cited as a consequence of the failure of one or more of the preconditions needed for healthy housing: heating, insulation and ventilation. Respiratory illness, heart conditions and psychological stress are candidates for further study.

Since the Age Concern update (Salvage 1993) of Malcolm Wicks' hypothermia study (Wicks 1972) there has been no national study of the winter living conditions of

pensioners. Now that affordable warmth is a Government policy keystone it may be appropriate for a further such study to be undertaken.

2.7.3 Fuel poverty – the Department for Environment, Food and Rural Affairs

It is a historical accident that the Department for Environment, Food and Rural Affairs (Defra) has been charged with lead responsibility (jointly with the Department for Trade and Industry) for fuel poverty policy. Defra has no significant role in housing policy, nor does the department exercise any control over energy prices, utility regulation or household income. Defra's responsibility largely resides in departmental oversight of the Warm Front programme and involvement in development of Energy Efficiency Commitment (EEC) schemes and parameters. Research related to Defra responsibilities will inevitably focus on actual achievements of energy efficiency programmes in reducing fuel poverty. However, progress towards fuel poverty eradication under Warm Front and EEC schemes appears to have been taken for granted in the past, with minimal assessment or even complete lack of monitoring. With a stronger focus on fuel poverty and integration of programmes being seen as the way forward, this will change. It seems inevitable that future programmes will have the specific remit to eliminate fuel poverty in individual households, communities or even towns or cities.

Given Defra's energy efficiency remit, the Department will be the lead body across all assessment of heating and insulation measures applied to housing. Research into Defra-related issues will need to focus on the effectiveness of combinations of measures in achieving affordable warmth in hard to heat properties and communities and, in particular, on alternative and renewable means of delivering household energy: micro-CHP, solar and wind power. Further research will also be needed into less conventional insulation measures as external and internal insulation become more frequently employed in pursuit of the Government's policy to eliminate fuel poverty where reasonably practicable. The SAP 65 target for properties assisted under Warm Front will also promote use of more imaginative combinations of heating systems and insulation materials and the effects of these new developments will also need to be monitored and evaluated.

Warm Front is the Government's main programme for tackling fuel poverty in England, and considerable funds are paid through the budget for the scheme. Despite the fact that the scheme is funded through public money there has been limited external access to data from the scheme managers although information has been made available for research funded through the Eaga Partnership Charitable Trust and to statutory bodies such as the House of Commons Public Accounts Committee and the National Audit Office. Defra does not require scheme managers to put detailed information into the public domain.

The next phase of Warm Front will revert to a single Managing Agent, Eaga Partnership Limited. In the previous phase of the programme, Powergen Warm Front

had managed work in eastern England - one of the four geographical areas used for scheme administration purposes.

Revisions to Warm Front from June 2005 have the potential to make the scheme more effective as a fuel poverty programme and independent research will be needed to monitor and quantify the achievements of the programme in reducing fuel poverty.

2.7.4 Energy prices and regulation – the Department of Trade and Industry

The Department for Trade and Industry takes the lead role in consumer protection generally and, through sponsorship of energywatch and the Office of Gas and Electricity Markets (Ofgem), is heavily involved in energy regulation. In reality, as has been seen in recent price hikes for both gas and electricity, the DTI has no real authority or power to modify market forces and is limited to a mixture of exhortation and formal regulation through Licence Conditions to mitigate the worst excesses of the free market and ensure that disadvantaged domestic energy consumers are not marginalised and have their needs and circumstances taken into account in company practices.

Some companies have been both innovative and imaginative in responding to their 'social obligations' and have introduced social tariffs and benefits health checks as well as maintaining a Priority Service Register for their most vulnerable households. However little work has been done on the effectiveness of company schemes, the numbers of customers involved and the resulting benefits for them.

Energy suppliers provide immense amounts of data to Ofgem for the purpose of Social Action Plan compliance monitoring but little use appears to be made of this information to date. For example, several of the issues on which companies report reveal surprising disparities in their apparent practice e.g debt recovery rates, levels of disconnection from supply, access to the full range of payment methods.

The main area in need of investigation is how companies deal with tensions between their main objective, which is to maximise profit, and any limitations imposed on this objective by the need to accommodate social welfare considerations. This is one area where qualitative research is essential to understanding how procedures actually work – the individual experience of households as they, for example, negotiate over debt repayment rates or have applications to pay via Fuel Direct rejected.

2.7.5 Heating subsidies and other financial assistance – the Department for Work and Pensions

The Warm Homes and Energy Conservation Act emphasises energy efficiency improvements as a means to address fuel poverty whilst implying that other additional measures will be required. The Department for Environment, Transport and Local Government (the predecessor of the Office of the Deputy Prime Minister in respect of housing) acknowledged that the Thermal Comfort criteria of the Decent Homes Standard would not remove all social sector households from fuel poverty. The clear

implication of this acknowledgement is that some form of financial support will be necessary to maximise the number of households removed from fuel poverty. The DTLR (Department for Transport, Local Government and the Regions) consultation on the Decent Homes Standard did not discuss this issue but suggested that social tariffs might make up any energy efficiency shortfall. However, it would be inadvisable to depend upon hypothetical voluntary initiatives developed by commercial agencies for the success of the Fuel Poverty Strategy.

Prior to the reform of Supplementary Benefit in 1988 the social security system paid a range of Heating Additions to claimants based on the age and health conditions of the occupants and the heating and insulation characteristics of the dwelling. When Income Support replaced Supplementary Benefit these Heating Additions were withdrawn with the intention of consolidating the value of additional requirements subsidies into the scale rates for the new benefit. Clearly this decision caused the loss of any direct link between housing conditions and benefit payments to compensate for high energy costs.

The Heating Additions element of Supplementary Benefit acted as a primitive energy audit and made some basic link between heating requirements and resources available to meet these. The Family Budget Unit at York University produces regular analyses of what is required for 'Low Cost but Acceptable' and 'Modest but Adequate' household budgets; however, again, their assumptions are too generalised to serve any useful purpose in determining the necessary resources for affordable warmth. Researchers of fuel poverty issues have also lost a useful resource in the shape of the Fuel Expenditure Survey, which was an ad-hoc detailed analysis of domestic energy spending data from the Family Expenditure Survey commissioned by the Gas Consumers Council until the mid-1990s.

Successive Governments have determined welfare benefit rates without any assumptions as to how money is spent and, consequently, there is no identifiable element within payments for fuel expenditure. This ignores the need to distinguish between elements of expenditure that are broadly equivalent across similar households (food and clothing) and those variable costs where factors such as location, climate, heating system, fuel type and thermal insulation introduce significant variation in needed spend.

It would be wise for the Government to consider how the social security system can be adapted to at least reflect some of the actual disparity in needed spend in different household circumstances. Given the inevitable failure of the energy efficiency approach to completely eradicate fuel poverty, for instance where a SAP65 cannot be achieved, a top priority would be to commission work on how energy subsidies and discounts can best contribute to affordable warmth.

2.8 Summary

Academic research, with the hallmarks of quality, impartiality and rigour, has a central role to play in the achievement of the Government targets. Whilst there is much valuable work that has been done to date, current research tends to be fragmented and narrowly focused, exacerbated to a certain extent by the split of responsibilities across various Government departments. Objective research to evaluate existing programmes and policies, assessing progress towards the official targets, is necessary. There are a number of areas which would benefit from further research and discussion, with some key issues requiring clarification and consistency, such as how fuel poverty is defined. These opportunities are built upon in Chapter 4, which identifies a possible remit for a Fuel Poverty Research Centre, following on from a summary of the scoping study survey results provided in the next chapter.

3 Fuel Poverty Research Centre survey

3.1 Background

An on-line survey of key stakeholders was conducted in April/May 2005 to investigate opinions on the need for and role of a Fuel Poverty Research Centre. Over 235 people were invited to submit a response. These represented a wide range of individuals and organisations with a history in the field of fuel poverty, spread across England, Scotland, Wales, Northern Ireland and EIRE. Organisations contacted included academic institutions, charities, campaigning groups, Government departments (both national and local), health bodies, think tanks, consultancies, energy supply companies and national advisory groups. This chapter summarises the key findings of the survey. A copy of the questionnaire and data tables are included in Appendix II and a list of survey respondents in Appendix III.

3.2 Respondent information

A total of 68 responses were received, four of which were partially completed.

The majority of respondents, 89%, described themselves as 'expert' or 'well-informed' in the field of fuel poverty, with 71% having been involved with fuel poverty for over five years.

Only 11% of respondents were involved with fuel poverty in a voluntary capacity. Of those undertaking paid work, over a third spent more than 50% of their time on fuel poverty issues.

Respondents came from a wide spread of organisations, with just under a quarter working for an academic institution. The most common occupation was research (40%) – over half of which were academics – with another 19% represented by practitioners. Civil servants and energy suppliers each constituted 9% of the sample, with campaigners at 6%. The primary area of research/interest with regard to fuel poverty was energy efficiency (40%). However, the multi-disciplinarity of fuel poverty is evidenced by the fact that respondent's research/interest covered an average of four key areas.

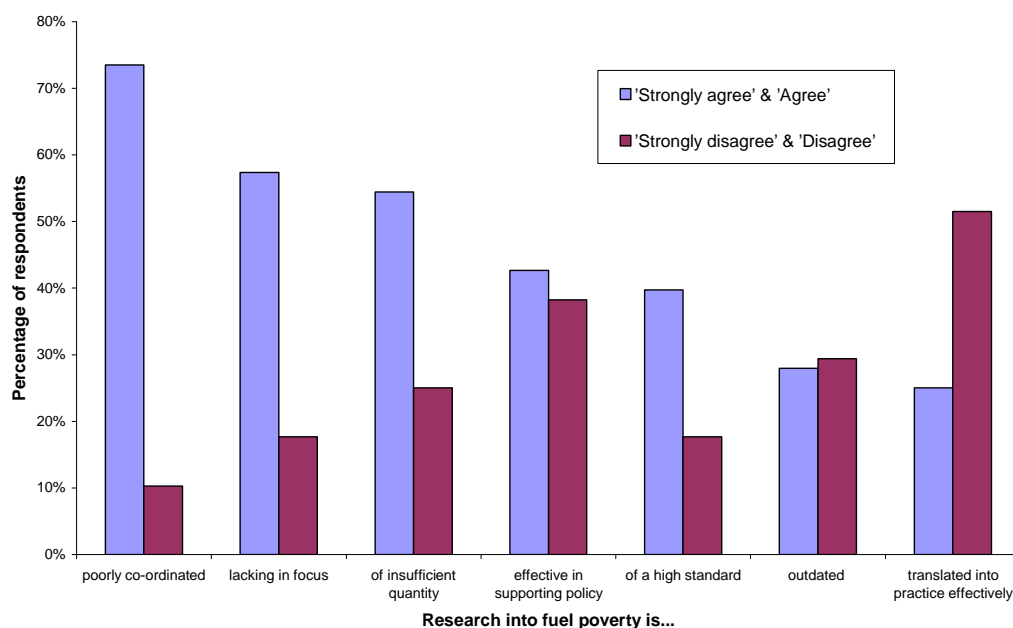
3.3 Current state of fuel poverty research

There was a strong feeling that fuel poverty research is currently poorly co-ordinated, lacking in focus and is of insufficient quality (Figure 1). Whilst 39% of respondents considered the research to be of a high standard, the majority (51%) felt that it was not translated into practice effectively. Opinion was fairly equally divided as to whether current research is up-to-date and effective in supporting policy. The highest proportion of 'neutral' responses were associated with research being outdated and of a high standard (both 43%).

'Presently research on fuel poverty is of variable quality and not disseminated in a way in which it can be easily accessed and understood' – survey respondent

Civil servants appeared to differ most noticeably in their responses compared to other groups (campaigner, practitioner, researcher, energy supplier). The majority of civil servants did not agree that research was poorly co-ordinated or lacking in focus, whereas there was commonly agreement with these statements amongst the other groups. Conversely, most of the civil servants agreed that current research is translated into practice effectively and is effective in supporting policy, whereas the majority within the other groups disagreed with these statements (with the exception of researchers, the majority of whom also agreed that research is effective in supporting policy).

'[There are] gaps between theory and practice. Fuel poverty is very real and research undertaken needs to respond to this' – Joanne Patterson, Cardiff University



Note: 68 respondents

Figure 1 Views on the current state of fuel poverty research

The vast majority of respondents (87%) felt that there were important gaps in existing fuel poverty research.

'It is not always easy to see the overall picture and to determine the current state of research and subsequently to accurately assess where the gaps lie' –

Nick Eyre, EST

Views were that these gaps covered a wide range of topics, but there were some common underlying themes:

- Definitions – improvement and standardisation
- Lack of co-ordination and the need for a central resource/one-stop shop
- Identifying, understanding and targeting hard to treat and hard to reach homes
- Behavioural and social dimensions
- Improving links with other research areas eg basic skills, health, general poverty, financing

*'The centre could act as a national focus for the links between fuel poverty and poor health...[to] help galvanise much needed resources from the health sector into supporting the task of eliminating fuel poverty' –
Bob Cherryman, Head of EST Wales*

Therefore there is a clear message that more research is needed and that this needs to be better co-ordinated and of higher quality, with an emphasis on translating the research into both policy and practice.

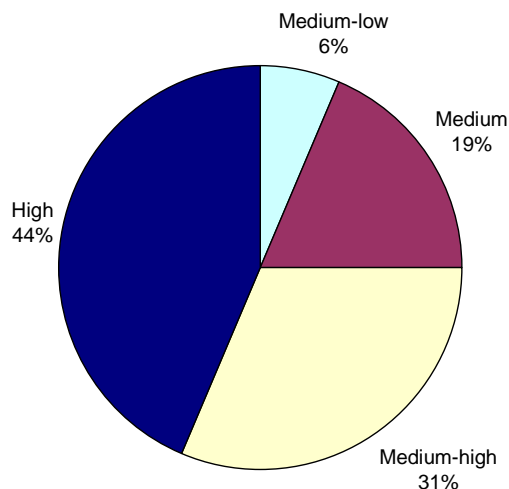
*'Progress has been made in defining fuel poverty [over the last 20 years] but as far as I am aware most of the key questions remain to be answered' –
Professor Jonathan Bradshaw, University of York*

3.4 Support for a Centre

There was strong support for establishing a Fuel Poverty Research Centre amongst 75% of respondents, with 19% indicating medium support (Figure 2).

'...the centre could be extremely important and influential in helping the UK to reach its target of eradicating fuel poverty' – survey respondent

Amongst the four participants who indicated medium-low support for a Centre, one of the main reasons for concern was that the Centre may detract from the funds and roles of existing institutions and may not represent value for money.



Note: 64 respondents

Figure 2 Level of support for establishing a Research Centre

In the group indicating high support, civil servants and energy suppliers were under-represented compared with the profile of the total sample, whereas campaigners and practitioners were over-represented. The majority of civil servants and energy suppliers expressed medium-high support, compared to the majority in the other occupation groups (campaigners, practitioners, researchers and other) who expressed high support.

