

Energy Action Grants Agency Charitable Trust  
Rural Development Commission  
CT 424/95/0006

*Report presented by  
Energy for Sustainable  
Development Ltd*

## **RURAL FUEL POVERTY**

**A project in South West Wiltshire to study  
rural fuel poverty and develop practical  
solutions**

*FINAL REPORT*



energy for  
sustainable  
development

February 1997

EAGA Charitable Trust  
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February 1997

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**Rural Fuel Poverty - A Project in the Wiltshire Rural Development  
Area to Study Rural Fuel Poverty and Suggest Practical Solutions**

**Final Report**

**February 1997**

**Acknowledgements**

The authors would like to thank the Energy Action Grants Agency Charitable Trust and the Rural Development Commission for the financial support they have given to this project. Many other agencies and individuals also gave assistance and support. Appendix 4 gives a comprehensive list of those who have helped, we apologise for any accidental omissions. In particular we would like to thank Adam Hunt, the field worker in the RDA, for his support and interest and the members of the steering group, Hugh Barton and Trevor Houghton, for their ideas and direction.

## Contents

|  |    |
|--|----|
| List of Tables and Figures.....  | ii |
| Abbreviations.....   | iv |
| Executive Summary.....   | v  |
| 1. Introduction.....   | 1  |
| 1.1 The purpose of this research .....   | 1  |
| 1.2 Justification for the research .....   | 2  |
| 1.3 Background to the project.....   | 4  |
| 1.4 Outputs of the study .....   | 5  |
| 1.5 The Project Area .....   | 5  |
| 2. The study activities and methodology .....  | 8  |
| 2.1 Study Activities.....  | 8  |
| 2.2 Survey Methodology.....  | 9  |
| 3. The Domestic Energy Situation in Rural Areas .....                                    | 11 |
| 3.1 Domestic fuel use.....   | 11 |
| 3.2 Rural Housing Assessment .....   | 18 |
| 3.3 Energy Efficiency Measures .....   | 20 |
| 3.4 Environmental Analysis.....  | 22 |
| 3.5 Specific Consultation - The Estate Sector.....                                       | 24 |
| 4. Rural indicators of fuel poverty .....  | 26 |
| 4.1 Housing .....  | 26 |
| 4.2 Home Energy Efficiency Scheme .....  | 30 |
| 4.3 Fuel supply and heating systems.....   | 32 |
| 4.4 Analysis of the data for the target groups .....                                     | 32 |
| 4.5 Other assessments of fuel poverty risk .....   | 33 |
| 4.6 Access to services .....   | 35 |
| 5. Summary of findings and conclusions.....  | 37 |
| 5.1 Fuel use in rural areas .....  | 37 |
| 5.2 Energy Efficiency .....  | 37 |
| 5.3 Perceived warmth and ease of heating .....   | 37 |
| 5.4 Take up of grants.....   | 37 |
| 5.5 Tenure and ability to heat.....  | 37 |
| 5.6 Energy Advice.....   | 38 |
| 5.7 Wood as a fuel.....  | 38 |
| 5.8 General Conclusions .....  | 38 |
| 6. Routes for future action in the RDA to assist households with their energy needs..... | 41 |
| 6.1 Energy Advice.....   | 41 |
| 6.2 Combining Energy Advice and Money Advice.....  | 41 |
| 6.3 Rural Energy Initiatives .....   | 42 |



|  |   |
|--|---|
| 6.4 Community Energy Businesses .....                          | 43  |
| 6.5 Recommendations to fuel utilities .....                    | 45  |
| 6.6 Recommendations to local authorities .....                 | 45  |
| 6.7 Recommendations to the Home Energy Efficiency Scheme ..... | 45  |
| 6.8 Recommendations to the Estate sector.....                  | 45  |
| Appendix 1   | Results Tables..... 46  |
| Appendix 2   | Fuel poverty - A description of the problem..... 51               |
| Appendix 3   | Assistance for energy efficiency for low income households.... 54 |
| Appendix 4   | Organisations Contacted..... 62                                   |
| Appendix 5   | References..... 65  |
| Appendix 6   | Survey Form..... 67   |

### List of Tables and Figures

|   |    |
|---|----|
| Figure 1.1: The RDA in South West Wiltshire.....  | 6  |
| Figure 2.1: Household tenure data from the parish survey census .....                         | 10 |
| Figure 3.1: Main heating fuels in the English domestic section 1991 .....                     | 11 |
| Figure 3.2: Main heating fuels in Upper Deverills Parish .....                                | 12 |
| Figure 3.3: Comparative cost in pence per kWh in useful energy for space heating .....        | 15 |
| Figure 3.4: Comparative cost in pence per kWh in useful energy for room heating.....          | 16 |
| Figure 3.5: Comparison of heating costs by fuel for central and room heating .....            | 17 |
| Figure 3.6: Comparison between RDA house types and the national average.....                  | 18 |
| Figure 3.7: Carbon dioxide emissions from the main domestic fuels .....                       | 23 |
| Figure 3.8: Average carbon dioxide emissions per household .....                              | 23 |
| Table 3.1: Comparison of heating systems in the RDA with national figures .....               | 13 |
| Table 3.2: Comparative heating costs for whole house heating in rural South West Wiltshire .. | 15 |
| Table 3.3: Comparative heating costs for room heating in rural South West Wiltshire.....      | 16 |
| Table 3.4: Percentage of households in each age range.....                                    | 19 |
| Table 3.5: House tenure from national statistics and survey data .....                        | 20 |
| Table 3.6: Energy efficiency measures in the three survey options .....                       | 21 |
| Table 3.7: Householders were asked about five other energy saving methods .....               | 22 |

|   |    |
|---|----|
| Table 3.8: The Estate's data on housing types, heating systems and energy efficiency..... | 25 |
| Table 4.1: Difficult to heat or afford to heat home by house type.....                    | 27 |
| Table 4.2: Heating difficulties linked with age of house.....                             | 27 |
| Table 4.3: Difficulty heating and affording to heat by tenure .....                       | 28 |
| Table 4.4: Percentage of each tenure group on low income .....                            | 29 |
| Table 4.5: Take up of HEES in the South West Wiltshire RDA.....                           | 30 |
| Table 4.6: Work covered by HEES .....   | 31 |
| Table 4.7: Difficulty to heat on the control group .....                                  | 32 |
| Table 4.8: Responses from target groups to difficult to heat questions.....               | 32 |
| Table 4.9: Comparison of difficult to heat houses with the control group .....            | 33 |
| Table 4.10: Fuel direct and prepayment meter customers .....                              | 34 |
| Table 4.11: Perception of everyday problems to households in the RDA. (All surveys).....  | 36 |
| Table A1.1: House Type.....   | 46 |
| Table A1.2: Age.....  | 46 |
| Table A1.3: Tenure.....   | 47 |
| Table A1.4: Energy efficiency measures.....   | 47 |
| Table A1.5: Energy efficiency investments.....  | 48 |
| Table A1.6: Other energy saving materials .....   | 48 |
| Table A1.7: Awareness of grants for home improvements .....                               | 49 |
| Table A1.8: Perception of household energy supply problems .....                          | 49 |
| Table A1.9: Willingness for use of wood as fuel .....                                     | 49 |
| Table A1.10: Central heating.....   | 50 |
| Table A1.11: HEES Eligibility .....   | 50 |

**Abbreviations**

|      |                                    |
|------|------------------------------------|
| EAGA | Energy Action Grants Agency        |
| EHCS | English House Condition Survey     |
| ESD  | Energy for Sustainable Development |
| HEES | Home Energy Efficiency Scheme      |
| HECA | Home Energy Conservation Act       |
| LEAC | Local Energy Advice Centre         |
| RDA  | Rural Development Area             |
| RDC  | Rural Development Commission       |
| REC  | Regional Electricity Company       |
| SAE  | Stamped Addressed Envelope         |
| SDC  | Salisbury District Council         |
| SOP  | Standards of Performance           |
| WCC  | Wiltshire County Council           |
| WWDC | West Wiltshire District Council    |



## Executive Summary

This study aims to provide information on domestic energy use and energy efficiency among lower income households in an area of south west Wiltshire designated a Rural Development Area, (RDA). In particular the study addresses the "fuel poverty" problem that affects those on low incomes living in energy inefficient homes. The work breaks new ground as there has been no previous study which has looked specifically at the problems of rural fuel poverty. Although focused on one area of the country, the study is intended to provide insights which can be applied more generally, particularly in rural England. In addition to providing information on the present position and highlighting problem areas, the study suggests actions for alleviating fuel poverty.