'If resources were pooled in a one stop shop...it would enable more effective targeting of resources for tackling fuel poverty. There is excellent practice out there but not effectively shared' –

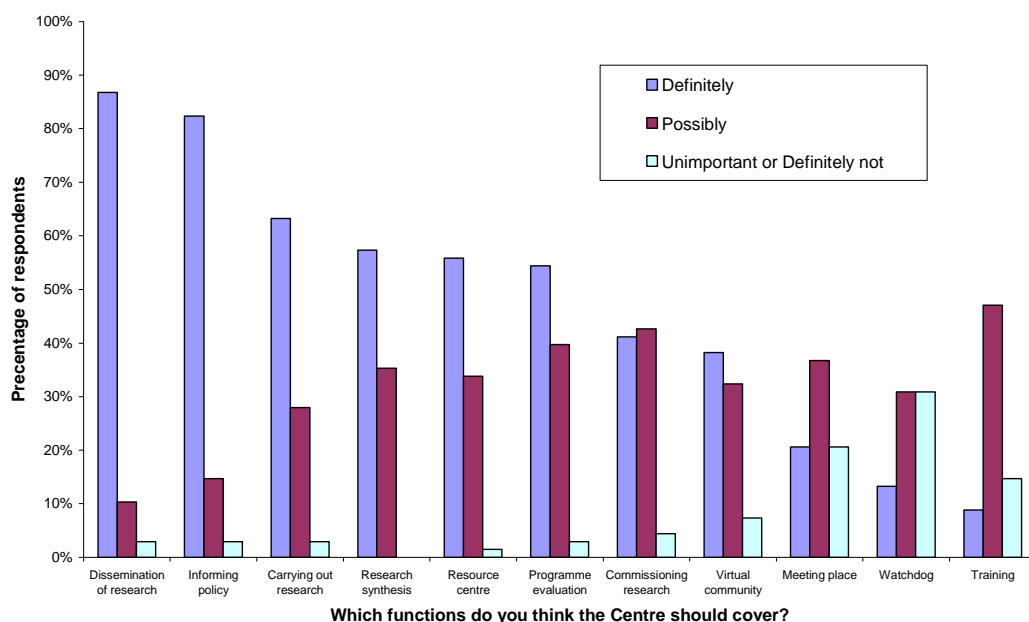
Jo Stevenson, Northern Ireland General Consumer Council

3.5 Functions of a Centre

In terms of the types of function the Centre should cover, there was a clear indication amongst the responses. Dissemination of research and informing policy emerged as the two key functions, with over 80% of participants stating that these should definitely be covered (Figure 3) and 34% of respondents identifying informing policy as the most important function overall (Figure 4).

'[The] fuel poverty agenda is marginal to Government action and solidly based research and advocacy is needed to assist change' –

Pat Conaty, New Economics Foundation



Note: 68 respondents

Figure 3 Views on the possible functions of a Research Centre

Some respondents expressed the view that it was important to ensure research was not ‘straight-jacketed’ by the political agenda.

‘...there is almost too close an association between policy and research in this area at the moment’ – Tom Sefton, London School of Economics.

Within most of the occupation groups, the majority gave informing policy as the most important function. However, amongst the campaigners, the majority viewed the most important function as being a resource centre, whereas most civil servants considered either a resource centre or carrying out research to be vital.

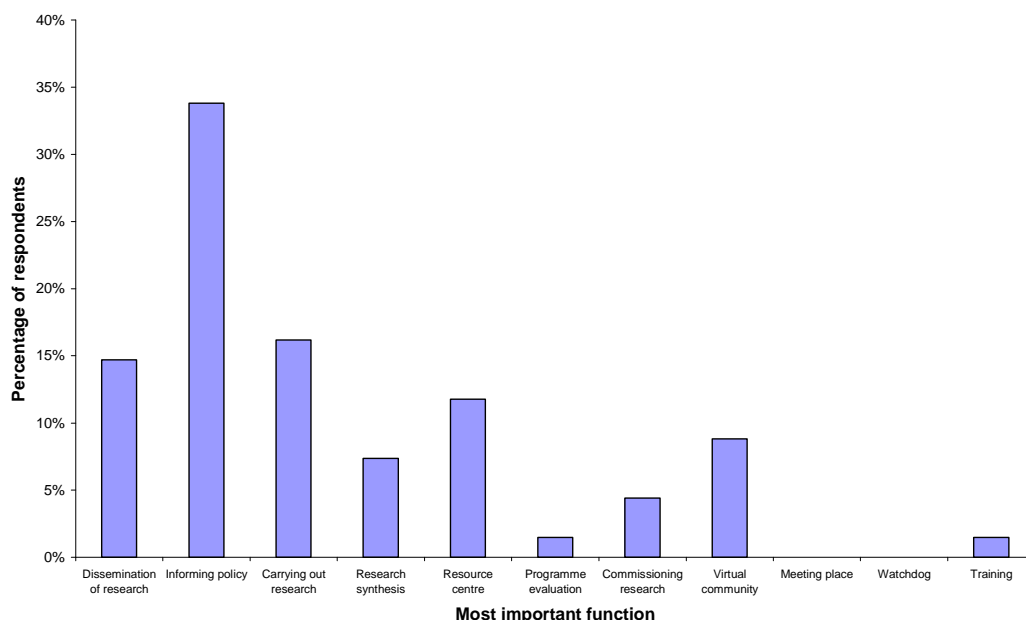
‘...the centre could potentially be a resource for government (UK, devolved and local) that would not only provide...a valuable resource, undertake research etc. but could independently monitor Fuel Poverty Strategy progress’ – Jean Morrison, SCARF

Conducting and synthesising research both received strong support, although split between ‘definitely’ and ‘possibly’, closely followed by resource centre and programme evaluation. Only 38% of respondents felt that a virtual community was essential.

‘A virtual community would be less likely to have an England focus’ – Majella McCloskey, formerly National Energy Action, Northern Ireland

The functions of watchdog and meeting place were the least popular (Figure 4), receiving the highest proportion of ‘unimportant’ and ‘definitely not’ responses (Figure 3). Training was also a low priority.

‘...the main role for the Centre would be to inject academic rigour into fuel poverty research’ – William Baker, Centre for Sustainable Energy



Note: 68 respondents

Figure 4 *Most important function of a Research Centre*

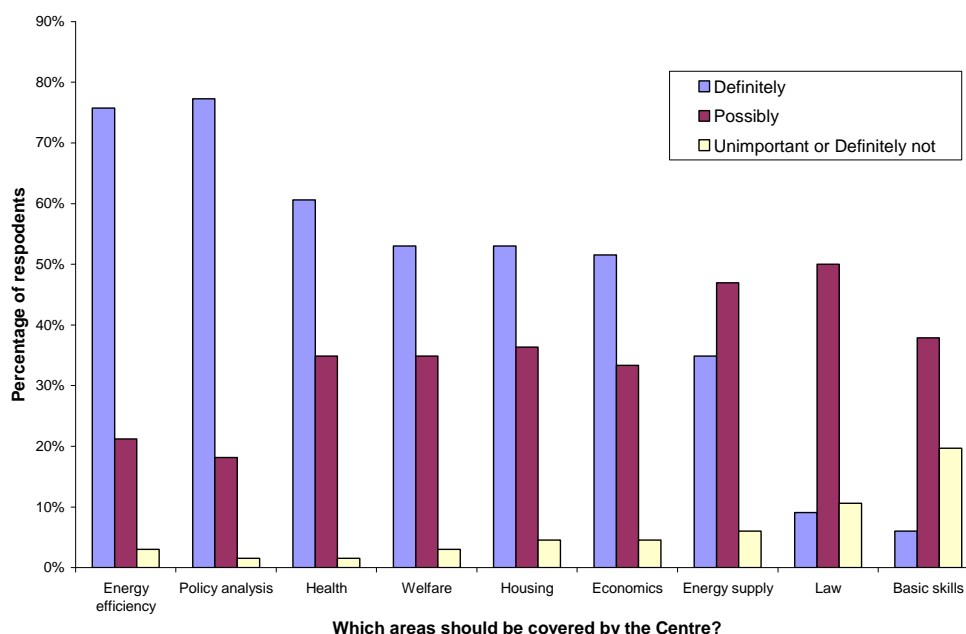
A significant relationship was identified between support for the functions ‘research synthesis’ and ‘informing policy’ with support for establishing a Centre ($H(3)=10.78$ and $H(3)=12.79$, $p<.05$). Jonckheere’s test revealed a significant trend in the data: strong support for these two functions was associated with strong support for establishing a Centre.

‘It is important that the Centre remains open to the participation of a large academic and policy community and is flexible enough to change with a changing research and policy agenda’ – Harriet Bulkeley, University of Durham

3.6 Areas covered by a Centre

Energy efficiency and policy analysis were the two areas that received the greatest level of support in terms of what the Centre should cover (Figure 5).

‘[There is a] need to ensure that fuel poverty issues are not diluted into just expensive energy efficiency campaigns’ – Dave Murphy, Citizens Advice Bureau, Northern Ireland



Note: 66 respondents

Figure 5 Views on the possible areas to be covered by a Research Centre

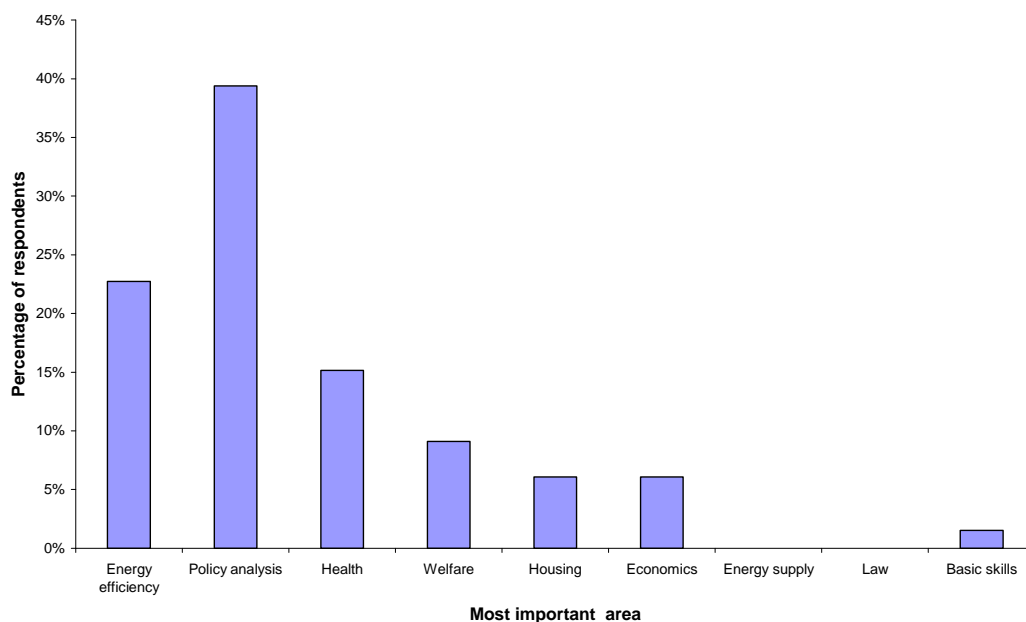
Health, welfare, housing and economics were fairly similar in popularity, with law and basic skills being the least favoured options. The latter two also received the highest proportion of ‘neutral’ responses at 30% and 36% respectively.

*‘[We] need...a bridge between preoccupations with energy efficiency and welfare’ –
Professor Adrian Harvey, University of Liverpool*

Views of the different occupation groups were similar across all the areas apart from basic skills, where the majority of energy suppliers were strongly against this issue being covered by the Centre whereas the majority in the other groups were either neutral or considered it a possibility.

When asked to select the one most important area out of all the options, policy analysis emerged as the most popular, chosen by 39% of respondents (Figure 6). The pattern of support was similar to that in the previous Figure, although energy supply and law did not feature at all.

*‘There is a lack of evidence on effective interventions to inform growing interest in addressing fuel poverty’ –
Anita Counsell, Adur, Arun and Worthing Teaching Primary Health Care Trust*



Note: 66 respondents

Figure 6 Most important area to be covered by a Research Centre

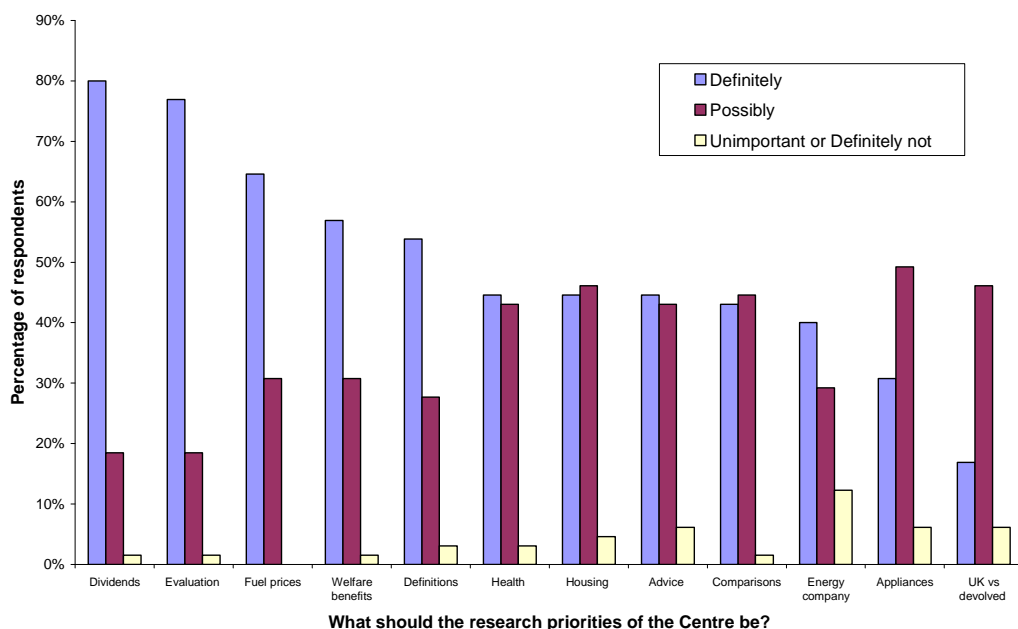
3.7 Research priorities

There were also two clear leaders in terms of the research priorities of a Centre: ‘the social, economic & environmental dividends of fuel poverty programmes’ and ‘evaluation of existing policy and programmes: effectiveness and how to improve’ (Figure 7).

‘It is very difficult to get funding to provide evidence that efforts to reduce fuel poverty are having a real impact’ – Joanne Patterson, Cardiff University

Table 2 Key to Figures 7 and 8

Dividends	The social, environmental & economic dividends of fuel poverty programmes	Definitions	Standardising & revising definitions	Comparisons	National & international comparisons of policy & practice
Evaluation	Evaluation of existing policy & programmes: effectiveness & how to improve	Health	Physical & psychological health issues	Energy company	Monitoring of energy supply company provisions for vulnerable customers
Fuel prices	The impact of fuel prices	Housing	Housing policy & practice	Appliances	Energy-using equipment in the home
Welfare benefits	The role of the welfare benefits system	Advice	The role of energy advice & education	UK vs devolved	Responsibilities of UK versus devolved administrations



Note: 65 respondents

Figure 7 Research priorities for a Centre

Opinion was most divided over whether the monitoring of energy supply company provisions for vulnerable customers should be covered by the Centre – this option received the most ‘unimportant’ (6%) or ‘definitely not’ (6%) responses whilst 40% of respondents felt that this issue should definitely be included. ‘Responsibilities of UK versus devolved administrations’ received the highest number of ‘neutral’ responses (31%).

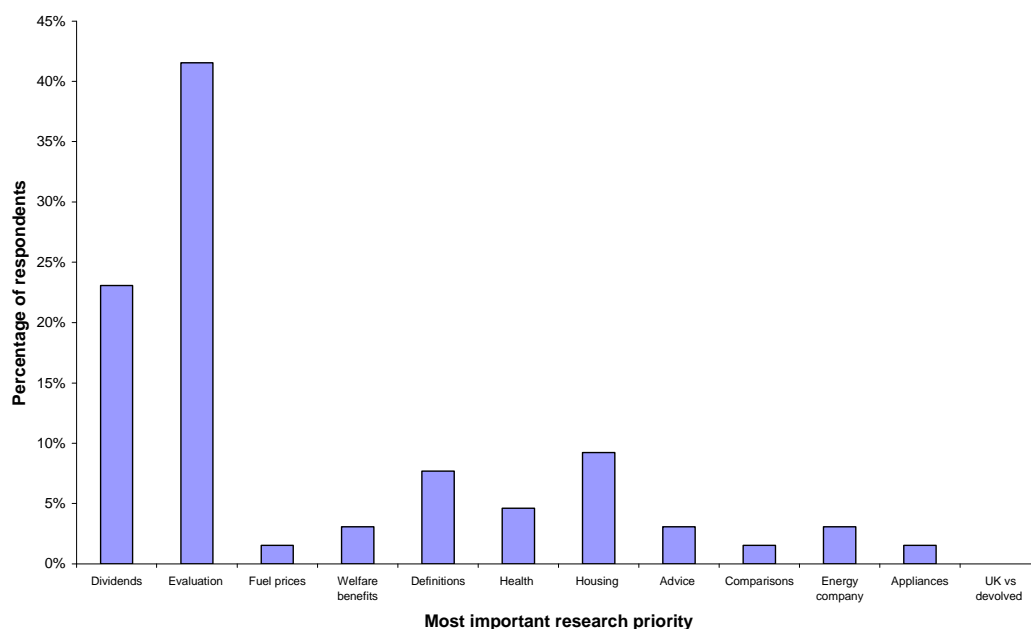
There was general agreement amongst the occupation groups on all research priorities apart from the monitoring of energy supply company provisions. In this case, the majority of energy suppliers were of the view that this should definitely not be a research priority, whereas the majority in the other groups felt that it definitely should.

*‘We need authoritative and independent research in this area to influence policy and practice and help maximise the benefits from public investment’ –
Oliver Myers, Camden Council*

Evaluation of existing policy and programmes emerged as the most important research priority out of all those given, supported by 42% of respondents (Figure 8). This appears to be contradictory to responses in the earlier question regarding the functions of the centre in which only one respondent gave ‘programme evaluation’ as the most important function. This is best explained by the fact that the emphasis in each question is different (and with different options to choose between) – identifying evaluation as a function in one and a research priority in the other. The most important function was identified as ‘informing policy’, which would, of course, be supported by evaluation of existing policy and programmes as a research priority. Therefore, the

responses appear to indicate that the main function of the Centre should not be programme evaluation, but that this is still an important priority for research.

'We need independent evaluation of policies and programmes based on sound data' – Philip Kear, npower



Note: 65 respondents

Figure 8 Most important research priority for a centre

In terms of the distribution of responses within 'programme evaluation' and 'evaluation of existing policies and programmes', the only significant difference was amongst researchers, with a significantly higher proportion supporting 'evaluation of existing policies and programmes' ($z=-2.18, p<.05$).

3.8 Use of a Centre

Participants were asked how they would like to use a Centre. The majority of responses focused on a resource centre covering a range of issues: information, best practice, academic research papers & findings, data, contacts/networks, evidence, guidance and expertise.

'[I would like to use the Centre] as a resource centre offering genuine additionality' – Kevin O'Rourke, Sustainable Energy Ireland

Access to information and resources through a website was mentioned in several responses. There was also an emphasis on independence and impartiality of information and data.

Respondents felt that the Centre could help inform their individual research and work, as well as wider policy and practice. The need for cross-country/UK focus was also mentioned.

'[I would like to use the Centre] to inform and thereby improve the delivery of schemes aimed at the fuel poor' –

Peter Daley, Eaga Partnership Limited

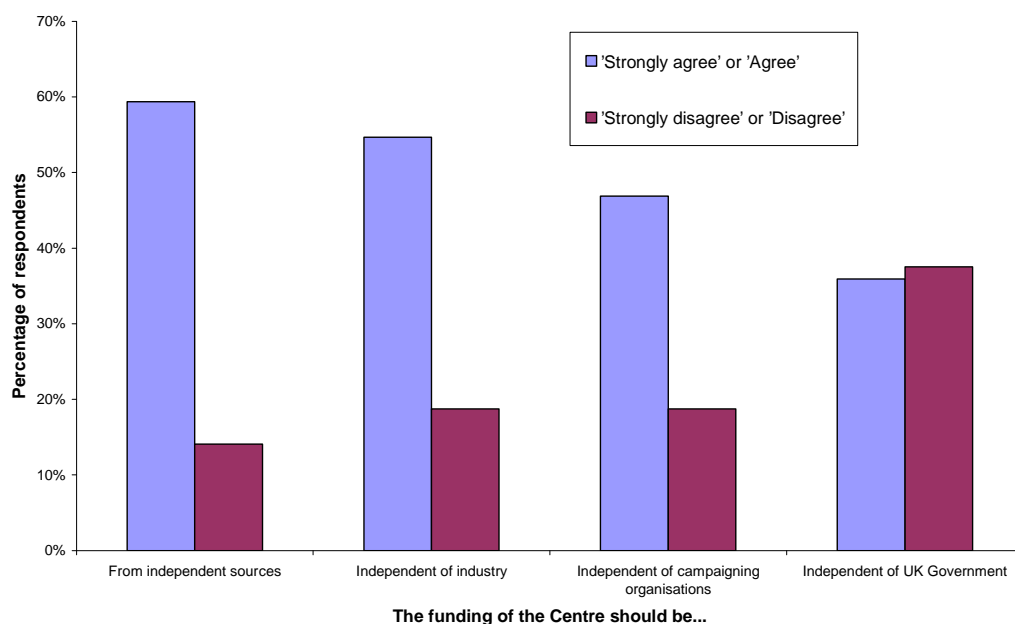
A number of people expressed strong interest in working with or contributing to the Centre in some way. The use of a Centre as a potential location for research funding and commissioning future research was proposed by several participants.

'[I would like to use the Centre] both for funding research and for disseminating and collaborating with others' –

Jacky Pett, Association for the Conservation of Energy

3.9 Funding of a Centre

There was strong support for the funding of a Centre to be from independent sources (such as charitable foundations and the Research Councils), with the majority of participants (55%) also of the view that funding should be independent of industry (Figure 9).



Note: 64 respondents

Figure 9 Funding sources for a centre

A relatively high proportion of respondents (14% 'strongly agree' & 33% 'agree') also felt that the funding should be independent of campaigning organisations. Opinion was equally divided over the issue of funding from Government sources. Around a third of

respondents had no strong opinion ('neither agree nor disagree') on the origin of funding for the Centre.

'[The Centre] should not be huge: it should work with, not displace, existing capabilities...[and] should have independence and rigour as hallmarks' –

John Chesshire, Fuel Poverty Advisory Group Vice-Chairman and Trustee of the Eaga Partnership Charitable Trust

3.10 Summary

It is clear from responses to the survey that there is strong support for establishing a Fuel Poverty Research Centre. Many people see a clear need for an initiative of this kind, particularly in relation to improving co-ordination of work on fuel poverty and providing a comprehensive resource centre.

The general feeling is that there is much useful work being done in the area of fuel poverty but better links need to be made between the various projects, disciplines and programmes as well as improved links to policy – especially in terms of evaluation. Respondents identify a wide range of important gaps in current fuel policy research, many of which could be addressed through a more focused and inclusive approach to the area.

A number of strong themes emerged from the comments provided by respondents including the need for a multi-disciplinary approach, independence, authority, impartiality, academic rigour and best practice. There was also a strong emphasis on the importance of building on and working with existing capabilities to avoid 're-inventing the wheel' and 'treading on toes', as well as ensuring the most cost-effective and useful outcomes.

Policy featured heavily in options for the role and research priorities of the Centre, mainly in terms of analysing and evaluating existing policy in order to be able to better inform future policy. Whilst the links with policy are crucial, it is also important that the Centre maintains its independence and freedom from political influence as far as possible.

In terms of how people would like to use the Centre, the main requirement was a resource centre or 'one-stop shop', most likely through a website. There was also support for the Centre to commission research and distribute funds.

Some respondents did express reservations about the need for a Centre and how it might fit in with existing institutions, but these could be addressed through an open and transparent approach to designing the Centre, with involvement of all the key players. The findings from this survey represent an important part of this process, demonstrating the need for a Fuel Poverty Research Centre and providing much valuable information to take forward to the next stage in establishing a Centre.

4 Fuel poverty research opportunities

Research into fuel poverty can be thought of in terms of causes, symptoms, impacts and solutions. Much work has already been done in understanding the causes of fuel poverty and substantial research has also been carried out on the various symptoms and impacts. These areas would benefit from further work, provided it is useful in terms of identifying and improving possible solutions to fuel poverty and not just as an academic exercise. Research and data on the underlying symptoms and causes is crucial in terms of defining and identifying fuel poverty as well as the targeting of policy and programmes. Links to other relevant areas which could contribute to the debate have not yet been fully exploited. However, within the present context of eradicating fuel poverty, the most important area for additional research is with regard to solutions, particularly in relation to the causes (rather than symptoms) of fuel poverty. This would involve both evaluation of existing policies and programmes, improving understanding of what works and what doesn't and why, as well as the identification and assessment of potential future solutions. There is also scope for using a wider range of methodologies, such as more qualitative research, to address some of the issues in the fuel poverty field.

Whilst the need for additional research does not automatically mean this is best achieved through a Research Centre, the wide range of issues reflected here demonstrate the importance of a coherent strategy and effective co-ordination of any research that is carried out. Without appropriate networks and co-ordination, there is a high risk of duplication and therefore ineffective spending of funds. There is an opportunity for building strong interconnections between a number of disciplines to identify comprehensive solutions.

This section builds upon the research themes highlighted in the preceding discussion and those identified through the Fuel Poverty Research Centre workshop and survey. The aim is to illustrate that there are substantial opportunities for further research and that this work is necessary for the effective eradication of fuel poverty. A strong message arising from both the workshop and survey was the importance of quality research, guaranteed through some type of peer-review process.

Research ideas have been grouped into the main themes of causes, symptoms, impacts and solutions, as well as definitions, targeting and evaluation. It is suggested that the balance of work between these areas is strongly weighted towards solutions, including targeting and evaluation, in a ratio of approximately 2:1 relative to the other areas.

4.1 Causes

The strength of the links between fuel poverty and the features producing it needs further exploration to help inform the design and targeting of effective solutions. In particular:

- Research to distinguish those who are in fuel poverty as the result of the poor quality and energy (in)efficiency of the building and those who are in fuel poverty because of low income, but live in an otherwise adequate property (ie under-occupied)
- The links between fuel poverty, income and capital and how poverty in general (eg child poverty) is key in the production of fuel poverty
- Investigation of the psychosocial and behavioural dimensions to provide an improved understanding of the mindsets and attitudes of the fuel poor eg What are the attitudes to heating and ventilation amongst the elderly?
- Qualitative research on experiences of living in fuel poverty
- Connections with financial exclusion agenda
- The links with basic skills gaps and access deprivation
- The relationship with general poverty, specific groups in poverty (children, lone parents, pre-payment meters consumers etc) and other forms of utility poverty
- Rigorous independent work on the impact of rising fuel prices

4.2 Symptoms

Key symptoms of fuel poverty relate to cold homes, excess winter deaths, health issues and debt and disconnection. Better understanding of the relationship between these symptoms and fuel poverty will be of benefit, particularly in relation to:

- Excess winter mortality
- Hospital admissions and incidence of cold-related illness
- The actual conditions in the home, eg temperatures, levels of debt, and, in particular, the winter living conditions of pensioners

4.3 Impacts

The impacts of fuel poverty are wide-ranging and varied, with social, economic, health and environmental dimensions. An appreciation of these impacts is useful in monitoring progress towards the eradication of fuel poverty as well as establishing links to other relevant areas which could open up possible solutions and further funding opportunities within a 'whole systems' approach. Some examples of research opportunities are:

- Establishing causal links between fuel poverty and general health indicators: effect of fuel poverty/cold homes on health and wellbeing in general, including mental health
- Cost to NHS of health effects of extreme temperatures – both high and low – the economic costs of fuel poverty on the health system are poorly understood
- Health impact assessment of interventions to reduce incidence of fuel poverty, including quantitative evidence on the financial benefits eg of installation of energy efficiency measures as a medical intervention (for asthma, pulmonary and heart conditions, arthritis etc) and cost-benefit of reducing bed blocking

- Impact of fuel poverty on disabled children and on families where a member of the household is disabled
- Linking fuel poverty action to energy conservation and climate change agenda eg taking a proactive approach by protecting against extreme heat
- Extent to which people classified as fuel poor under the 10% definition actually suffer hardship and diminished health and quality of life

4.4 Data, definitions and identification

4.4.1 Data required

Reliable, good quality data are essential as a basis for sound research and to provide a baseline against which progress can be monitored. Current data sources in relation to fuel poverty are either outdated – there has been no national measurement of thermal comfort standards since 1996 EHCS – or poor (2001 EHCS). On-going collection of relevant, reliable data as part of the EHCS would be ideal. Possible areas for data collection include:

- Numbers and location of households in fuel poverty with a detailed baseline of information for selected small areas to develop indicators and help with targeting
- National survey of home temperatures and their relationship to fuel poverty
- Detailed data collection in order to establish a new model of fuel poverty

4.4.2 Definitions

As discussed in Section 2.3, the definition of fuel poverty is a contentious issue but one that is crucial in terms of identifying and accurately assessing the numbers affected and therefore monitoring progress towards eradication of the problem. Consistency across the devolved administrations is also important within the context of a UK strategy. In addition, the definition must also be of practical use to practitioners to ensure effective identification of the fuel poor for targeting and delivery of programmes.

Further research on the both the overall principles and details of the definition of fuel poverty is required to determine the 'correct' level of the fuel poverty threshold. This includes a more sophisticated assessment of income and expenditure need (equivalised income etc) and the appropriateness of including benefits allocated for specific other needs (e.g. disability) within the income definition.

4.4.3 Identification

Being able to identify those households that are in fuel poverty is crucial in terms of delivering programmes and monitoring progress. Strengthening of the evidence base and improved understanding of the causal links involved is needed through:

- Profiling the types and distribution (between tenures) of properties that are hard to treat and the costs of carrying out measures on these dwellings
- Setting minimum standards for measuring fuel poverty in local surveys
- Gathering evidence for fuel poverty in other European countries
- Linking fuel poverty to inadequate standards within the housing stock
- Research into non-vulnerable households in severe fuel poverty

4.5 Evaluation: effectiveness of existing policies and programmes

A range of policies and programmes aimed at addressing fuel poverty are already in place, but assessment and monitoring of these initiatives has been somewhat limited to date. It is important to be able to identify the gaps between theory and practice and evaluation is crucial in understanding what works in reality, what doesn't and why, as well as establishing if the limited funds are being spent wisely. Lessons learnt can then be taken forward to inform the design of future initiatives, helping to ensure greater effectiveness. Specific areas to focus on include:

- Statistically robust quantified studies of degree of improvement in affordable warmth resulting from programmes eg internal temperatures, changes in life style, health benefits – what is the actual effect on the lives of the fuel poor?
- Establishing whether the existing 'stock' of the fuel poor is actually being depleted by programmes given deteriorating housing stock, ageing etc
- The interaction between utilities and their customers, including the impact of liberalisation, qualitative research on how company procedures work, effectiveness of company schemes, eg social tariffs and benefits health checks, and benefits for customers using these schemes – are these programmes benefiting the fuel poor or having a detrimental effect?
- Assessing the environmental impact of more robust fuel poverty policies and practices and the future impact of climate change on housing treatments currently being advocated (ie need for cooling rather than warmth by 2020)
- Better understanding of the barriers to effective take-up of energy efficiency measures (eg free or discounted insulation and heating measures, free benefits advice) and quantitative analysis of the impact of different forms of advice
- Potential for effective rationalisation of fuel poverty/energy efficiency initiatives across the UK
- Impact on fuel poverty from other policy instruments eg EEC, Renewables Obligation, the new Housing, Health and Safety Rating system and relevant European legislation
- Longitudinal studies on the impact of house condition improvements on health

4.6 Targeting

If fuel poverty programmes are to be successful, there must be effective targeting of solutions, which is not being achieved at present: the Scottish House Condition Survey found that only a low percentage of recipients of Warm Deal and Central Heating

Programme were actually in fuel poverty (SHCS 2004). There are lessons to be learnt from existing programmes – where these have worked and where they have failed – helping to improve their effectiveness and inform the development of future schemes.