This research wished to address such questions as:

- Are low income households experiencing fuel poverty in rural areas?
- Is the situation worse or better in the rural areas than the towns and cities?
- What are the specific problems in rural areas which are different from the urban setting?
- If the research team identifies specific problems, are there possible solutions to these problems?

The study was primarily an information gathering exercise. The main source of data was the public from whom information was gathered thorough a questionnaire survey targeted at three specific groups:

- Group 1 Salisbury District Housing Department tenants
- Group 2 Older people contacted through luncheon clubs
- Group 3 A control sample parish survey in the Upper Deverills Parish in West Wiltshire District .

The purpose of the control survey was to have a representative sample of typical rural households to compare with the two target groups above and with national average household data.

Additional information and assistance also came from fuel suppliers in the area, local authority departments, large private sector estate landlords and community and voluntary groups.



**Main findings****Perceived warmth and ease of heating.**

- Many householders found their homes difficult to heat or difficult to afford to heat.
- One third of the control group found their homes difficult to heat and a quarter found them difficult to afford to heat.
- The number of households with difficult-to-heat and difficult-to-afford-to-heat homes rose dramatically in the target groups of older people, disabled and invalids, and young families. For example three quarters of families with young children stated that they found it difficult to afford to heat their homes.

**Tenure and ability to heat.**

- A high proportion of private sector tenants found their homes difficult to heat.
- Public sector tenants also reported this problem but their greater concern was difficulty to afford to heat.
- Owner occupiers reported a much lower level of heating difficulty.
- Rented properties owned by large estate land owners lag behind other tenures in terms of energy efficiency and modern heating systems.

**Energy Advice.**

- More information and advice on energy efficiency is required to encourage take up of available energy efficiency grants and/or investment by households in energy efficiency measures.

**Fuel use.**

- Information from fuel suppliers proved to be inadequate for developing an accurate picture of the fuel supply profile in the area. This was for two main reasons - a reluctance on the part of the large utilities to supply information and small local suppliers of coal, oil and wood did not keep adequate records. The decision was taken to use the household surveys as an alternative route for establishing the fuel supply mix.
- Consumers in the control group were well informed about fuel use irrespective of income group, generally using the cheaper fuels wherever possible.
- Oil fired central heating was the most common form of heating amongst Group 3, oil being a cheap and convenient fuel. In Group 1 properties, oil was perceived as an expensive form of heating and tended to deter tenants from requesting it.
- Mains gas supplies were not present in the control group area and only a few

households in the Group 1 sample were connected to gas. Despite the fact that gas is the heating fuel of choice in about 80% of UK homes only 26% of the control sample thought the lack of gas was a problem.

- A high level of open fire only heating systems seems to exist among the Estate sector.

### **Energy efficiency.**

- Many of the households questioned would benefit from improved energy efficiency measures, but there is a general reluctance to invest in this area.
- Low cost measures such as draught proofing and loft insulation are absent in many of the homes, particularly among the target groups 1 and 2. Loft insulation, is reported as being required in one fifth of the sample of older people's homes.
- Group 2 was the most reluctant to invest in energy efficiency measures and being older people they have one of the greatest needs for warm, energy efficient homes.
- Take up of available grants for energy improvement was very low, this particularly applies to the Home Energy Efficiency Scheme grants.
- The allocation of HEES grant funding for Wiltshire in 1997 will allow only approximately 600 homes to be fitted with loft insulation and draught proofing. The need in the RDA only for these measures is several times greater than this.
- Private estate sector rented households seem to have low levels of energy efficiency measures.

### **Wood as a fuel.**

The study had an interest in the use of wood as a fuel given that it is produced locally and has a neutral effect on global warming.

- Wood fuel was used by 23% of the control sample Group 3.
- Wood was less widely used among the target groups 1 and 2. In the case of Group 1, local authority tenants, many homes did not have fires which could burn wood. In the case of the older people groups there were a number who were using coal and there was little interest in using wood. Compared to coal it was seen as expensive, more difficult to use and provided less heat.
- Wood is a useful fuel in the rural area with a major part to play in the overall energy balance but it would be wrong to target its use at low income and special heating needs groups who may not find it ideal. If it can be made available at a reasonable price the choice whether to use it is then the consumers, whether on a low income or not.



## **Recommendations**

The study makes the following recommendations for assisting in alleviating fuel poverty in the RDA.

### **- Energy Advice.**

Energy advice services should be linked to advice services already operating in, or being set up in, the RDA. These services are likely to be targeted at groups such as the unemployed, older people, the disabled and families, all of who have been identified as requiring energy advice. It would not be economically viable to have a dedicated service purely giving energy advice in the RDA.

Local authorities should also be encouraged to promote assistance which is available for known target groups. An example of this would be promoting HEES grants to all recipients of council tax benefit.

Another route for delivering energy advice at village level could be through the training of 'Energy Stewards'. These would be local volunteers with basic training to promote energy efficiency in their parish. There is interest from the Wiltshire Agenda 21 group in this area.

### **- Rural Energy Initiatives.**

The study recommends exploring innovative and original methods of promoting energy efficiency in villages. One such innovative scheme is the Energy-Saving Village of the Year Competition which has been piloted in Oxfordshire by the Oxfordshire Energy Advice Centre.

The survey work gave the impression to the survey team that singling the fuel poor out as a group for particular attention in a village would not be the best approach. A scheme which involves all members of the village and has the aim of warmer homes and more energy efficiency for all would be more likely to succeed.

### **- Community Energy Business**

Investigate the possibility of setting up a Community Energy Business (CEBs) to deliver energy efficiency services in the RDA.

The aims of a community energy business would be to:

- i) Provide employment and training for people living in the RDA
- ii) Improve insulation and heating standards in the homes of families in the area, particularly those on low incomes who would have difficulties funding the improvements themselves.
- iii) Reduce fuel bills

- iv) Increase utilisation of available grants
- v) Develop other areas of energy efficiency work outside the scope of grant funding.

The long term grant support for a CEB is uncertain. Local authorities and other organisations who could assist with start up funds and grants will expect such an organisation to become self sufficient. A CEB must therefore be a commercial undertaking and may have to diversify its activities in order to become a viable business.

#### **Recommendations to fuel utilities**

- Gas supplies are only available in a few of the larger centres in the RDA. There is an evident level of interest in the area to which private suppliers of gas may wish to respond.
- The electricity supply services should aim to make bill paying facilities and key charging services as widely available as possible in rural villages through sub-post offices and shops.

#### **Recommendations for local authorities**

- Housing departments should continue their efforts to improve insulation standards in their properties and provide tenants with cost effective heating systems. The data indicates that many local authority tenants still experience difficulties in affording to heat their homes. This is because a significant proportion of these tenants are on low incomes. The opportunities provided by the further liberalisation of energy markets in 1998 give local authorities the chance to help their tenants receive discounted fuel supplies from suppliers.

#### **Recommendations to the Estate sector**

- The Estate sector, as a large private sector landlord in rural areas, needs to concentrate its efforts in improving the energy efficiency standards of its properties. Innovative financing schemes and routes for government assistance should be looked at and developed.