- Better understanding of where (geographically) greatest fuel poverty exists and of rural fuel poverty
- Establishing how effective various different approaches (eg area, health referral) are to targeting the fuel poor and identify a means of targeting fuel poor in a total solutions approach
- Identification of homes where demolition is most appropriate strategy
- Understanding the factors behind tackling ‘hard to treat’ and ‘hard to reach’ homes (eg physical state of housing stock, economic factors, policy, technological and social barriers – attitudes, behaviour, stigma, resistance to change) and how these interact

4.7 Future solutions

Research into potential solutions is vital in ensuring the most appropriate options are made available to fuel poor households and supported by relevant policies and programmes. Possibilities include research to:

- develop a coherent and co-ordinated approach across the devolved administrations, sharing best practice and developing economies of scale;
- identify and economically evaluate suitable technologies (eg renewables, shutters for cooling) for hard to treat homes and investigate the practicalities of installation/usability for fuel poor homes – will new technologies help or hinder eradication of fuel poverty?;
- establish the effectiveness of currently available solid wall insulation measures and research into new types;
- look at an increased focus on solutions based on heating regimes, hot water and appliance energy use for different household types;
- investigate the feasibility of fuel-poverty proofing the housing stock and the options for those households that cannot attain SAP 65 eg demolition or energy vouchers (so people can continue to live there); and to
- explore community based solutions to eradicate fuel poverty.

4.8 Summary

Feedback from researchers, practitioners, campaigners and policy-makers through the scoping study survey and workshop has highlighted the need for further research in the field of fuel poverty, building links with other disciplines. Through this consultation, a list of possible research questions has been developed. Whilst this list is not necessarily exhaustive, it could potentially form the basis of a Research Centre work programme, with the emphasis on causes and their solutions. Given the range of issues and disciplines involved, careful co-ordination is essential to avoid duplication and ensure maximum benefit.

5 Proposal for a Fuel Poverty Research Centre

This final chapter pulls together the findings of the scoping study, building on results from the workshop in particular, in order to develop an outline of what a Fuel Poverty Research Centre could look like.

In one of the exercises at the workshop, four breakout groups were formed and given the task of designing a Research Centre within a fixed timescale and budget. Two groups were given an annual budget of £100,000 and the other two, a budget of £250,000. Within these budgets, one group had a five year timescale and the other, ten years.

There was a strong consensus that options within the £100,000 budget were extremely limited and would restrict the Centre to a co-ordination and dissemination role, with little or no scope for conducting primary research. Even within the £250,000 budget, it was felt that opportunities for primary research would still be constrained.

Two options are considered here at different levels of funding. Based on the feedback from the workshop, the minimum budget is set at £230,000 per annum, with a second option at the higher level of £550,000. The key difference is the extent to which the Centre has its own research programme – therefore many of the features are common to both. As a first phase, a description of a Fuel Poverty Network – essentially a resource centre and network – is provided, since this would form the basis of a more extensive model. This includes a discussion of the structure, location, role, staffing and funding requirements of such a Network. This is followed by an outline of how the Network could be built upon to form a Fuel Poverty Research Centre, incorporating a primary research function, with two alternative funding arrangements.

5.1 Structure of a Network

Given the wide range and spread of institutions involved in the field of fuel poverty, a network approach would be most suitable. An effective knowledge network goes beyond the sharing of knowledge, strengthens the capacity for research and communications and engages decision-makers more directly (Creech 2001). Based on a review of existing ‘knowledge networks’, the following features have been identified as important for the Fuel Poverty Network:

- Involvement of as many members of the fuel poverty community as possible, as well as the wider community working on related issues such as health, poverty, social exclusion, environmental and social justice – this is essential to prevent duplication and improve coherence and co-ordination.
- Active engagement with the fuel poverty and wider community is important, being open to feedback and responsive to the needs of key parties, as far as possible.
- A good quality web portal is essential.

- Membership is free and open to all, but may require registration to access certain parts of the website (eg database of researchers).
- An annual event is important in maintaining momentum and involvement of key players. This is also vital in regularly evaluating progress and performance of the Network and revising aims as well as advances in fuel poverty research.
- It will be necessary to build on and work with existing networks and capacity to avoid duplicating what is already available – for example, National Energy Action already produce a good quality regular journal and hold an annual conference.
- Transparency in organisation is essential - the aims of the Network must be clearly defined, along with the roles of all involved, particularly the interaction with policy-makers.
- Evaluation of the Network's performance must be built in from the start, including identification of indicators of success, in order to demonstrate that there is a 'network advantage', eg number of Network members, website traffic, attendance at seminars.
- Lifespan needs to be considered in the Network design – it can take up to five years for a network to become fully effective (Creech 2001).

It is recommended that the host institution is responsible for overall co-ordination of the Network and maintenance of the website in a 'hub and spokes' model. Strong links with other institutions and shared responsibilities, formalised within the Network, would help avoid dominance by the host organisation. Ideally such partners would be funded to ensure consistency and commitment, although with limited funds this may not be possible.

5.2 Location of the Network

The intention would be for the hub of the Network to be located within an existing academic institution, emphasising the importance of independence and academic rigour and minimising set-up costs. The Network would be essentially virtual in nature, with members spread across different institutions reflecting a range of disciplines and a website providing the interface for interactions between all members. This would help establish a UK-focus for the Network, bringing about greater coherence between the devolved administrations.

5.3 Role and functions of the Network

The key role of the Network is to synthesise research outputs and build a strong network of all relevant parties, with the aim of helping to inform policy.

Research synthesis would be focused on bringing together and categorising existing research outputs in order to make the findings accessible and available to all interested parties. Within this process, there would need to be some type of quality-

control procedure, eg a peer-review process, to ensure that only research of sufficient standard and academic rigour (although not necessarily only from academic sources) was provided through the Network.

Initially, the main emphasis would be on building up a comprehensive database of the available high-quality research. Once that has been achieved, the emphasis would shift more towards dissemination and there would be opportunity for secondary research analysis on the basis of this synthesis. This would involve the production of reports outlining available research in a specific area and highlighting where additional research is required. Creation of the Network and identification of research opportunities would facilitate the drawing down of additional funds for further research by members of the Network.

A primary function of the Network would be to act as an information resource centre, or 'one-stop-shop', for all the major players in the field. This would most likely be accomplished through a comprehensive website, providing the following:

- Database of existing high-quality research (continually updated)
- Database of researchers, campaigners and practitioners in the field
- Database of relevant policies and programmes
- Regular e-bulletin
- List of forthcoming events and relevant news items
- Funding information/announcements
- Links to other sources

The establishment of such a comprehensive resource would assist in the development of a co-ordinated and coherent strategy for future research, with the Network available as a potential conduit for funding and commissioning research. Some of these functions are currently provided by organisations such as NEA, but with reliance on researchers to provide input and with limited support to fully co-ordinate research activities. A formal Network would have the advantage that time and resources would be dedicated to fulfilling these roles.

Dissemination would be carried out through the website and e-bulletin. In addition, a series of regular inter-disciplinary seminars focused on particular research themes would be beneficial, as well as maintaining interest and momentum for the Network. These seminars would have an academic focus, to distinguish them from other well-established fuel poverty events, but would not be exclusive to the academic community – the inclusion of the wider field, in terms of practitioners, campaigners and policy-makers, as well as researchers from other disciplines, is central to the aims of the Network. The Network would also be responsible for organising an annual event at which the performance of the Network is reviewed and evaluated and the strategy for the coming year is developed.

The aim is for the Network to be the first port of call for any researcher, campaigner, practitioner or policy-maker where they can establish what work already exists, where the gaps are and make the necessary links and contacts. The Network would actively

build connections with and engage with non-'traditional' fuel poverty work, bringing it into the fuel poverty arena to develop the synergies and research opportunities that exist. Establishing and enhancing the interconnections between a wide range of disciplines would be one of the key benefits of creating the Network.

5.4 Staffing of a Network

The staffing of the Network is heavily dependent on the funding available and requires clear prioritisation of the desired functions of the Network.

At a minimum, the Network would require a total of four staff, split between various roles. This would cover a part-time Director (0.25) and three full-time roles: a Network co-ordinator, researcher and communications manager, with scope for an additional part-time researcher/communicator. The Co-ordinator (1.0) would have overall responsibility for building the network, over-seeing the research synthesis and managing the staff. The Researchers (1.75 – 2.0) would focus on research synthesis, review and dissemination, whilst the Communications manager (0.75 – 1.0) would have responsibility for design and maintenance of the website and information management.

An Advisory Board consisting of all the main stakeholder groups (researchers, practitioners, campaigners, charities, government bodies, funders and possibly lay-people), with all the UK regions represented, would be required to oversee the running of the Network, ensuring transparency and impartiality.

5.5 Outline budget for a Fuel Poverty Network

It is important that funding is provided for a minimum of five years from the outset to enable the Network to become established and fully effective over the longer term. Ideally, the Network would be funded for ten years, to match the Government target of eradication of fuel poverty by 2016-18. Table 3 provides an indication of the annual budget for a Fuel Poverty Network.

Table 3 *Outline annual budget for a Fuel Poverty Network*

Cost item	Unit cost	Total cost
4 full-time staff (including overheads)	£50,000 pa	£200,000
4 seminars (40 people) each year	£1,500	£6,000
Annual event (100 people)	£6,000	£6,000
Supporting the peer-review process		£10,000
Travel & subsistence		£5,000
Publications		£3,000
Total		£230,000

5.6 Extending to a Fuel Poverty Research Centre

The Network outlined in the previous sections would have limited research functions, with no opportunity for primary research. However, if funds were available, such a Network would be ideally positioned to develop its own research programme, making a distinctive contribution to the current research arena. Through bringing together, evaluating and disseminating existing research and initiatives, the Network would be well-placed to identify where any research opportunities exist. The Network would also be in a good position to make better linkages and connections across the social, economic, environmental and technological fields and thus build a more coherent, truly inter-disciplinary research strategy, incorporating a 'whole systems' approach with a strong policy focus.

A research programme, focused along the lines of the research themes identified in Chapter 4, would be distributed across a range of partners and institutions to reflect the varied causes and effects of fuel poverty and to emphasise the interconnections between disciplines. The areas covered would include expertise in health, housing, poverty, energy efficiency, social science, welfare, economics and policy.

5.7 Outline budget for a Research Centre

The basic budget would be identical to that given in Section 5.5, with the Network forming the hub of the Research Centre. In addition to this, a further £300,000 per annum would be required to carry out primary research. This would represent a total annual budget of £530,000, equating to £2.65 million over five years.

Depending on the required outputs, this additional money could be distributed in different ways. Two options are outlined here: one based on a fixed group of research partners and the other drawing on a pool of researchers. It could be that a combination of both options would be most appropriate.

5.7.1 Fixed research partners

Under this option, five research partners are identified, covering the range of key disciplines. Each institution receives £50,000 per annum to fund a researcher dedicated to fuel poverty research under the remit of the Centre. The remaining £50,000 is allocated to the Host institution for an additional staff member to manage the research programme as well as conduct primary research.

This arrangement has the advantage that it may be perceived as a fair way to distribute funds (rather than in the control of the Host institution) and would build up expertise, commitment and constancy of research amongst the six organisations (including the Host institution). It would also provide more freedom to each of the partners in terms of the research undertaken (within the Research Centre strategy).

The main disadvantage with such a structure is that the research programme would potentially be more rigid, dictated to a certain extent by the expertise of the partners involved.

5.7.2 Pool of researchers

An alternative option would be to create a pool of researchers through the Network, with the Host institution responsible for commissioning individual research studies of varying duration and on a range of issues. For example, £250,000 per annum could be divided between five year-long studies or ten six-month projects (with the other £50,000 allocated to the Host institution, as in Section 5.7.1). This approach would have the advantage of being more responsive to the changing needs of the research agenda, enabling research to be focused upon the most important questions (rather than investing in building up expertise). Such flexibility might be considered more important, given the limited time horizon to 2016-18. It would also provide more opportunity for building research links with the wider community, encouraging greater inter-disciplinarity working within a more comprehensive approach.

Whilst this arrangement may be considered as being less equitable, in that the Host institution has more control over how the research funds are distributed and spent (although this would be overseen by the Advisory Board), it would allow the available funds to be spread more widely amongst a larger number of organisations. However, this option would be more time-intensive for the Host institution in terms of managing the research programme.

5.8 Funding options

The following list represents potential funders for a Fuel Poverty Network/Research Centre, with details of the funding possibilities and any contact made so far. It is possible that some combination of funding sources will be required, since some organisations are unlikely to be able to cover the full costs of a Centre.

- Economic and Social Research Council
 - *funded the scoping study*
 - *Expression of Interest submitted under the Research Centres competition*
 - *also possibilities under the new scheme for large grants due to be announced in October 2005*
- TSEC (Towards a Sustainable Energy Economy joint Research Council Programme)
 - *call for proposals likely in 2006*
- Medical Research Council
- DTI
- Defra
- Eaga Partnership Charitable Trust
 - *possibility of limited funding for a pilot project*

- Help the Aged
- *contacted and discussed possible funding*
- Joseph Rowntree Foundation
- *contacted and discussed possible funding*
- Eaga Partnership Limited
- Ofgem
- Powergen
- EDF
- British Gas

5.9 Next steps

Through the work undertaken in this scoping study, it is clear that there is a need for and support for some type of Fuel Poverty Centre. The exact role and functions of this Centre will depend on the level and sources of funding available. It appears essential that, at the very least, a strong network is established in order to better co-ordinate the research that is being carried out and build links within and between the range of relevant disciplines. Ideally, the Centre will be able to take on primary research in addition to the networking function, providing added value in the form of high-quality and rigorous inter-disciplinary research.

Securing funds for a Centre was not part of the remit of this study, but it is important that the momentum generated through this work is not lost and that steps are taken to establish a Centre without delay. This is vital if eradication of fuel poverty is to be achieved within the timeframe of 2016-18 set by the Government, particularly given rising fuel prices.

6 References

- Alyin P, Morris S, Wakefield J, Grossinho A, Jarup L and Elliott P (2001) *Temperature, housing, deprivation and their relationship to excess winter mortality in Great Britain, 1986–1996*. International Journal of Epidemiology, Vol 30:1100-1108, Oxford University Press, Oxford, UK
- Boardman B (1998) Energy efficiency and fuel poverty. Praseg National Conference, November 1998, London, UK
- Boardman B, Darby S, Killip G, Hinnells M, Jardine C, Palmer J, Sinden G (2005) 40% House. Research Report 31, Environmental Change Institute, University of Oxford, Oxford, UK
- Cheshire J (2002) Initial review of main fuel poverty research and publications. Undertaken on behalf of the Department of Trade and Industry, London, UK
- Creech H (2001) Form follows function: management and governance of a formal knowledge network International Institute for Sustainable Development, Canada
- Defra (2004) The UK fuel poverty strategy 2nd annual progress report. Department for the Environment, Transport and the Regions, London, UK
- DETR (2000) English House Condition Survey 1996: Energy Report. Department for the Environment, Transport and the Regions, London, UK
- DTI (2005) The UK fuel poverty strategy 3rd annual progress report. Department of Trade and Industry, London, UK
- DTI (2003) Our energy future – creating a low-carbon economy. Energy White Paper. Department of Trade and Industry, The Stationery Office, London, UK
- DTI/Defra (2003) Fuel Poverty in England in 2001. Department of Trade and Industry, The Stationery Office, London, UK
- DTI/Defra (2001) The UK Fuel Poverty Strategy. Department of Trade and Industry, The Stationery Office, London, UK
- DTI/Defra (2001b) Fuel Poverty in England in 1998. Department of Trade and Industry, The Stationery Office, London, UK
- Hansard (2005) Official Report. Vol.429, col. 1044W (20 January 2005)
- Salvage A (1993) Cold Comfort: a national survey of elderly people in cold weather. Research Report 7, Age Concern Institute of Gerontology, London UK
- SHCS (2004) Fuel Poverty in Scotland. Communities Scotland Investment and Performance Division, Edinburgh, UK
- UK Government (2005a) Securing the future – delivering UK sustainable development strategy. The Stationery Office, London, UK
- UK Government (2005b) The Home Energy Efficiency Scheme (England) Regulations 2005. Statutory Instrument 2005, Number 1530, The Stationery Office, London, UK
- UK Government (2000) Warm Homes and Energy Conservation Act 2000. The Stationery Office, London, UK
- Wicks M (1978) Old and Cold: Hypothermia and Social Policy. Heinemann

Appendix I – Literature review

This Literature Review is intended to achieve three things: to collate the key written documentation relating to fuel poverty in terms of describing the nature of the problem; to describe the legislative and regulatory forces that contribute to the eradication of fuel poverty; and to consider what is regarded as the definitive work to date on fuel poverty. As this last element suggests it is not intended to attempt to identify all research and comment on fuel poverty and domestic energy efficiency, this would inevitably lead to much replication and repetition and would serve no useful purpose. Rather it is hoped to cover what may be considered by fuel poverty researchers as definitive work on related matters and to assist prospective researchers to awareness of other seminal research, precluding the waste of resources, both financial and human, in pointless replication of earlier work.

However it is also recognised that there is a need for research which, though unoriginal, has its own valid justification. For example small-scale studies of fuel poverty in specific geographical areas or as it affects certain household types. In such cases it is hoped that this review will permit access to models of good practice in carrying out specialised discrete analysis.

Much of the criticism of Government fuel poverty policy has focused on the perceived failure to assess the extent of fuel poverty prior to intervention and any beneficial outcomes resulting from that intervention, this was particularly true of past phases of Warm Front. The case for rigorous investigation of the outcomes of fuel poverty intervention is made by the amount of resources being invested and many of the activities described in the literature review have not been subject to serious analysis. For example HM Treasury currently spends some £2 billion a year on Winter Fuel Payments without any apparent attempt to assess the scheme's contribution to the eradication of fuel poverty. It is hoped that, in addition to avoiding unnecessary repetition in research projects the material listed below may also trigger interest and involvement in researching some of these previously neglected subjects.

The Cheshire Review

In 2002 the Department for Trade and Industry funded work to identify key written resources on fuel poverty. The work was undertaken by Professor John Cheshire and represented a comprehensive review of studies into fuel poverty issues to 2002.

- Initial Review of Main Fuel Poverty Research and Publications, undertaken on behalf of the Department for Trade and Industry by Professor John Cheshire, DTI, 2002

The review organises subject matter under a wide range of fuel poverty-related categories:

- Primary Policy and Data Sources
- Other Regular and/or Primary Sources

- Advice on Energy Efficiency and Fuel Poverty Issues
- Co-ordination of Delivery
- Debt and Disconnection Due to Debt
- Definitions of Fuel Poverty (Decent Homes etc.)
- Energy Efficiency, Energy Services & Fuel Poverty, including the Comfort Factor
- Energy Required for Non-Heating Purposes
- Evaluation, Comparison and Appraisal
- Expenditure on Fuels and Energy
- Extension of the Gas Network
- General Condition of the Housing Stock
- Hard to Heat Homes
- Health (and Housing) Effects of Fuel Poverty
- [Omitted in numbering sequence]
- Identification of the Fuel Poor, Nearly Fuel Poor & Otherwise Disadvantaged
- Impacts of Competition and Liberalisation upon Fuel Poverty
- International Comparative Experience
- Legal, Regulatory and Statutory Aspects
- Non-Vulnerable Fuel Poor: Definitions and Identification
- Payment and Billing Issues
- Progress Reports on Tackling Fuel Poverty
- Role of New Technology, Including Metering, Renewables and Alternative Fuels
- Rural Fuel Poverty
- Under-occupancy
- Wider Impacts of Fuel Poverty (other than Health)

The full review can be accessed at:

http://www.dti.gov.uk/energy/consumers/fuel_poverty/jhcresearch.pdf

Current Awareness

Regular publications on fuel poverty are listed below. However all of the organisations referred to maintain websites that provide the best means of keeping in touch with developments in the fields of fuel poverty and domestic energy efficiency.

NEA website

(www.nea.org.uk/Policy_&_Research/Fuel_poverty_research_file/View_reports)

The NEA website contains basic information on research projects and other material submitted to the site's fuel poverty research file.

Energy Action

Regular journal published by National Energy Action (NEA). Three publications per year covering the full range of fuel poverty and domestic energy efficiency issues and comment on policy matters. Frequently carries articles submitted by researchers based on their findings.

Fuel Poverty Focus (www.nea.org.uk)

Quarterly publication from National Energy Action covering broadly similar ground to Energy Action but with greater emphasis on practical initiatives being undertaken by the charity.

Energy Review (www.eas.org.uk)

Quarterly magazine of Energy Action Scotland, covers the same fuel poverty/domestic energy efficiency subject matter as Energy Action but with a strong Scottish emphasis.

Fuel News (www.righttofuel.org.uk)

Quarterly newsletter of the National Right to Fuel Campaign – a coalition of agencies and individuals with a professional involvement in fuel poverty issues. Fuel News combines policy comment and findings of research projects undertaken by members of the campaign and other agencies and individuals.

The Fifth Fuel (www.ukace.org)

Formerly quarterly newsletter of the Association for the Conservation of Energy (ACE). Publication now intermittent. Primary concern is the promotion of energy conservation through political lobbying and introduction of relevant legislation. ACE is the main trade body for the domestic energy efficiency industry.

The Eaga Partnership Charitable Trust (www.eaga.co.uk/Charitable/)

The Eaga Partnership Charitable Trust publishes information on fuel poverty-related work funded by the Trust.

Social Action Plan Newsletter (sap@ofgem.gov.uk)

Quarterly publication of the energy industry regulator, the Office for Gas and Electricity Markets, the newsletter contains updated information on company compliance with social obligations to vulnerable and other disadvantaged energy consumers. Contains brief reviews of relevant research.

Fuel Poverty Update

(www.dti.gov.uk/energy/consumers/fuel_poverty/fuel_newsletter.shtml)

Joint publication from the Department for Environment, Food and Rural Affairs and the Department for Trade and Industry. Collates news and research information related to fuel poverty. Irregular production linked to specific initiatives and developments.

Fuel Poverty – General

- Fuel Poverty: From Cold Homes to Affordable Warmth, Brenda Boardman, Belhaven Press, London, 1991

At time of publication a definitive work on the issue of fuel poverty, but now partially overtaken by policy developments particularly the almost universal recognition of fuel poverty as a legitimate area of social concern and a political consensus that the problem must be resolved. This book remains the best analysis of the problem and possible solutions.

- The UK Fuel Poverty Strategy, Defra and DTI in association with the Department for Social Development in Northern Ireland, the Scottish Executive and the National Assembly for Wales, 2001.

Following publication of the draft strategy for consultation this document sets out how it is proposed to meet the requirements of the Warm Homes and Energy Conservation Act with the primary commitment to eradicate fuel poverty for vulnerable households in England by 2010.

- The Scottish Fuel Poverty Statement, the Scottish Executive, 2002.

Published under Section 88 of the Housing (Scotland) Act 2001 the Scottish Fuel Poverty Statement sets out the Scottish Executive's objective of ensuring that, by November 2016 and as far as reasonably practicable, people are not living in fuel poverty in Scotland.

- Warm Homes and Energy Conservation Act 2000: A Fuel Poverty Commitment for Wales, National Assembly for Wales, 2003.

Establishes a target date of fifteen years from publication of the Strategy (March 2018) to ensure that, as far as is reasonably practicable, fuel poverty is eradicated in Wales. This commitment is underpinned by the Warm Homes and Energy Conservation Act 2000.

- Ending Fuel Poverty: A Strategy for Northern Ireland, Department for Social Development, 2004

Sets out the objective of eliminating fuel poverty in vulnerable households by 2016 and for the remainder of the fuel-poor population by 2016 – subject to the availability of the necessary resources. There is no formal legislative basis for the Northern Ireland Strategy.

- The UK Fuel Poverty Strategy 1st Annual Progress Report, DTI, Defra, the Scottish Executive, the Northern Ireland Department for Social Development and the Welsh Assembly Government, 2003.

First in a series of annual reports on the Government's Fuel Poverty Strategy. Whilst fuel poverty is in theory a devolved issue Westminster reserves powers relating to energy prices and the social security system. The annual reports consider progress across the constituent countries of the United Kingdom and also on the basis of UK-wide policies.

- The UK Fuel Poverty Strategy 2nd Annual Progress Report, DTI, Defra, the Scottish Executive, the Northern Ireland Department for Social Development and the Welsh Assembly Government, 2004.

- Fuel Poverty Advisory Group (for England) Annual Reports: First Annual Report 2002/2003, Department of Trade and Industry, 2003; Second Annual Report 2003/2004, Department of Trade and Industry, 2004; Third Annual Report 2004/2005, Department of Trade and Industry, 2005.

The Fuel Poverty Advisory Group was set up to advise the Government on its target of eradicating fuel poverty. The Group has a range of representatives from bodies in the energy sector, local government, the health sector and NGOs. The focus of the Group is on progress in delivering targets and on constructive comment to Government related to barriers to achievement; the need for additional policies; continuing motivation of key players; and considering and reporting on the results of work to tackle fuel poverty.

- Energy White Paper: Our energy future – creating a low carbon economy, DTI, Defra and the Department for Transport, The Stationery Office, 2003.

The Energy White Paper identifies three main challenges:

1. *environmental issues;*
2. *declining indigenous resources; and*
3. *the need to update much of the UK's energy infrastructure.*

In setting out its response to these challenges the Government includes as one of its four goals the need to 'ensure that every home is adequately and affordably heated.'

- Energy Efficiency: the Government's Plan for Action, Defra, 2004

The Plan is of marginal relevance to fuel poverty since it anticipates publication of the Fuel Poverty Implementation Plan later in the year. It does however indicate that Warm Front, and its equivalents in the devolved administrations, represents the principal policy directed specifically at fuel poverty.

- Fuel Poverty in England: The Government's Plan for Action, Defra, 2004.

Publishes the intention to make the best use of existing regulations, policies and programmes designed to increase energy efficiency, improve housing, regenerate communities, tackle fuel poverty and improve health. The Plan seeks to ensure that policies are well co-ordinated across Government, that synergies are developed and [that this enables] the very best use of resources.

- The Trade and Industry Committee

In recent years the Trade and Industry Committee has undertaken to inquire into progress in meeting fuel poverty targets and other more specific aspects of fuel poverty such as the effect of energy price increases and fuel debt and disconnection. The Committee publishes the content of evidence sessions and, as appropriate, their views on the issue for Government attention.

- Evidence from the Fuel Poverty Advisory Group Session 2003-2004 Oral evidence taken before the Trade and Industry Committee on Tuesday 16 December 2003 and ordered to be published on that date.

- Fuel Poverty, Sixth Report of Session 2001-2002 from the Trade and Industry Committee, July 2002.

The Committee welcomed the Government's good intentions but concluded that there was a need for a clearer focus on the most effective means of tackling fuel poverty. The Committee emphasised that falling fuel prices could not be relied on and that action through the benefits system was comparatively inefficient. The Committee concluded that the only real long-term solution to fuel poverty is through greater energy efficiency of the housing stock.

- Fuel Poverty: Government Reply to the Sixth Report of Session 2001-2002 from the Trade and Industry Committee, December 2002.

Legislation Relevant to Fuel Poverty

- The Social Security Act 1990

The Act authorised the Secretary of State to make or arrange for the making of grants towards the cost of carrying out work to improve the thermal insulation of dwellings or for the purpose of reducing or preventing the wastage of energy in connection with domestic space or water heating.

- The Home Energy Conservation Act 1995

This legislation originated as a Private Members Bill which received such a degree of Parliamentary support that it eventually reached the Statute Book. The basic provision of the Act required local authorities to report on progress in improving the energy efficiency of residential properties within their area.

Subsequent guidance indicated that the level of savings that would be considered 'significant', as required by the Act, would be of the order of a 30% improvement over a 10-15 year period. Separate guidance was issued for England, Scotland, Northern Ireland and Wales. Guidance for local authorities in England was contained in DOE Circular 2/96.

Since 2000 local authorities have been required to report on their plans to reduce fuel poverty as a result of new guidance: Home Energy Conservation Act 1995 DETR Guidance for energy conservation authorities: Tackling Fuel Poverty – a Local Well-Being Issue.

- The Energy Conservation Act 1996

The Energy Conservation Act 1996 introduced some additional elements to the earlier Act. Most important of these was the extension of reporting provisions to Houses in Multiple Occupation. DOE Circular 5/97 provided updated guidance for English local authorities on compliance with this Act.

- The Warm Homes and Energy Conservation Act 2000

Also introduced as a Private members Bill, but with Government support, this legislation is the keystone of the UK Fuel Poverty Strategy that commits

Government to the eradication of fuel poverty for vulnerable households by 2010 and for the remaining fuel-poor households by November 2016. Achievement of the strategy objectives is subject to the qualification 'as far as is reasonably practicable.'

- The Sustainable Energy Act 2003

The Act requires the Secretary of State to report on an annual basis on progress towards achievement of sustainable energy aims. Issues on which reporting is required follow the main goals of the Energy White Paper and include a report on reductions in the number of persons in the United Kingdom who are living in fuel poverty.

- The Utilities Act 2000

Authorises the Secretary of State to impose energy saving obligations on domestic energy suppliers based on a target and timescale imposed by the Gas and Electricity Markets Authority. The Act also enables the Secretary of State to make an order containing a scheme for the adjustment of charges for gas and electricity where he considers that members of any group (a "disadvantaged group") of customers of authorised suppliers are treated less favourably than other customers of theirs as respects charges for gas and electricity with a view to eliminating or reducing the less favourable treatment.

- The Energy Act 2004

The Energy Act amends the Sustainable Energy Act 2003 to require the Government to publish information on development and implementation of new energy sources. Government must also report on actions taken to achieve statutory energy efficiency aims set out in the Sustainable Energy Act; publish and implement a micro-generation strategy; and ensure that the Gas and Electricity Markets Authority and the Secretary of State perform their duties in a manner conducive to sustainable development.

Fuel Poverty and Energy Efficiency

The English House Condition Survey (EHCS) is the key source of information about the condition of the housing stock and the extent of fuel poverty in England. The EHCS is the definitive source because it collects all relevant information on household characteristics, property characteristics and household income. The survey is conducted by qualified surveyors who gain physical access to the property and this results in survey data that is highly reliable in analysing fuel poverty. Up to and including publication of the 2001 report the English House Condition Survey was produced on a five-year cycle, however the 2003 EHCS Key Findings report was published on 1 March 2005 based on data from the 2002/03 and 2003/04 survey years and representing the average position at April 2003. EHCS Bulletin 6 was also published in March 2005 and this provides a summary of the 2003 EHCS Headline results and an update on current progress and developments.