#### **Recommendations for the Home Energy Efficiency Scheme (HEES)**

- More study of the delivery of HEES in rural areas should be carried out to look into possible measures for increasing take up. The level of take up of HEES grants by those eligible is low according to the data collected. For example there may be justification for additional subsidies for rural jobs to compensate for the extra cost network installers incur when carrying them out.



## 1. Introduction

### 1.1 The purpose of this research

The main purpose of this research was to study fuel poverty in a rural area.

One definition of fuel poverty is "the inability to afford adequate warmth in the home". The fundamental causes of fuel poverty in rural areas are similar to those in the urban environment. These causes, including low income, the use of expensive fuels and energy inefficient housing, in combination can lead to the inability of low income householders to keep warm. The majority of research carried out on fuel poverty has been in the urban areas, little work has been done to consider the specific issues of fuel poverty in rural areas.

This research wished to address such questions as:

- Are low income households experiencing fuel poverty in rural areas?
- Is the situation worse or better in the rural areas than the towns and cities?
- What are the specific problems in rural areas which are different from the urban setting?
- If the research team identifies specific problems, are there possible solutions to these problems?

The joint funders of this research are the Energy Action Grants Agency Charitable Trust and the Rural Development Commission. The Eaga-CT are the charitable arm of Eaga Ltd, an organisation which administers the government funded Home Energy Efficiency Scheme. This scheme, explained in more detail later in this report, is one of the few direct funding methods by which low income households can improve the energy efficiency of their homes.

The Rural Development Commission gives as its goal in the RDA "the achievement of significant economic and social improvements to benefit all those living and working in the area". Obviously the RDC has a much wider remit of activities than Eaga which is primarily interested in assisting the fuel poor. However, those living in rural areas in or on the margins of poverty are clearly a specific interest group to the RDC. There is often a lack of communication between those addressing rural poverty issues and those in the fuel poverty lobby. The fuel poverty lobby are predominately involved in the urban environment and with public sector housing. Those suffering from "hard to heat" homes in rural areas can go unnoticed. The study team wished to highlight problems in rural areas and make the link between the two different sets of

interest groups

## 1.2 Justification for the research

There are several features unique to rural areas which can exacerbate fuel poverty:

- a lack of good quality housing for those on low incomes;
- the absence of connection to the gas network in many rural areas leading to a reliance on electricity or solid, "bulk buy" fuels;
- poor transport links can make paying bills, charging key meters and accessing energy services difficult;
- increased exposure to the weather and a higher percentage of detached housing can lead to greater heating needs than in the urban environment;
- a high proportion of private rented sector housing is found in rural areas; this is often the most neglected section of the housing stock used by low income groups.

There have been many studies and reports on the problems of fuel poverty based on urban experience<sup>1</sup>. The main points arising are:

- 1.7 million dwellings in England and Wales, 5%, cannot be 'adequately heated' to a standard of 18°C in the living room and 13°C in other rooms when the external temperature is -1°C<sup>2</sup>.
- although low income households spend less on energy than more affluent households, the money spent represents a higher percentage, 10%, of their household expenditure as compared to an average figure of 4.7%<sup>3</sup>. This disparity was exacerbated by the controversial introduction of VAT on domestic fuel in April 1994.

Data on the heating problems of low income households in SW Wiltshire is not widely available, but it is unlikely that there are fewer cases of hardship than other

---

1 See Appendix 4

2 "English House Condition Survey 1991 "

3 "Family Expenditure Survey 1995 "t

rural areas. Some statistics gathered for this study indicate that there will be a sizeable minority of families and householders with fuel related problems:

- 20% of households in the SW Wiltshire RDA do not have central heating, of these homes 87% are in the rented sector. The private rented sector often contains those householders least able to afford the high cost of heating, often energy inefficient houses, a situation they are unable to improve.
- a study<sup>4</sup> in Salisbury District identified that 14% of older people wishing to move to sheltered accommodation cited cold or damp homes as being a major factor for their decision.
- The recent English House Condition Survey Energy Report (1996) states that it consistently found rural houses to be less energy efficient than urban houses, particularly in the rented sector.

There is also evidence that heating problems could be worse in rural areas:

- the Audit Commission reports<sup>5</sup> that 15% of the national housing stock is in a poor condition, but in rural areas, this rises to 22%. Poorly maintained properties are often the hardest to heat.

There are statistics which suggest there are a sizeable number of households on low incomes within the RDA:

- the RDC study in Pewsey, Wiltshire in 1994, found 25% of the households surveyed to be in, or on the margins of, poverty according to the definition of the study<sup>6</sup>. Pewsey has a similar geographic and economic profile to RDA designated regions.

Others studies suggest that fuel poverty is not only shown as an inability to afford adequate warmth in the home, but may also manifest itself for those families that choose to heat their homes at the expense of other necessities such as food, clothing, shoes etc.

Where rural fuel poverty exists householders use a number of strategies to lessen the

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4 "Now or Never: Community Care Planning "- University of Southampton

5 Healthy Housing: The role of environmental services, 1991

6 "Lifestyles in Rural England ", Paul Cloke



impact of inadequate heating. Methods for conserving energy often include: only heating one room, keeping the heating at a low level, minimising the use of hot water or cutting down on the amount of cooking done.

### 1.3 Background to the project

The origin of this project is the interest Energy for Sustainable Development has in rural energy matters and social issues. ESD has worked in the field of sustainable energy supply in rural areas for some time; from the study of the utilisation of wood crops for energy use to assessing the potential of wind farms. The difficulties experienced by low income households living in energy inefficient buildings is also an area of work where ESD staff have considerable experience. It was through this link that ESD became aware that there has been little study of the particular problems faced by rural communities in meeting their energy needs. When in November 1994 the Energy Action Grants Agency advertised for project proposals to:

- i) clarify the nature, extent and consequences of fuel poverty, and
- ii) offer insights into the opportunities for the energy efficient and cost effective relief of fuel poverty,

ESD saw it as an opportunity to take their ideas further and carry out a study.

Based in Wiltshire, ESD wanted to carry out the study locally. The south west portion of Wiltshire has been designated a Rural Development Area (RDA) by the Rural Development Commission (RDC). RDAs are areas which have been identified as having a concentration of key economic and social problems. ESD approached the RDC who gave their support to the proposed project. A proposal was submitted to the EAGA in January 1995 and ESD were awarded the contract to carry out the work.

In order to ensure a well monitored and directed project, representatives from the University of West of England, Town and Country Planning Department and the Bristol Energy Centre, Centre for Sustainable Energy were brought in to form a steering group and advise the project staff.

The RDA field worker and the Wiltshire County Council Chief Executive's department also had a keen interest in the project. They suggested applying for some funding from the Rural Development Commission to cover additional aspects of the environmental and economic effects of any proposals or initiatives arising from the project. A proposal was submitted to the RDC in July 1995 and funding confirmed in November 1995.



## 1.4 Outputs of the study

The study will have the following outputs:

- this final report which can be used as a reference document on the domestic energy situation for rural households, particularly focusing on those on low incomes,
- this report also develops possible solutions for alleviating some of the domestic energy related problems in rural areas,
- guidelines for taken these projects forward in the form of potential projects or recommendations to bodies and organisations in the area who can have an impact on these problems by their own actions,
- dissemination of the findings of the project through the networks concerned with rural poverty issues and those involved with fuel poverty,
- advice and information to householders who took part in the energy survey who may be able to receive assistance from the HEES.

## 1.5 The Project Area

The South West Wiltshire Rural Development Area covers an area of 67,378 hectares which is nearly 20% of the total area of Wiltshire. The RDA contained 21,687 people in 1991 which corresponds to a particularly low population density of 0.3 persons per hectare. The RDA is split between two Districts, Salisbury and West Wiltshire, comprising a portion of each one. The project area is shown in Figure 3.1.