The Office of the Deputy Prime Minister expects to publish a more detailed EHCS 2003 Summary Report in mid-2005. This Summary Report will include a core set of tables with supporting text that will form the annual reporting template for future years.

Future EHCS reporting will be on an annual basis using a two-year rolling sample. Once data from survey year 2004-05 is available this will be analysed with data from 2003-04 to report on the 2004 average position. These results are expected to be available by the end of 2005.

A number of English House Condition Surveys have been followed up by additional analysis specific to the heating and insulation characteristics of the property and to the perceptions of the adequacy of these areas of housing as evidenced by the views of the occupants. Whilst from the mid-1970s surveys had included questions about heating, insulation, dampness and mould growth in recognition of increasing concern about energy efficiency and energy conservation the actual data were extremely basic and only as the Energy Reports became more detailed and comprehensive in content was it possible to achieve any serious evaluation of fuel poverty (or a proxy such as cold homes). However, to date, fuel poverty information published as a result of findings from the English House Condition Survey 2001 have been comparatively rudimentary. Since 2001, data on temperatures, heating patterns, expenditure and tariffs have not been included in the EHCS and so the 1996 survey data is the most recent available that covers these factors.

- English House Condition Survey: 1986 Supplementary Energy Report, Department of the Environment, 1991

This report was the first to collect information on internal temperatures and to discuss the concept of cold homes (an early proxy for fuel poverty) although one that could not be specifically linked to deprivation without any household income data. The existence of fuel poverty (or the absence of affordable warmth) could only be inferred once housing conditions and household income were employed in a fuel poverty formula.

- English House Condition Survey 1991 Energy Report, Department of the Environment, 1996

This report introduced the concept of affordable warmth and, by extension, households who lacked affordable warmth. The report commented that: 'many households are spending a high proportion of their income on domestic fuel without achieving satisfactory thermal conditions – in short, they lack affordable warmth.' Although the term fuel poverty had gained currency over the previous decade it seems that it was still inexpedient to use the term 'fuel poverty'.

Whilst refraining from using the actual term 'fuel poverty' the report did adopt the definition used by fuel poverty campaigners in discussing what level of expenditure could reasonably be required: 'What level of expenditure is affordable for any heating regime will depend on a household's income after tax. A widely accepted target for affordable warmth is that a household's total fuel

costs should not exceed 10% of disposable income.’ In 1991 one in four households lacked affordable warmth on this basis with many more unable to meet minimum and standard heating regimes.

- The English House Condition Survey 1996 Energy Report, DETR, 2000

Detailed analysis of the heating and insulation characteristics of the housing stock in England and of the nature of fuel-poor households. First formal reference to fuel poverty in the EHCS series in describing households that cannot maintain adequate heating regimes for a given level of expenditure. Emphasis on ‘needed’ spend as opposed to actual fuel expenditure as the indicator of a fuel-poor household.

- Fuel Poverty in England in 1998: A summary report presenting data produced by the Building Research Establishment on behalf of the DTI and Defra, DTI and Defra, 2001

Findings on trends in fuel poverty from a smaller-scale EHCS Follow Up Survey to the 1996 survey

- Fuel poverty in England in 1999 and 2000: A summary report presenting provisional estimates produced by the Building Research Establishment on behalf of the DTI and Defra, 2000

Estimates of the incidence of fuel poverty in England based on modelling of energy prices and incomes data analysis carried out by BRE using the 1998 Energy Follow Up Survey, DTI and Defra, 2002.

- Detailed Breakdowns of Fuel Poverty in England in 2001: A summary report presenting data produced by the Building Research Establishment on behalf of the DTI and Defra, July 2003

Revised version of earlier report published in March 2003. The revised report corrects an error in grossing factors originally used to produce 2001 estimates.

- English House Condition Survey 2001, Office of the Deputy Prime Minister, 2003

The English House Condition Survey 2001 is complemented by a number of supporting tables that do not form part of the main report but which do provide more detailed analysis of heating and insulation properties of dwellings and compliance with the Thermal Comfort criteria of the Decent Homes Standard. These tables are available on the English House Condition Survey section of the ODPM website. Compliance with Decent Homes criteria is the key element in assessing the adequacy of the housing stock across all tenures.

The level of data collected in the 1996 survey has not been replicated in subsequent surveys; consequently, information on internal temperatures, heating patterns, tariffs and expenditure on fuel will be deduced through modelling exercises employing a smaller and less reliable sample.

- The UK Fuel Poverty Strategy 2nd Annual Progress Report, Defra and the DTI with The Northern Ireland Department for Social Development, the Scottish Executive and the Welsh Assembly Government, DTI and Defra, 2004

The report contains modelled estimates of the incidence of fuel poverty in England in 2002. Actual data for Scotland is available from the Scottish Housing Survey 2002; Northern Ireland data relate to 2001 and data for Wales relate to 1997-98.

- Department of Trade and Industry 'Ready Reckoner'

The impact of 2004 domestic energy price increases on fuel poverty is now a main part of the political debate. The Government has published its own estimates, as has the Fuel Poverty Advisory Group with the latter estimates being rather higher. The Department for Trade and Industry has published a 'ready reckoner' on the fuel poverty section of its website which is intended to allow calculation of the increased incidence of fuel poverty given a number of different energy pricing permutations.

http://www.dti.gov.uk/energy/consumers/fuel_poverty/ready_reckoner.pdf

- The English House Condition Survey Key Findings for 2003, ODPM, 2005

Report on progress in Decent Homes between 2001 and 2003. The Thermal Comfort element of the Decent Homes Standard is the Government's primary instrument to address fuel poverty in social housing. The report concentrates on priority areas for Government policy: providing decent homes for vulnerable households; and decent homes in the most deprived districts.

Fuel Poverty Methodology

There are minor differences in how fuel poverty is defined in the separate administrations of the United Kingdom although the intention is to maximise uniformity in future. For example the absence of relevant data precluded the Welsh Assembly Government from assessing the extent of fuel poverty in Wales and they had recourse to using HEES-eligible households as a proxy for fuel-poor households.

In England there has been considerable debate on the methodology. Fuel poverty campaigners have suggested that the political imperative to eliminate fuel poverty has led to some perverse decisions in defining fuel poverty and much of the debate has centred on treatment of household income. The Government preference has been to use full income from all household occupants in defining household income although they have also published figures based on basic income. The first definition includes housing subsidies (Housing Benefit and Income Support for Mortgage Interest) as household income whilst the basic income definition excludes such subsidies. To complicate matters further there is strong support among fuel poverty campaigners for disposable income (after housing costs) to form the basis for household income

assessment. Clearly the definition of income is central in any calculation of the extent of fuel poverty.

These matters and some more technical aspects of the fuel poverty formula have been discussed in a number of papers.

- Fuel Poverty in England in 2001 Methodology, DTI, July 2003

Schematic diagram of the revised fuel poverty model, description of the processes involved in modelling and the rationale involved in changes: fuel consumption and prices, household incomes and heating regimes.

- Consultation on the methodology used for calculating the number of households in fuel poverty for England, DTI and Defra, 2004

In April 2004 the Department for Trade and Industry published a series of proposed modifications to the methodology used to produce the figures for fuel poverty in England. The revisions, which had been proposed by the Building Research Establishment, mainly discussed changes to the method for calculating energy costs and household income. The proposals were subjected to a consultation process which was to inform a peer review of the methodology. To date, the conclusions of the peer review remain unpublished. Responses to the peer review have been published on the DTI website.

Decent Homes Standard

The Decent Homes Standard has its origins in the Housing Green Paper Quality and Choice: a Decent Home for All (April 2000) which committed Government to ensuring that, by 2010, all social housing will provide tenants with good quality accommodation. In order to meet the Decent Homes Standard the property should:

- be above the current statutory minimum standard for housing;
- be in a reasonable state of repair;
- have reasonably modern facilities and services; and
- provide a reasonable degree of thermal comfort.

Subsequently the UK Fuel Poverty Strategy indicated that the Thermal Comfort criteria would be used to address fuel poverty in social sector housing. The Government did acknowledge that compliance with the heating and insulation requirements of the Thermal Comfort criteria would still leave many thousands of households in fuel poverty.

Since then the Decent Homes Standard has been the subject of considerable controversy as the Government maintains that a rigorous energy efficiency standard for all social housing would be prohibitively expensive and that the Standard is a minimum requirement and that social housing landlords are encouraged to exceed the minimum requirements.

- Change to the Decent Home Definition – Consultation, DTLR, 2001

The Department published, for consultation, proposals to amend the Thermal Comfort criterion of the Decent Homes Standard in order to simplify the assessment of non-decent homes. This involved adoption of a heating and insulation measures-based approach where compliance resulted in the property satisfying the standard. The consultation resulted in some concessions in the form of higher insulation standards where the property was heated by a less efficient system.

- Decent Homes, ODPM: Housing, Planning, Local Government and the Regions Committee, November 2003

Inquiry by the Select Committee into the adequacy of the Government's Decent Homes Standard, the method of managing housing improvement and the likelihood of achieving targets. Report contains written and oral evidence submitted to the inquiry. The Committee was particularly critical of the Thermal Comfort element of the standard but recommended that, instead of revising the standard now, it should subsequently be replaced by a Decent Homes Plus Standard.

- Government Response to the ODPM: Housing, Planning and the Regions Committee's Report on Decent Homes, July 2004

Government response to Select Committee criticism rejecting all recommendations.

- Separate and Unequal: energy efficiency standards in social housing in the United Kingdom, NEA and EAS, 2005

Critical review of the different housing standards adopted by the administrations for England, Wales, Scotland and Northern Ireland. Comparison of the Scottish Housing Quality Standard, the Welsh Housing Quality Standard and the Decent Homes Standard for England which will also be adopted in Northern Ireland.

Review of Statutory Energy Efficiency Programmes

Since devolution, fuel poverty has been a devolved issue, and responsibility for devising and implementing strategies has fallen to the Northern Ireland Assembly (when not suspended), the Scottish Executive and the Welsh Assembly Government as well as to the Westminster Government for England. Despite the potential for independent and innovative thinking there have been close parallels in the policies and actions of the administrations.

The main programmes to address fuel poverty have been Warm Front in England and the Scottish, Northern Irish and Welsh equivalents – respectively the Scottish Executive Central Heating Initiative and its Warm Deal programme, the Warm Homes Scheme and the Home Energy Efficiency Scheme.

Annual reports on scheme achievements are published by the scheme managers although these tend to be little more than tables indicating type and number of jobs completed. Since Eaga Partnership Limited manages the programmes in all four countries, with the exception of the Warm Front eastern region of England which was managed by Powergen, most statistical information can be accessed from the Eaga Partnership website (www.eaga.co.uk). Information on Warm Front activities in eastern England can be found on the Powergen Warm Front website (www.powergen-warmfront.co.uk).

However, Eaga Partnership has been successful in the recent scheme manager bidding process and from 2005-2006 will manage the schemes in all four regions of England.

- Fuel Poverty in the United Kingdom: a review of statutory energy efficiency programmes for low-income households, NEA and EAS, 2002

To date this report is the only UK-wide review of statutory energy efficiency programmes. Whilst there are broad similarities between all of the programmes in terms of who is assisted, how they are assisted and to what extent, there is sufficient variety to identify good practice across a range of elements within the programmes. The purpose of this report was to identify best practice and commend it across all four countries' programmes.

There have been a significant number of reports, reviews and evaluations of the individual national programmes by researchers and by monitoring bodies.

- HEES 1996 Evaluation: Final Report, Prepared for EAGA Ltd by Nigel Oseland, Building Research Establishment, October 1996

Assesses the benefits of HEES in terms of customer satisfaction, potential fuel savings and increased comfort levels.

- The Home Energy Efficiency Scheme, Report by the Comptroller and Auditor General of the National Audit Office, 1998

Report examined the efficiency and effectiveness of the Home Energy Efficiency Scheme from its inception in 1991 to march 1997. Concluded that scheme was effective in its main objective of increasing take up of energy efficiency measures in eligible households and that administration was good but criticised some aspects of cost control.

- Targeting fuel poverty in England: is the Government getting warm? Tom Sefton, Fiscal Studies, Vol.23, No. 3, September, 2002

Research involves examination of the 'fuel poverty gap' – and the extent to which it could be closed through better targeting of the Home Energy Efficiency Scheme in England. The author concludes that the existing scheme is unlikely to have a significant impact on fuel poverty.

- Warm Front: Helping to Combat Fuel Poverty, report by the Comptroller and Auditor general of the National Audit Office, June 2003

Report found problems in a mismatch between need and eligibility for assistance. The degree of assistance available was frequently insufficient to remove households from fuel poverty and much of the worst housing was left untouched by the programme. Overall it was considered that the scheme was underachieving in its contribution to the Government's Fuel Poverty Strategy.

- Warm Front: helping to combat fuel poverty, House of Commons Committee of Public Accounts, January 2004

Report with formal minutes, oral and written evidence. Adversely critical report from the committee on the operation of Warm Front. Criticism focused on:

- *Failure to assist those in greatest need.*
- *No eligibility relating to energy efficiency standards.*
- *Many grants make minimal contribution to reducing fuel poverty.*
- *Irrational and perverse regulations in certain cases.*
- *Little help for hard to treat homes.*
- *Unreasonable delays in installing measures.*
- *Targets based on quantity rather than quality of assistance.*

- Aiming High – An evaluation of the potential contribution of Warm Front towards meeting the Government's fuel poverty targets in England, Tom Sefton, London School of Economics, 2004

This report used a scheme manager database to assess the performance of Warm Front in reducing fuel poverty. As such it was an advance on the earlier modelled work. However the conclusions were broadly similar in highlighting the extent to which non-fuel-poor households were assisted whilst genuinely fuel-poor households were excluded.

- A Fuel Poverty Solution? Assessing the Effectiveness of the Warm Homes Scheme. A Research Report for the Department for Social Development by NEA Northern Ireland, 2003

Assessment of the impact on clients of work carried out under the Warm Homes Scheme. Evaluation looked at how well targeted the scheme was; the extent to which it removed households from fuel poverty; and recommendations for additional future research.

- Assessing the Impact of the Central Heating Programme on Tackling Fuel Poverty: Report on the first year 2001-2002, Alembic Research, 2004

Review of the Scottish Executive's Central Heating Initiative with particular reference to the programme's achievements in removing beneficiaries from fuel poverty.

- The Scottish Executive's Central Heating Programme and the Warm Deal 2003-2004, The Scottish Executive, 2005

Third annual report by the Scottish Executive on the Central Heating programme and the fifth annual report on progress with the Warm Deal Programme.

- Warming up vulnerable households: An evaluation of the Eaga Warm Front Programme and its effect on fuel poverty, Bill Wilkinson, Marion Hart and Andrew Hart, Energy Audit Company, March 2003

Assessment of the success of Warm Front in reducing fuel poverty and series of proposals as to how the programme might be made more effective.

- Interim Evaluation of the New Home Energy Efficiency Scheme for Wales, National Energy Services & The Townsend Centre for International Poverty Research, National Assembly for Wales, January 2005

Assessment of the Home Energy Efficiency Scheme in terms of:

- *Appropriateness of eligibility criteria.*
- *Adequacy of assistance to fuel-poor recipients.*
- *Assessing the effect of price increases on those removed from fuel poverty.*
- *Establishing the benefits of increasing SAP improvements.*

- Health Impact Assessment of the New Home Energy Efficiency Scheme, prepared by Dr John Kemm, Welsh Combined Centres for Public Health, Sara Ballard and Dr Mike Harmer, Housing and Community Renewal Division, The National Assembly for Wales. The National Assembly for Wales, 2001

Health impact assessment is a key element in policy decision-making in Wales. The approach is intended to ensure that health and well-being issues are taken into account in policy development at all levels.