### 1.5.1 Age Profile

The population has a higher than average proportion of older people, 9.5% being over 75, the average for England is 6.1 (1991 census). The younger population is lower than the national average, this is particularly marked in the 16-24 year old age group where the RDA figure of 10% is less than half the English average of 20.1%.

### 1.5.2 Economic Profile

The economically active proportion of the RDA is 56.1%, similar to the average English figure of 58.8%. Unemployment rates are lower than average with 5.2 % being unemployed; the English average was 8.5% in 1991. There is a high level of self employed people in the Area compared to the County as a whole. Some

particular areas of the RDA have higher unemployment levels reaching nearly 10% in some areas.

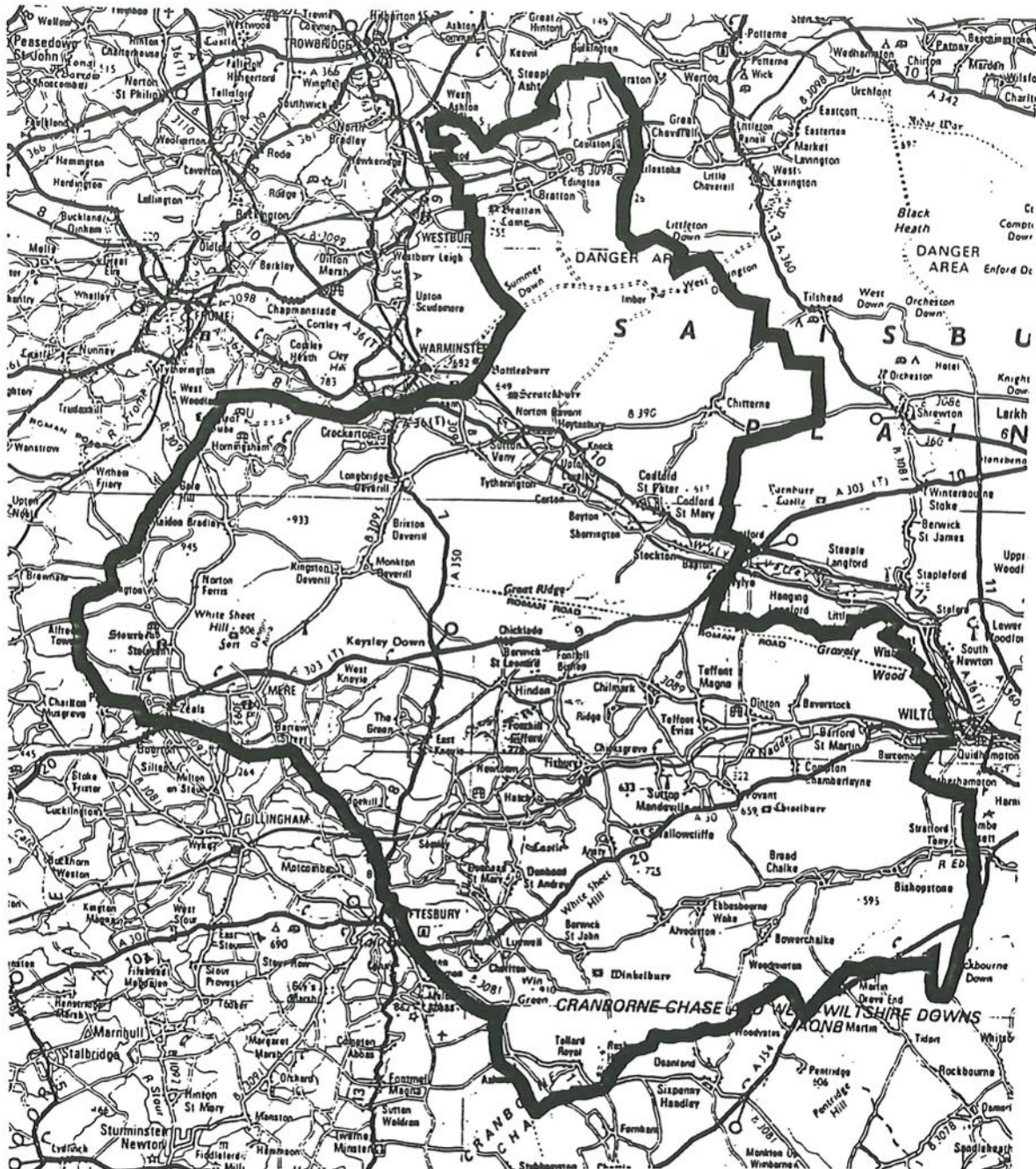


Figure 1.1 The RDA in South West Wiltshire



### **1.5.3 Housing**

Sixty-three percent of homes in the RDA are owner occupied, 15% are council owned, 9.8% rented with a job or business and 11.1% owned by private landlords. Housing association properties were very few in 1991 only 1% of the total. There is a perceived shortage of housing for young single people and couples according to interview work carried out by the RDC.

### **1.5.4 Services and Facilities**

A rural facilities survey was undertaken in 1991 and noted a marked decline in services from a previous study in 1989. One in four of the villages have no key facilities except a church. Pharmacies, doctor's surgeries, primary and pre schools, post offices and petrol stations are all particularly poorly represented.

## **2. The study activities and methodology**

### **2.1 Study Activities**

#### **2.1.1 Project set up and information search**

A reference search for published material on subjects related to rural fuel poverty was performed. A list of references is given in Appendix 5. The project also contacted other organisations who it was thought may have an interest in the project or be able to assist the project in some way. A list of organisations contacted is also given in Appendix 4.

As a result of the initial contacts made, several meetings were held throughout the period of the project, with most of the organisations listed in Appendix 4.

#### **2.1.2 Data collection on the energy supply and energy efficiency industry in the area**

An analysis of the energy supply options was carried out and involved contacting companies engaged in supplying energy in the area. This work was to provide the study with information on the supply networks, relative costs and possible future developments in the demand and fuel use in the area.

#### **2.1.3 The Household Surveys**

The purpose of the survey was to gather data on energy supply, energy prices and energy efficiency measures in a range of household types. This assisted in establishing the priorities and problem areas and was the basis of proposals for further action. The questionnaire surveys targeted the general public and particular sub sectors who may be suffering from particular heating problems. From discussions in the project meetings and the steering group meeting held on 29th November 1995, it was decided to carry out three types of survey. The same questionnaire was used for all three survey types. A copy of the survey form is attached in Appendix 6:

##### **i) A mailshot to 300 Salisbury District local authority properties**

**Aim** - to survey the current state of the local authority housing stock and record the opinion of the residents of the housing stock. This is a tenure group which is likely to contain some householders on low incomes.

Three hundred out of approximately 800 tenants in the area received the questionnaire along with a covering letter. The full range of household types within the public sector were covered. The Salisbury District Housing (SDH)



department usually has at least a 40% return rate as long as a SAE is enclosed. SDH has provided the SAEs for this survey. 129 survey forms were returned completed, a return rate of 43%.

ii) **A parish survey undertaken by ESD in West Wilts District.**

**Aim** - To survey an entire Parish within the RDA, irrespective of house type or income group, providing a control set of data for comparison with other sets of survey data.

The Upper Deverills are a group of small villages within West Wilts District in the west of the RDA. All households were supplied with a questionnaire form. Sixty nine survey forms were collected which is 46% of the 150 houses listed on the electoral role. Non - returns were due to unwillingness of householders to participate in a few cases, but mainly due to nobody being at home when we called to collect the form.

iii) **Visits to day centres and luncheon clubs run or assisted by Social Services.**

**Aim** - To directly target older people, identified as one group likely to be having heating difficulties.

ESD met with the development officers for Social Services in both districts. They assisted in locating centres where ESD could carry out interviews.