Energy Efficiency Commitment

The Energy Efficiency Commitment has developed from a modest levy on electricity consumers first imposed in 1994 as the Energy Efficiency Standards of Performance into a source of funding for domestic energy efficiency improvements raised from all domestic gas and electricity consumers and with a considerably higher budget than that for Warm Front. The first Energy Efficiency Standards of Performance were imposed on the electricity industry in 1994 and were followed by further EESoP programmes in 1998 and 2000. EESoP targets for energy savings were funded by an allowance on the supply price control which allowed for £1 per franchise customer to be invested in energy efficiency work.

In recognition of the liberalisation of the gas market EESoP targets were placed on all licensed gas and electricity suppliers with at least 50,000 customers from 2000.

- A Review of the Energy Efficiency Standards of Performance 1994-2002: A joint report by Ofgem and the Energy Saving Trust, July 2003
Report setting out the effectiveness of Energy Efficiency Standards of Performance programmes from their inception until they were replaced by the Energy Efficiency Commitment in 2002. The Utilities Act 2000 gave the Secretary of State powers to set energy efficiency targets for suppliers.
- Improving Energy Efficiency Financed by a Charge on Customers, Report by the Comptroller and Auditor General, National Audit Office, July 1998
Review of the rationale of EESop, energy saving achievements and consumer attitudes.
- Energy Efficiency Commitment 2002-2005: Consultation Proposals, Defra, August 2001
Statutory consultation on the Energy Efficiency Commitment scheme as required by the Utilities Act 2000. proposals set out energy saving objectives over the period 2002-2005.
- The Energy Efficiency Commitment from April 2005: Consultation Proposals, Defra, May 2004
Sets out proposals for overall energy savings of some 130TWh during the lifetime of the programme 2005-2008. As with previous EEC programmes at least 50% of savings should be achieved in the homes of priority group customers. Estimates that costs will double for consumers compared to the previous programme with average household costs of around £9 per fuel.
- Comparing the Energy Efficiency Commitment (EEC) 2002-2005 with EEC 2005-2008, Defra, August 2004
Considers the expected outcomes from revisions to the Energy Efficiency Commitment and discusses potential barriers to achievement.

Fuel Poverty and Energy Prices

There is still no full explanation for the significant price increases in gas over the past year or so. A combination of high oil prices (to which gas prices are linked) exacerbated by 'market sentiment' are the main drivers. High gas prices have led to substantial increases in electricity costs and these factors have combined to arrest and, to some degree reverse, the achievements of the Government's Fuel Poverty Strategy.

- Fuel Prices: Twelfth Report of Session 2004-2005 by the Trade and Industry Committee, published in typescript March 2005. Formally published in June 2005.
The Committee listened to evidence of the adverse impact of rising energy prices and called for greater co-ordination within Government to deploy key providers of public services in identifying and assisting fuel-poor households.

- National Right to Fuel Campaign

The National Right to Fuel Campaign is currently undertaking a detailed analysis of the impact of recent price increases on the incidence of fuel poverty in England. This is a 'work in progress' and will not be published until later in 2005.

- Rising Fuel Prices: the challenge for affordable warmth in hard to heat homes, by Jacky Pett, Association for the Conservation of Energy, 2005 [work in progress].
- The Department of Trade and Industry

The Department of Trade and Industry has published on its website a 'ready reckoner' which is intended to illustrate the impact on fuel poverty of a range of energy pricing scenarios. The information can be accessed at:

http://www.dti.gov.uk/energy/consumers/fuel_poverty/ready_reckoner.pdf

The Department of Trade and Industry has produced a paper on energy pricing projections between 2003-2010. The paper was intended to inform Defra's Fuel Poverty Action Plan and illuminate what policies would be required to end fuel poverty for vulnerable households by 2010. The paper explains the assumptions on which energy price projections are based.

http://www.dti.gov.uk/energy/consumers/fuel_poverty/trends_prices.pdf

- Family Spending: A report on the 2002-2003 Expenditure and Food Survey, Office for National Statistics, June 2004

Most recent in an annual series that provides detailed analysis of household expenditure broken down by age, income, composition, socio-economic characteristics and geography. Contains basic information on expenditure on fuels.

- Fuel Poverty in Britain: Expenditure on Fuels 1993-94 to 1995-96, Gas Consumers Council, 1998

Last in a series of detailed analyses of household expenditure on fuels. Previous (irregular) analyses had been commissioned jointly by the Gas Consumers Council and the Electricity Consumers' Council.

- Sutherland Comparative Domestic Heating Costs, Salkent Ltd

Bi-annual reports on domestic space and water heating costs analysed by geographical region and fuel type. Publication now covers the whole of the British Isles. Paper version but primarily available CD-Rom:

http://www.salkent.co.uk/html/heating_cost_information.html

- The Fuel Picture: CAB clients' experience of dealing with fuel suppliers, NACAB, 2002

Evidence-based comments from the National Association of Citizens Advice Bureaux on problems faced by CAB clients in paying for fuel and in their relationship with energy supply companies.

Fuel Poverty and Health

The health consequences of fuel poverty are the focus for much recent and current research. This reflects the fact that, ultimately, avoidance of harm to physical and psychological health is the main factor in policies to address fuel poverty and the following listing of health-related work is intended to provide some indication of the extent of research into housing conditions and health. No attempt has been made to produce a definitive listing of health-related publications; the material referred to below is intended for illustrative purposes.

- Energy Saving Trust

The Energy Saving Trust has recently included a section on health on their website. Copies of research material can be found on the websites:
www.est.org.uk/partnership/resource/action/
www.est.org.uk/partnership/sector/swg.cfm?group_id=104
- Fuel Poverty and Ill Health: A Review, Centre for Sustainable Energy, 2001

Bibliography produced for the Walsall Health and Fuel Poverty project
<http://www.cse.org.uk/pdf/pub11.pdf>
- Health Impact Assessment of the New Home Energy Efficiency Scheme, National Assembly for Wales, 2000

Contains a useful set of references to housing and health related issues
<http://www.housing.wales.gov.uk/index.asp?task=content&a=d8>
- An epidemiological study of the relative importance of damp housing in relation to adult health, Julie Evans and Sophie Hyndman et al, Journal of Epidemiology and Community Health 2000; 54: 677-686
- Associations of cold temperatures with GP consultations for respiratory and cardiovascular disease amongst the elderly in London, S Hajat and A Haines, International Journal of Epidemiology 2002; 31: 825-830
- Health effects of housing improvement: systematic review of intervention studies, Hilary Thompson, Mark Petticrew, David Morrison, BMJ Volume 323, 28 July 2001
- Health impact assessment of housing improvements: incorporating research evidence, H Thompson, M Petticrew, M Douglas, Journal of Epidemiology and Community Health, 2003; 57; 11-16
- Indoor heating, house conditions, and health, I Gemmell, Journal of Epidemiology and Community Health 2001; 55: 928-929
- Keeping warm and staying well: findings from the qualitative arm of the Warm Homes Project, Barbara E Harrington, Bob Heyman, Nick Merleau-Ponty et al, Health and Social Care in the Community 13(3), 259-267
- Prescribing warmer, healthier homes, Dr Noel Olsen, BMJ 2001; 322: 748-749 (31 March)

- Housing and Asthma: Why our homes are making us ill! Dr Stirling Howieson, Taylor & Francis, Abingdon, Oxon, 2005
- Health Implications of Cold and Damp Housing: a training resource, written and compiled by Trevor Davison, Eaga Partnership Charitable Trust, Updated 2004
- Engaging Communities. An evaluation of a community development model for tackling rural fuel poverty, Institute of Public Health in Ireland, 2004
- Fuel poverty and health: a guide for primary care organisations, and public health and care professionals, by Dr Vivienne Press, Produced by the National Heart Forum, the Eaga Partnership Charitable Trust, the Faculty of Public Health Medicine, Help the Aged and the Met Office, 2003
- Guidance Note for Primary Care Trusts: PCT Local Plans and Fuel Poverty 2003-2006, NEA, 2003
- Health Impact Assessments of Housing Improvements – A Guide, Public Health Institute of Scotland, 2003
- Housing and Health: Building for the Future, British Medical Association, 2003
- Transforming Lives: Lessons Learned and Shared, Armagh and Dungannon Health Action Zone, 2002

Excess Winter Death

Within the debate on fuel poverty and ill health, excess winter mortality is the most sensitive indicator of the problem. The issue is particularly politically sensitive since excess winter death rates amongst the elderly population are disproportionately high and because the problem appears to be associated with the United Kingdom to an extent not replicated in countries with similar climatic conditions and levels of affluence.

- Cold Comfort: the social and environmental determinants of excess winter death in England, 1986-1996, Wilkinson et al, Joseph Rowntree Foundation, 2002
- Multiple Deprivation and Excess Winter Deaths in Scotland, Dr Stirling Howieson, University of Strathclyde and Energy Action Scotland, 2004
- The Raised Incidence of Winter Deaths, by Neil Bowie and Graham Jackson, the General Register Office for Scotland, Occasional Paper 7, 2002
- Impact of climate on mortality in Northern Ireland 1980-2001, Department for Social Development Technical Paper to accompany consultation Towards a new Fuel Poverty Strategy for Northern Ireland, DSD, 2003
- Excess winter mortality in Europe: a cross-country analysis identifying key risk factors, by Dr Jonathan Healy, Journal of Epidemiology and Community Health, 2003, Volume 57, Number 10

Fuel Poverty and Energy Tariff Issues

Little formal research has been done in recent years into the impact of energy tariffs on fuel poverty; whether the negative effect of higher charges such as prepayment or the beneficial effect of social tariffs operated by most of the major energy suppliers to provide preferential terms to specific categories of vulnerable consumers.

- Social Action Plan

The major source of information on payment methods, fuel debt and other fuel poverty indicators is the regular publication of Social Action Plan data by the Office of Gas and Electricity Markets (Ofgem). This material is produced on a quarterly basis and in the form of an annual report. These reports can be accessed via the Ofgem website. A link to the most recent Social Action Plan Annual Report is available on:

www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/10978_10505.pdf

- Debt and Disconnection: Gas and electricity supply companies and their domestic customers, House of Commons Trade and Industry Committee, Fifth Report of Session 2004-2005, TSO, 2005

The following links refer to the Committee report and to oral and written evidence:

www.publications.parliament.uk/pa/cm200405/cmselect/cmtrdind/297/297.pdf

www.publications.parliament.uk/pa/cm200405/cmselect/cmtrdind/297/297ii.pdf

- Preventing debt and disconnection – the review, an independent review by Sohn Associates on behalf of Ofgem and energywatch, 2005

www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/10688_9005.pdf

- Self Disconnection Survey Report, Energy Action Scotland, 2004

www.eas.org.uk/downloads/SelfDisc.pdf

- Protecting Vulnerable Customers from Disconnection, Energy Retail Association, 2004

www.energy-retail.org.uk/pdfs/Disconnections_Report_Sep_04.pdf

Fuel Poverty and Local Authorities

- Addressing fuel poverty through Community Planning: A Toolkit: Developing effective community participation and partnerships, by Impetus Consulting, 2004

- Review of English Local Authority Fuel Poverty Report Strategies, by Impetus Consulting and the Association for the Conservation of Energy, 2003

www.eaga.co.uk/Charitable/Eaga%20Fuel%20Poverty%20Report.pdf

- Home Energy Conservation Act Reports

Home Energy Conservation Act Reports are submitted annually to the Department for Environment, Food and Rural Affairs by local authorities in England. Local authorities may publish their full reports for general scrutiny. Individual local authority progress is published in a summary report by Defra. The most recent available figures can be found at:

www.defra.gov.uk/environment/energy/heca95/pdf/heca_data2003.pdf

- Tackling fuel poverty: A Beacon Council Toolkit for Local Authorities, Prepared by NEA in association with the five local authorities awarded Beacon Council status for their innovative work on fuel poverty, 2003

www.nea.org.uk/downloads/publications/beacon_toolkit.pdf

Regional Strategies and Reports

Warm Zones address problems of fuel poverty and poor domestic energy efficiency by offering some degree of assistance to all households in a predetermined geographical area.

- Warm Zones External Evaluation: First Annual Report, prepared on behalf of the Energy Saving Trust by the Centre for Sustainable Energy and National Energy Action, 2003

www.est.org.uk/uploads/documents/warm_zones_evaluation_1.pdf

- Warm Zones External Evaluation; Second Report, prepared on behalf of the Energy Saving Trust by the Centre for Sustainable Energy and National Energy Action, 2004

www.est.org.uk/uploads/documents/ACFEAAcuaGbt.pdf

- Green light to clean power: The Mayor's Energy Strategy, Greater London Authority, 2004

www.london.gov.uk/mayor/strategies/energy/docs/energy_strategy04.pdf

- Future Energy West: West of England Sustainable Energy Strategy and Action Plan, Prepared for the local authorities of the west of England by the Centre for Sustainable Energy, 2003

www.cse.org.uk/ftp/Future-Energy-West.pdf

- Regional Affordable Warmth Strategies

National Energy Action is currently finalising the first partnership with a wide range of agencies in the East Midlands to create a prototype Regional Affordable Warmth Strategy. The strategy brings together representatives from the health, economic development, housing and sustainability sectors to develop the strategy. The East Midlands will be the first in a number of region-wide strategies

since it is proposed over the next year to replicate this approach across other English regions.

Energy Advice

Energy advice is often thought of as a minor adjunct to practical energy efficiency improvements. However the benefits of good quality advice can range from substantial money savings to prevention of debt and disconnection. Since energy suppliers are required under their licence conditions to provide customers with effective and impartial advice it is essential that these services be, as an absolute minimum, well informed and competently delivered.

Ofgem commissions occasional analyses of the quality of energy suppliers' advice services. This has generally entailed a 'mystery shopper' exercise undertaken by external consultants.

- Report on the Quality of Energy Efficiency Advice from Electricity and Gas Suppliers, prepared for Ofgem by New Perspectives, December 2003

www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/5432_quality_energy_efficiency_advice_report_19dec03.pdf

- Energy Advice Handbook, written by Julia Green, published by Energy Inform, 2004

Comprehensive resource covering all aspects of domestic energy use

- Fuel Rights Handbook, written by Alan Murdie, published by Child Poverty Action Group, 2005

Detailed guide to the rights and entitlements of domestic gas and electricity consumers

Appendix II – Stakeholder survey

A copy of the questions used in the on-line survey of stakeholders is provided here:

Fuel poverty research

In the first part of this survey, we would like to gather your views on the current state of research into fuel poverty.

1. Please indicate if you agree/disagree with the following statements (randomised):
Research into fuel poverty is:
poorly co-ordinated
of a high standard
translated into practice effectively
lacking in focus
effective in supporting policy
of insufficient quantity
outdated
2. Do you think there are any important gaps in existing fuel poverty research?
Yes/No
If yes, what do you consider these gaps to be?

The Fuel Poverty Research Centre

One of the aims of this questionnaire is to establish what a Fuel Poverty Research Centre might look like, on the basis of what you consider important.

The primary focus of the Centre will be on high quality research generating robust findings. However, within this, there are a number of roles the Centre could fulfil and a number of ways in which it could operate. We would appreciate your input on what you consider these should be.