Horningsham WRVS Luncheon Club - 10 forms completed

Edington Friendly Circle - 13 forms completed

Tisbury Luncheon Club - 11 forms completed

#### 2.1.4 Results analysis

Extensive analysis of the data gathered from the energy supply survey and the household survey provided the information and results presented in this report. The data was entered on in a computer database and analysed using relational queries.

#### 2.2 Survey Methodology

The idea of the survey work was to target those who may be suffering from fuel poverty problems and also, through the parish survey, establish a control sample of a typical rural parish in the RDA.

The Salisbury District Housing sample was effective in covering some of the target

group as 58 respondents were either claiming benefits which made them eligible for HEES grants or were drawing state pensions. This was 45% of the sample.

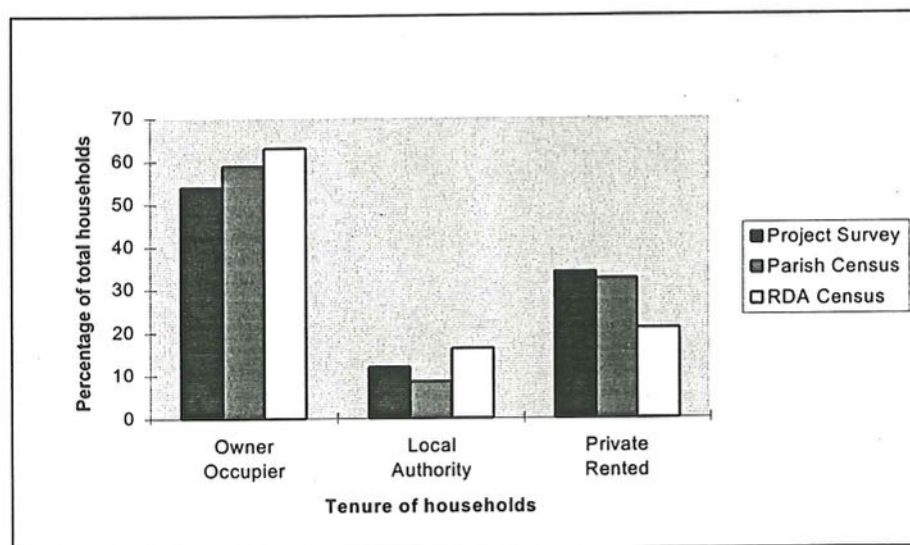
The luncheon club samples are small (34 in total) and not statistically significant when used on their own. They do provide useful qualitative information on the opinions and choices of older people in the RDA.

For the parish survey we first had to ensure that the Parish itself was representative of the RDA as a whole and secondly that the sample we surveyed was representative of the Parish.

### 2.2.1 Selection of the parish

This was done with the assistance of the Chair of the Wiltshire Parish Councils Association. Several parishes, thought to be "typical" of the area were proposed and approached. The Upper Deverills Parish was the most receptive to the idea of the survey. Further discussions with the Parish Clerk indicated that it was a suitable parish to survey.

Figure 2.1 below compares tenure data from the survey, the parish census in 1991 and



**Figure 2.1 Household tenure data from the parish survey and census**

the census data for the RDA as a whole. It can be seen that the data from the project survey and the parish census are similar but there is some difference from the RDA Census data. The private rented sector in the Upper Deverills is greater than the RDA average and the local authority households are less. The RDA census data is in fact skewed by a few large villages containing large numbers of council properties.

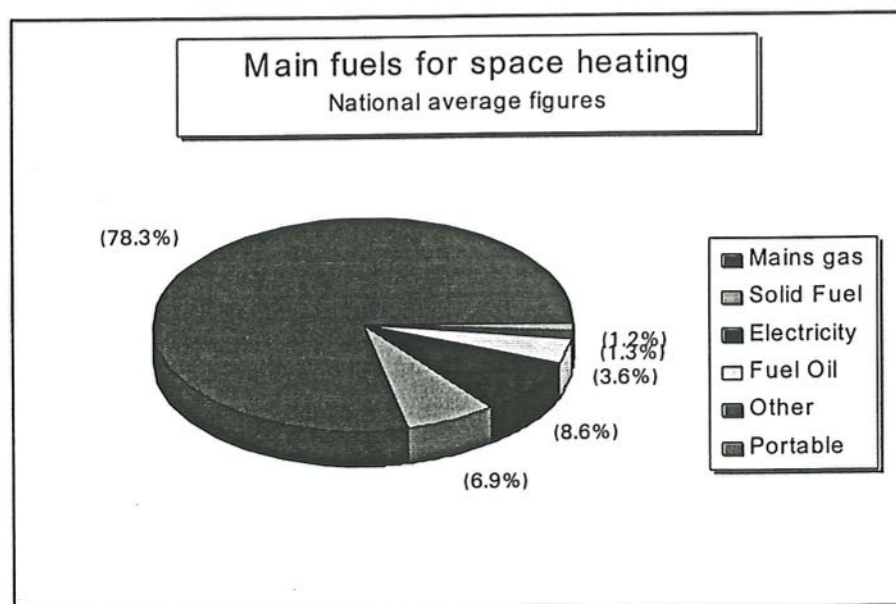
### 3. The Domestic Energy Situation in Rural Areas

This chapter presents the domestic energy situation in the study area and also contrasts it with the national domestic energy situation. The findings of the energy supply and household surveys are set out and information from other sources are also analysed.

#### 3.1 Domestic fuel use

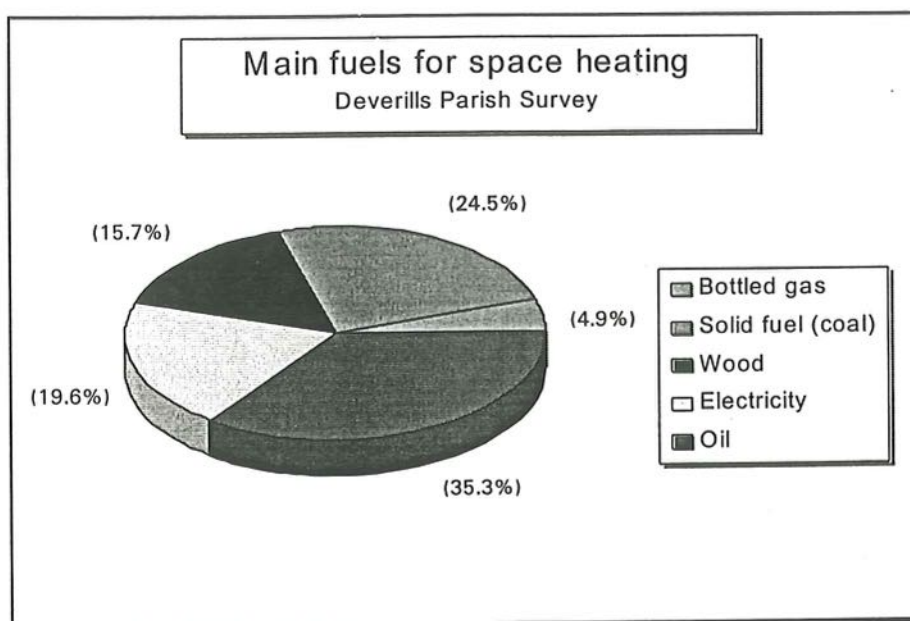
The fuel supply profile in rural areas differs from that for the UK as whole. The main differences are due to the restrictions on burning certain types of coal and wood in urban areas and the lack of availability of mains gas in rural areas. The data from the control survey in Upper Deverills Parish was used to provide the fuel mix of a "typical" rural parish. Figures 3.1 and 3.2 show the differences between UK national figures and the heating options utilised in the Parish.

The national data for the number of households using each heating fuel as their main heating fuel as a percentage of total household numbers comes from the English House Condition Survey 1991. This distinction is not so clearly made in our parish survey where respondents often listed 2 or 3 main types of heating, the pie chart in Figure 3.2 is the average of their responses. This can be explained by the fact that rural homes often use several different heating systems at the same time. For instance a wood burning stove will heat a living room while an oil fired Aga runs partial central heating elsewhere.



**Figure 3.1** Main heating fuels in the English domestic sector 1991





**Figure 3.2** *Main heating fuels in Upper Deverills Parish*

Table 3.1 shows the primary and secondary heating fuels both on a national basis and for the Deverills parish. The figures for the Deverills are taken from the survey and the national figures from the 1991 English House Condition Survey. The data from the parish survey is given directly as the householders answered; the figures for main and secondary heating are the number of incidences householders indicated each form of heating to be present. As mentioned above, the figures under main heating add up to over 100% as several households indicated more than one form of main heating.

The data available nationally and from the parish survey is not directly comparable for a number of reasons. The national data only lists solid fuel, with no separate listing for wood. For the purpose of this study it is assumed that wood is included in the solid fuel figures. Additionally the national figures for secondary heating only apply to homes with central heating so exclude other forms of main heating. However these differences are only minor and do not alter the fundamental, and obvious, difference in fuel mix.

| Fuel used for heating  | Main heating system |            | Secondary heating |            |
|--|---------------------|------------|-------------------|------------|
|  | Deverills           | Nationally | Deverills         | Nationally |
| % of households using the fuel for main or secondary heating |                     |            |                   |            |
| Mains gas  | 0                   | 80         | 0                 | 37         |
| Propane and bottled gas                                      | 7                   | 2          | 11                | 6          |
| Solid fuel   | 35                  | 7          | 6                 | 12         |
| Oil  | 52                  | 3          | 0                 | 0          |
| Electricity  | 29                  | 8          | 22                | 9          |
| Wood   | 23                  | -          | 35                | -          |
| Other  | 8                   | 1          | 4                 | <0.01      |

**Table 3.1 Comparison of heating systems in the RDA with national figures**

The use of different fuels in the rural area is explained by several factors: fuel availability, tradition and fuel cost.

The main difference between the overall UK figures and the survey area is the supply of mains gas which is not available in the Deverills parish.

LPG or bottled gas is available as an alternative to natural gas and is supplied locally to the South West from the oil field at Wych Farm, Dorset. There are added conditions to using bottled gas, particularly in the installation and maintenance of the cylinders.

The other noticeable difference between rural areas and the UK as a whole is in the use of solid fuels. The use of coal and wood has been reduced drastically in the UK partly through the cost of the fuel, but also due to the implementation of the Clean Air Act in the 1970's. In the South West of the UK only the major conurbations have been included in the legislation. Bristol is the only city in the South West where the act is applicable to 100% of the land area.

Oil requires local storage if it is to be used by domestic households. Due to the space implications of oil storage, oil only tends to be used in rural or peri-urban areas. The large difference between rural use of oil (52% in our survey) and national use which is predominately urban (3%) indicates this to be the case.

After availability of fuels is taken into account, type of fuels is then decided by cost. To compare costs of energy sources, the cost must be calculated on an end use basis. That is the cost of useful energy. Even though a fuel may be cheap, if there are no appropriate technologies to extract heat from the fuel, then the extra difficulty in extracting the energy may increase the overall cost.

The Sutherland tables have been used to compare the end use cost of various fuels. They compare the cost of useful energy from each source. These costs have been adjusted for this study to reflect the specific energy cost in the rural area of Wiltshire. The fuel costs for the main fuels used in the RDA are shown in Tables 3.3 and 3.4 the tables compare the absolute cost of the fuels and the comparative energy end use cost. The end use cost is calculated from the unit cost using an efficiency factor shown in the tables. The assumption made in Table 3.2 is that the fuel is the main energy supplier to the home and that it is used in conjunction with a domestic boiler system. Table 3.3 is for heating appliances which just heat one room.

Many of the fuels used in rural areas are bought in bulk and require storage facilities. Although not listed in these tables, it is also necessary to take into account the additional costs of fuel storage. For oil and LPG this is the cost of storage tanks, for coal and wood some form of bunker.

For LPG central heating a tank needs to be supplied and fitted. This is frequently supplied free of charge but the cost to the installer is recouped by a quarterly charge for the rent and maintenance of the tank. For oil tanks, the householder is responsible for the purchase installation of the tank.

The costs for boiler systems also vary depending on the fuel that is used in the system. The boiler systems for bottled gas are marginally more expensive than for mains gas, additionally about £50 per system. For an oil fired system there is less choice and the boilers can be almost twice as expensive for the same capacity, although the heating load is higher.

The wood systems tend to be cheaper than for gas, up to £150 cheaper depending on the system. But counteracting this is the need in many cases for lined chimney flues to prevent damage to the chimney breast from tar deposits when using a closed wood burning appliance. A local property owner put this cost at £1200 per flue.



|             | Comparative Heating Costs |              |                   | Average Efficiency |               | Cost in pence per useful kWh | Cost per useful kWh |      |
|-------------|---------------------------|--------------|-------------------|--------------------|---------------|------------------------------|---------------------|------|
|             | Central Heating           |              |                   | Space heating      | Water Heating | Space heating                | Water Heating       |      |
| Solid Fuel  |                           | Supply unit  | Price/ p per unit | %                  | %             |                              |                     |      |
| 1           | Household Coal            | 50 Kg        | 594               | 60                 | 25            | 2.38                         | 5.70                |      |
| 2           | Anthracite Nuts           | 50 Kg        | 844               | 70                 | 25            | 2.50                         | 6.99                |      |
| 3           | Anthracite Grains         | 50 Kg        | 837               | 70                 | 30            | 2.64                         | 6.17                |      |
| 4           | Homefire                  | 1 tonne      | 20000             | 70                 | 30            | 2.96                         | 6.90                |      |
| 5           | Anthracite                | 1 tonne      | 13700             | 70                 | 30            | 2.16                         | 5.05                |      |
|             |                           |              |                   |                    |               |                              |                     |      |
| Wood        |                           |              |                   |                    |               |                              |                     |      |
| 1           | Survey average            | Load (tonne) | 4550              | 60                 | 25            | 2.73                         | 6.55                |      |
| 2           | Split wood                | m3           | 4650              | 60                 | 25            | 2.79                         | 6.70                |      |
| 3           | Pole 2m                   | m3           | 3800              | 60                 | 25            | 2.28                         | 5.47                |      |
|             |                           |              |                   |                    |               |                              |                     |      |
| Electricity |                           |              |                   |                    |               |                              |                     |      |
| 1           | Standard Domestic         | kWh          | 7.64              | 100                | 70            | 7.64                         | 10.91               |      |
| 2           | Economy 7                 | kWh          | 2.69              | 100                | 70            | 2.69                         | 3.84                |      |
| 3           | Night rate                | kWh          | 8.22              |                    |               | 8.22                         | 11.74               |      |
|             |                           |              |                   |                    |               |                              |                     |      |
| Gas         | 1                         | kWh          | 1.433             | 70                 | 35            | 2.05                         | 4.09                |      |
| LPG         | 2                         | Propane      | litre             | 19.3               | 70            | 35                           | 3.88                | 7.75 |
|             | 3                         | Calor Gas    | litre             | 15.9               | 70            | 35                           | 3.19                | 6.39 |
|             |                           |              | 17.9              |                    |               | 3.60                         | 7.19                |      |
| Oil         | Heating Oil               | litre        | 15.8              | 70                 | 35            | 2.18                         | 4.36                |      |

Table 3.2 Comparative heating costs for whole house heating in rural South West Wiltshire