3. Please indicate which functions you think the Centre should cover: (definitely, possibly, neutral, unimportant, definitely not) (randomised)
research synthesis/commissioning research/carrying out research/dissemination of research/training/informing policy/watchdog/meeting place/virtual community/resource centre/programme evaluation
4. Out of all the functions listed in the previous question, which do you think is the most important? (1 response)
5. Which areas do you think should be covered by the Centre? (definitely, possibly, neutral, unimportant, definitely not) (randomised)
housing & construction/energy efficiency/economics/health/energy supply/policy analysis/consumer law/welfare/basic skills (eg literacy)
6. Out of all the areas listed in the previous question, which do you think is the most important? (1 response)
7. Are there any other functions or areas that you think should be covered by the Centre? (open)

8. What do you think the research priorities of the Centre should be? (definitely, possibly, neutral, unimportant, definitely not) (randomised)
- The role of the welfare benefits system
 - The social, environmental and economic dividends of fuel poverty programmes
 - National and international comparisons of policies and practice
 - Physical and psychological health issues
 - Monitoring of energy supply company provisions for vulnerable consumers
 - The role of energy advice and education
 - Evaluation of existing policy & programmes: effectiveness & how to improve
 - Standardising and revising definitions (eg income, fuel poverty)
 - The impact of fuel prices
 - Housing policy and practice (eg quality and under-occupancy)
 - Energy-using equipment in the home (eg standards and usage)
 - Responsibilities of UK versus devolved administrations
9. Out of all the research priorities listed in the previous question, which do you think is the most important? (1 response)
10. Are there any other research priorities you think should be covered by the Centre? (open)
11. How would you like to use such a Centre? (open)
12. Please indicate how much you agree with the following statements (strongly agree to strongly disagree)
- The Centre should be funded from sources:
 - independent of the UK Government
 - independent of industry
 - independent of campaigning organisations
 - which are independent (eg charitable foundations, research councils)
13. On a scale of 1 (low) to 5 (high), please indicate your level of support for the establishment of a Fuel Poverty Research Centre.
(if tick 1 or 2 goes to) Please give your reasons why you are not supportive of a Centre and suggest any alternatives. (open)
(if tick 4 or 5 goes to) What are your reasons for being supportive of a Centre? (open)
14. Do you have any further thoughts on what the Centre might look like and the role that it might take? (open)

Demographics/background information

In this final section we would like to ask you a few general questions about your experience and involvement in the field of fuel poverty.

15. What type of organisation do you work for? (1 response)
- academic/local government/national government/campaigning organisation or charity/energy supply industry/housing body/think tank or consultancy/other

16. How long have you been involved in the field of fuel poverty? (1 response)
<1yr, 2-4 yr, 5-10 yr, 10+ yr
17. How would you describe your level of expertise in the field of fuel poverty? (1 response)
expert/well-informed/limited knowledge
18. Are you involved with fuel poverty in a voluntary capacity? Yes/No
If Yes, please indicate the level of your involvement:
daily/weekly/monthly/annually/other
19. Please estimate the percentage of your paid work that is dedicated to fuel poverty:
0%/<10%/10-25%/26-50%/51-75%/76-100%
20. How would you describe your **main** role in the field of fuel poverty? (1 response)
researcher/practitioner/campaigner/civil servant/energy supplier/other
21. What is your **main** area of your research/interest in fuel poverty? (the next question gives you the option to indicate additional areas if your work covers more than one)
basic skills (eg literacy)/energy efficiency/fuel pricing/energy supply/
health/housing/social justice & exclusion/benefits & incomes/other
22. Does your research/interest in fuel poverty cover any other key areas?
basic skills (eg literacy)/energy efficiency/fuel pricing/energy supply/
health/housing/social justice & exclusion/benefits & incomes/other
23. Please provide your job title, department and research discipline (if applicable).
24. Please provide brief details (date, project/paper title, web-link) of your most recent written research in the field of fuel poverty, if applicable.
25. Please use this space if you wish to inform us of any relevant affiliations (eg Board membership, Trusteeship).

Final questions

26. The data from this questionnaire will form the basis of a report on the potential for a Fuel Poverty Research Centre. Some of the comments that you have provided may be highly relevant to this report. If this is the case, are you happy for us to attribute quotes to you in this report? Yes/No
27. The ECI, University of Oxford, and NEA will be holding a one-day workshop in Oxford sometime between 27 June – 1 July 2005 to discuss the role and institutional arrangement of a Fuel Poverty Research Centre further. The draft report will be circulated prior to the event for discussion at the workshop. Please indicate if you would be interested in attending this workshop (places are limited and it may be necessary to limit attendance to one representative per organisation) – details will be sent out closer to the time.
Yes, I would be interested in attending the workshop in June/July
No, I am not interested in attending the workshop but would like to be sent a copy of the draft report to comment on (available in June 2005)
No, I am not interested in attending the workshop but would like to be sent a copy

of the final report (available in August 2005)

No, I am not interested in attending the workshop and do not wish to receive any further information

28. A list of the people who have been invited to take part in this consultation is available on the ECI website at www.eci.ox.ac.uk/lowercf/fuelpovertycentre.htm. If there is anyone you think would be interested in participating in the consultation and who is not currently on the list, please provide their e-mail address here and we will invite them to fill out the questionnaire.

Results

The following tables provide a summary of the results to each question (excluding the open-ended questions).

Question 1

Please indicate if you agree/disagree with the following statements:

	poorly co-ordinated	lacking in focus	of insufficient quantity	effective in supporting policy	of a high standard	outdated	translated into practice effectively
Strongly agree	21%	9%	16%	4%	7%	1%	3%
Agree	53%	49%	38%	38%	32%	26%	22%
Neutral	16%	25%	21%	19%	43%	43%	24%
Disagree	10%	16%	25%	35%	15%	25%	43%
Strongly disagree	0%	1%	0%	3%	3%	4%	9%

N=68

Question 2

Do you think there are any important gaps in existing fuel poverty research?

Yes	87%
No	13%

N=68

Question 4

Please indicate which functions you think the Centre should cover:

	Dissemination of research	Informing policy	Carrying out research	Research synthesis	Resource centre	Programme evaluation
Definitely	87%	82%	63%	57%	56%	54%
Possibly	10%	15%	28%	35%	34%	40%
Neutral	0%	0%	6%	7%	9%	3%
Unimportant	1%	0%	0%	0%	1%	3%
Definitely not	1%	3%	3%	0%	0%	0%

	Commissioning research	Virtual community	Meeting place	Watchdog	Training
Definitely	41%	38%	21%	13%	9%
Possibly	43%	32%	37%	31%	47%
Neutral	12%	22%	22%	25%	29%
Unimportant	4%	6%	18%	15%	12%
Definitely not	0%	1%	3%	16%	3%

N=68

Question 5

Out of all the functions listed, which do you think is the most important?

Dissemination of research	Informing policy	Carrying out research	Research synthesis	Resource centre	Programme evaluation
15%	34%	16%	7%	12%	1%
Commissioning research	Virtual community	Meeting place	Watchdog	Training	
4%	9%	0%	0%	1%	

N=68

Question 6

Which areas do you think should be covered by the Centre?

	Energy efficiency	Policy analysis	Health	Welfare	Housing
Definitely	76%	77%	61%	53%	53%
Possibly	21%	18%	35%	35%	36%
Neutral	0%	3%	3%	9%	6%
Unimportant	0%	0%	2%	2%	3%
Definitely not	3%	2%	0%	2%	2%

	Economics	Energy supply	Law	Basic skills
Definitely	52%	35%	9%	6%
Possibly	33%	47%	50%	38%
Neutral	11%	12%	30%	36%
Unimportant	5%	5%	9%	11%
Definitely not	0%	2%	2%	9%

N=66

Question 7

Out of all the areas listed, which do you think is the most important?

Energy efficiency	Policy analysis	Health	Welfare	Housing
23%	39%	15%	9%	6%
Economics	Energy supply	Law	Basic skills	
6%	0%	0%	2%	

N=66

Question 9

What do you think the research priorities of the Centre should be?

	Dividends	Evaluation	Fuel prices	Welfare benefits	Definitions	Health
Definitely	80%	77%	65%	57%	54%	45%
Possibly	18%	18%	31%	31%	28%	43%
Neutral	0%	3%	5%	11%	15%	9%
Unimportant	2%	2%	0%	2%	3%	2%
Definitely not	0%	0%	0%	0%	0%	2%

	Housing	Advice	Comparisons	Energy company	Appliances	UK vs devolved
Definitely	45%	45%	43%	40%	31%	17%
Possibly	46%	43%	45%	29%	49%	46%
Neutral	5%	6%	11%	18%	14%	31%
Unimportant	3%	3%	2%	6%	5%	5%
Definitely not	2%	3%	0%	6%	2%	2%

N=65

Question 10

Out of all the research priorities listed, which do you think is the most important?

Dividends	Evaluation	Fuel prices	Welfare benefits	Definitions	Health
23%	42%	2%	3%	8%	5%
Housing	Advice	Comparisons	Energy company	Appliances	UK vs devolved
9%	3%	2%	3%	2%	0%

N=65

Question 13

Please indicate how much you agree with the following statements: The Centre should be funded from sources:

	From independent sources	Independent of industry	Independent of campaigning organisations	Independent of UK Government
Strongly agree	31%	23%	14%	22%
Agree	28%	31%	33%	14%
Neutral	27%	27%	34%	27%
Disagree	11%	16%	17%	28%
Strongly disagree	3%	3%	2%	9%

N=64

Question 14

On a scale of 1 (low) to 5 (high), please indicate your level of support for establishing a Fuel Poverty Research Centre.

Level of support	1	2	3	4	5
Percentage responding	0%	6%	19%	31%	44%

N=64

Question 18

What type of organisation do you work for?

Academic	22%
Campaigning organisation or charity	12%
Energy supply industry	9%
Housing body	3%
Local government	7%
National government	7%
Think tank or consultancy	13%
Public sector	10%
Not-for-profit or quango	7%
Other	9%

N=68

Question 19

How long have you worked in the field of fuel poverty?

1 year or less	2%
2-4 years	27%
5-10 years	36%
More than 10 years	36%

N=64

Question 20

How would you describe your level of expertise in the field of fuel poverty?

Expert	31%
Well informed	58%
Limited knowledge	11%

N=64

Question 23

Please estimate the percentage of your paid work that is dedicated to fuel poverty:

Percentage of paid work	Percentage of sample
0%	3%
1-10%	34%
11-25%	23%
26-50%	9%
51-75%	9%
76-100%	20%

N=64

Question 24

How would you describe your main role in the field of fuel poverty?

Campaigner	6%
Civil servant	9%
Energy supplier	9%
Practitioner	19%
Researcher	40%
Other	18%

N=68

Question 25

Please indicated the main area of your research/interest in fuel poverty:

Basic skills	2%
Benefits & income	5%
Energy efficiency	41%
Energy supply	2%
Fuel pricing	2%
Health	16%
Housing	14%
Social justice & exclusion	13%
Other	8%

N=64

Question 26

Does your research/interest in fuel poverty cover any other areas?

No other areas	0%
Basic skills	9%
Benefits & income	50%
Energy efficiency	50%
Energy supply	42%
Fuel pricing	50%
Health	52%
Housing	58%
Social justice & exclusion	45%
Other	33%

N=64

Appendix III – Survey respondents

First Name	Last Name	Organisation
Gordon	Angus	Eaga Partnership Limited
Allan	Asher	energywatch
William	Baker	Centre for Sustainable Energy
Dick	Barry	Unison
Stephen	Battersby	University of Warwick Law School
Graham	Bertram	Merthyr Tydfil Housing Association
Jonathan	Bradshaw	University of York
Naomi	Brown	Eaga Partnership Charitable Trust
Harriet	Bulkeley	University of Durham
Karen	Casson	University of Ulster
Keith	Chalmers	Scottish and Southern Energy
Bob	Cherryman	EST Wales
John	Cheshire	Eaga Partnership Charitable Trust
Diane	Clemison	Berkshire Health Care Trust
Pat	Conaty	Birmingham Settlement/ New Economics Foundation
David	Connor	Newcastle Warm Zone
Anita	Counsell	Adur, Arun and Worthing Teaching Primary Health Care Trust
Frank	Cowie	Falkirk Council
John	Crowe	Independent Consultant
Peter	Daley	Eaga Partnership Limited
Simon	Dresner	Policy Studies Institute
Frank	Duffy	Communities Scotland
Nick	Eyre	Energy Saving Trust
Charlotte	Gibson	National Assembly for Wales
Jan	Gilbertson	Sheffield Hallam University
Mike	Gill	Department of Health
Howard	Glennerster	London School of Economics
David	Gordon	University of Bristol
Jill	Harrison	British Gas
Adrian	Harvey	Eaga Partnership Charitable Trust
Jonathan	Healy	Combat Poverty Agency
Kate	Higgins	Capability Scotland
Philip	Kear	npower
Norman	Kerr	Energy Action Scotland
Sue	Lambert	Swansea University
Janice	Lyon	Aberdeen City Council
Majella	McCloskey	(formerly) National Energy Action, Northern Ireland
Lynne	McCullough	Ballymoney Borough Council
Douglas	McIlldoon	Ofreg
Ann	Milovic	Scottish Executive
Richard	Moore	Independent Housing Consultant
Jean	Morrison	SCARF
Dave	Murphy	Citizens Advice Bureau, Northern Ireland

Oliver	Myers	Camden Council
Dave	Ormandy	University of Warwick
Kevin	O'Rourke	Sustainable Energy Ireland
David	Orr	SFHA
Gill	Owen	Public Utilities Access Forum/ Warwick University
Joanne	Patterson	Cardiff University
Jacky	Pett	Association for the Conservation of Energy
David	Pickles	Local Government Association
Alan	Pither	Energy Efficiency Consultant and Trainer
Jim	Prosser	WLGA
Simon	Roberts	Centre for Sustainable Energy
Janet	Rudge	London Metropolitan University
Jorun	Rugkasa	Institute of Public Health
Brian	Scannell	National Energy Services
Tom	Sefton	London School of Economics
Bill	Sheldrick	Alembic Research Limited
Jim	Skea	UK Energy Research Centre
Sue	Stanton	National Grid Transco
Jo	Stevenson	General Consumer Council for Northern Ireland
Corinne	Thompson	Eaga Partnership Limited
Ruth	Thompson	National Grid Transco
Hilary	Thomson	Medical Research Council
Jeremy	Walker	Edinburgh University
Douglas	Watt	Soild Fuel Association
Graham	White	DTI

Appendix IV – Workshop participants

First name	Surname	Organisation
William	Baker	Centre for Sustainable Energy
Brenda	Boardman	Environmental Change Institute
Ron	Campbell	National Energy Action
Diane	Clemison	Berkshire Health Care Trust
Sarah	Darby	Environmental Change Institute
Simon	Dresner	Policy Studies Institute
Geoff	Green	Sheffield Hallam University
Gary	Grubb	Economic and Social Research Council
Gill	Hackman	Defra
Russell	Hamblin-Boone	Energy Retail Association
Jonathan	Healy	Combat Poverty Agency
Jack	Hulme	BRE
Philip	Kear	npower
Norman	Kerr	Energy Action Scotland
Eoin	Lees	EDF Energy Trust
Linda	Lennard	University of Leicester
Janice	Lyon	Aberdeen City Council
Peter	Matejic	DTI
Nick	Merleau-Ponty	National Energy Action
Richard	Moore	Independent Housing Consultant
Diana	Montgomery	British Gas
Tadj	Oreszczyn	University College London
Dave	Ormandy	University of Warwick
Gill	Owen	University of Warwick
Jane	Palmer	Environmental Change Institute
Jacky	Pett	Association for the Conservation of Energy
David	Pickles	Local Government Association
Alan	Pither	Energy Efficiency Consultant and Trainer
Jim	Prosser	WLGA
Janet	Rudge	London Metropolitan University
Jenny	Saunders	National Energy Action
Tom	Sefton	London School of Economics
Corinne	Thompson	Eaga Partnership Limited
Joanne	Wade	Eaga Partnership Charitable Trust