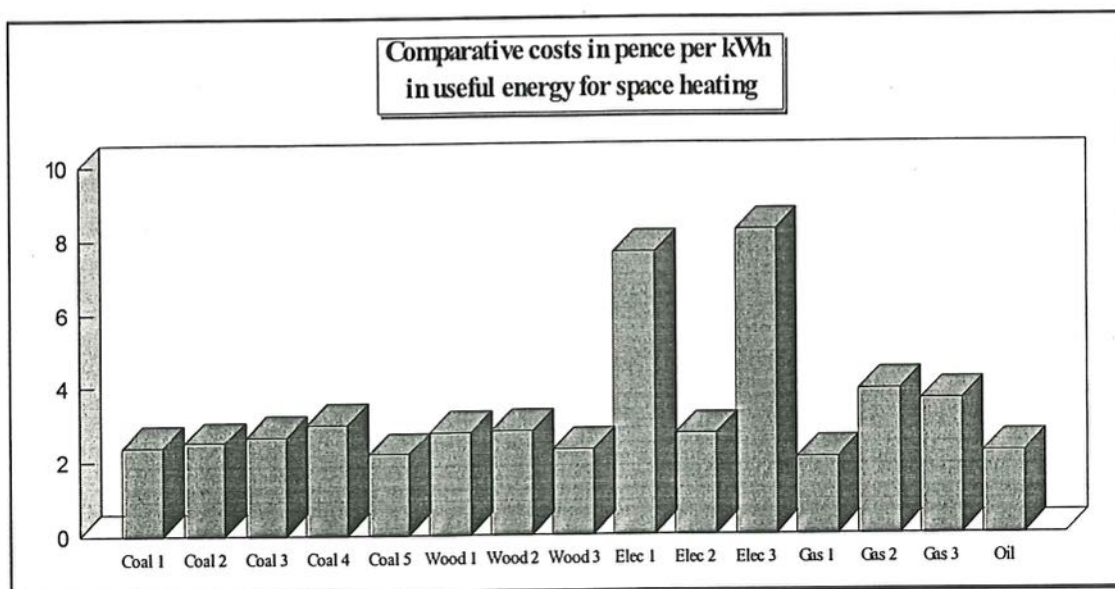


Figure 3.3: Comparative cost in pence per kWh in useful energy for space heating

| Comparative Heating Costs |                                   |               |                   | Average Efficiency | Cost in pence per useful kWh |
|---------------------------|-----------------------------------|---------------|-------------------|--------------------|------------------------------|
| Room heating              |                                   |               |                   | Room heating       | Room heating                 |
|                           |                                   | Supply unit   | Price/ p per unit | %                  |                              |
| Solid Fuel                | 1 Household Coal - Open Fire      | 50 Kg         | 594               | 28                 | 5.09                         |
|                           | 2 Coalite - Open Fire             | 50 Kg         | 985               | 37                 | 5.99                         |
|                           | 3 Anthracite - Closed roomheater  | 50 Kg         | 844               | 60                 | 2.91                         |
|                           | 5 Homefire - Open fire            | 1 tonne       | 20000             | 37                 | 5.60                         |
|                           | 6 Anthracite - Closed roomheater  | 1 tonne       | 13700             | 60                 | 2.52                         |
|                           |                                   |               |                   |                    |                              |
| Wood                      |                                   |               |                   |                    |                              |
|                           | 1 Survey average                  | Load (tonne)  | 4550              | 28                 | 5.85                         |
|                           | 2 Split wood                      | m3            | 4650              | 60                 | 2.79                         |
|                           | 3 Pole 2m                         | m3            | 3800              | 60                 | 2.28                         |
| Electricity               |                                   |               |                   |                    |                              |
|                           | 1 Standard tariff - Electric fire | kWh           | 7.64              | 100                | 7.64                         |
|                           | 2 Economy 7 - Storage heater      | kWh           | 2.69              | 90                 | 2.99                         |
|                           | 3 Economy 7 - day fire            | kWh           | 8.22              | 100                | 8.22                         |
| Gas                       |                                   |               |                   |                    |                              |
|                           | 1 Radiant Convector               | kWh           | 1.52              | 60                 | 2.53                         |
|                           | 2 Wall heater                     | kWh           | 1.52              | 73                 | 2.08                         |
|                           | 3 Decorative effect open fire     | kWh           | 1.52              | 28                 | 5.43                         |
| LPG                       |                                   |               |                   |                    |                              |
|                           | 1 Propane - radiant/convector fir | 47kg cylinder | 2139              | 60                 | 5.46                         |
|                           | 2 Butane - Butane heater          | litre         | 1099              | 92                 | 6.72                         |

Table 3.3 Comparative heating costs for room heating in rural South West Wiltshire

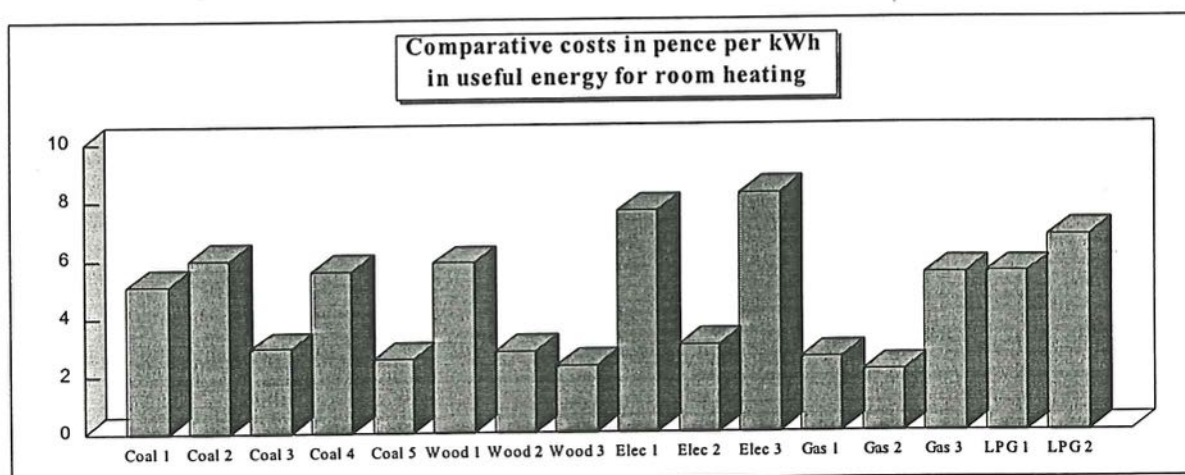


Figure 3.4 : Comparative cost in pence per kWh in useful energy for room heating

Coal fuelled systems are either the same price as the wood or slightly more expensive. If the fuel is burnt as a mixture of wood and coal with over 25% coal a coal adapter kit is required

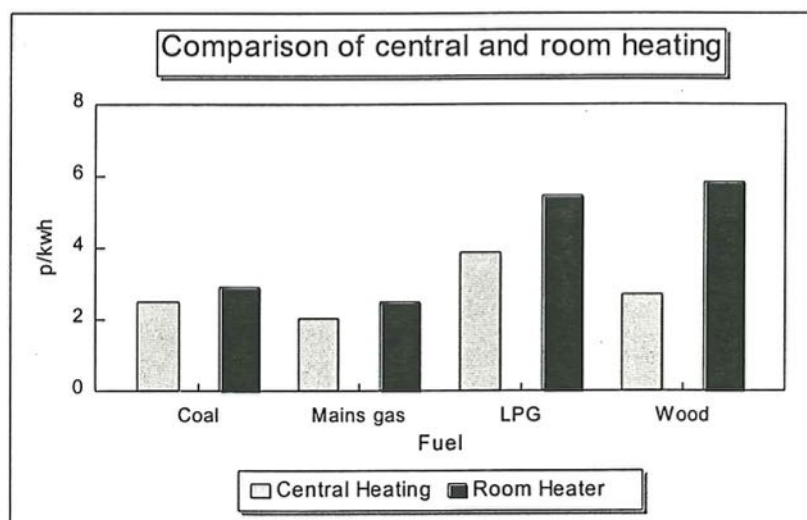
Electric storage heating systems are usually relatively cheap to install. However, the time of heating is not flexible, and to maintain the temperature of the house, a high level of insulation is required.

In summary, oil and Economy 7 are the cheapest fuels when running an existing system. Mains gas is also relatively cheap to run, with the solid fuel systems being slightly more expensive. However, mains gas is generally not available in rural areas.

Wood and coal are more expensive than mains gas or Economy 7. They have the disadvantage of requiring to be hand fed, which can cause difficulty for some groups of people.

### 3.1.1 Central heating and room heating

Comparison of Tables 3.2 and 3.3 provide some interesting results, selected fuels are shown in Figure 3.5 below.



**Figure 3.5** Comparison of heating costs by fuel for central and room heating.

In Figure 3.5 efficient forms of room heating have been chosen for comparison with central heating and it can still be seen that they are more expensive for a kWh of heat. More inefficient heat sources such as coal or wood open fires increase this difference, a Coalite open fire costs 5.99 p/kWh, compared with a coal central heating system of about 2.5 p/kWh. This comparison is made here as it is often the lower income householders who survive with room only heating methods. They cannot afford to



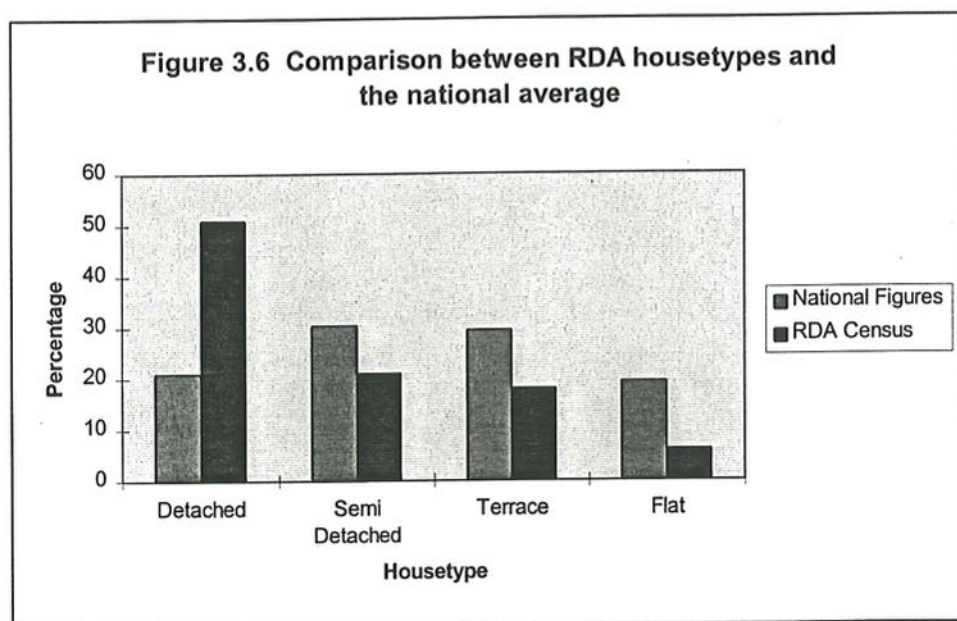
install central heating systems, or their landlords are reluctant to install them, so pay more for their heat.

## 3.2 Rural Housing Assessment

### 3.2.1 Housing Type

The survey and local Census data show that the type and age of buildings in rural areas differs greatly from the national average. Figure 3.6 compares the relative percentage of the house types found in the RDA with national figures, see also Table A1.1 in the Appendix 1.

The most obvious difference is a much larger percentage of detached housing in the RDA compared to the national average. There is a corresponding but smaller reduction in the percentage of the other house types to make up for this. As detached housing has greater heat loss characteristics than the other types, we investigated whether this led to an increased incidence of heating hardship amongst those living in detached housing in rural areas.



### 3.2.2 Housing Age

Table 3.4 presents figures on house ages from national figures in the English House Condition Survey and the project survey.

| Percentage figures %   | pre 1900 | 1900 - 1965 | 1965 - 1980 | 1980 -pres. |
|--|----------|-------------|-------------|-------------|
| National figures for rural areas ( <i>Table A3.23 EHCS</i> ) | 24       | 38          | 27          | 9           |
| National figures for urban areas ( <i>Table A3.24 EHCS</i> ) | 15       | 52          | 22          | 8           |
| Project Survey*  |          |             |             |             |
| Control group  | 56       | 15          | 20          | 9           |
| Salisbury DHD  | 5        | 50          | 42          | 3           |
| Low income   | 12       | 41          | 46          | 1           |

**Table 3.4** *Percentage of households in each age range*

\* The survey data is only for the households which responded with a positive answer to these questions. Low income households are deemed to be those receiving some form of benefit payments.

### 3.2.3 House Tenure

The published data from the 1991 Census for the Kingston Deverill Parish control matches well with the control group data collected in the same area as would be expected, see Table 3.5 below. The match is not so good with the RDA as a whole or with national data for rural areas. In both cases the control group and Census Parish data show that the Deverills Parish has a higher proportion of public and private rented properties than the national, rural and RDA averages.

| Percentage figures %                      | Owner<br>Occupier | Local<br>Authority/<br>HA | Private<br>Rented |
|---|-------------------|---------------------------|-------------------|
| National Statistics<br>(Table EHCS A3.22) | 65                | 22                        | 8                 |
| Urban                                     | 63                | 25                        | 7                 |
| Rural                                     | 74                | 12                        | 10                |
| Census 1991 in RDA                        | 63                | 16                        | 21                |
| Kingston Deverill                         | 59                | 8                         | 32                |
| Project Survey                            |                   |                           |                   |
| Control group                             | 54                | 12                        | 34                |
| Low income                                | 8                 | 81                        | 9                 |

**Table 3.5** *House tenure from national statistics and survey data*

### 3.3 Energy Efficiency Measures

#### 3.3.1 Survey results on energy efficiency

For the survey results see Table 3.6. The main points are:

- Low levels of window and door draught proofing, especially amongst the Salisbury District Housing group and the luncheon club sample.
- A low level of loft insulation amongst the luncheon club sample.
- A high perceived need for double glazing amongst the Salisbury Housing and luncheon club group.

The first two points suggest a need for the type of services provided by the Eaga Home Energy Efficiency Scheme. Further analysis of the data for households without draught proofing or loft insulation indicated that 100 households were eligible for the benefits, but only 3 stated they had accessed the grant.

Householders were also asked whether they would be willing to invest in energy efficiency improvements, see Table 3.7. For the Salisbury survey 25% said yes and 53% said no, for the Deverills survey 33% said yes and 48% said no. For the luncheon clubs for older people only 12% said yes they would invest while 68% said no. This illustrates a general reluctance by the survey groups to invest in energy efficiency.

Households were asked whether certain energy efficiency measures were installed in



their homes and, if not, whether they thought they were needed.

| Energy Efficiency Measure (% is national average)* | Salisbury District Housing (Sample size 129) |          | Deverills Parish (Sample size 69) Control group |          | Day centres and luncheon clubs (Sample size 34) |          |
|--|--|----------|---|----------|---|----------|
|  | Fitted %                                     | Needed % | Fitted %  | Needed % | Fitted %  | Needed % |
| Cylinder lagged                                    | 85   | 7        | 91  | 1        | 74  | 9        |
| Window draught stripping (36%)                     | 28   | 40       | 51  | 19       | 32  | 32       |
| Doors draught stripping                            | 29   | 48       | 43  | 23       | 38  | 32       |
| Loft insulation (91%)                              | 78   | 9        | 80  | 10       | 53  | 21       |
| Cavity wall insulation (26%)                       | 57   | 19       | 29  | 7        | 18  | 12       |
| Solid wall insulation                              | 9  | 12       | 19  | 10       | 3   | 6        |
| Secondary/double glazing (52%)                     | 49   | 39       | 64  | 13       | 32  | 26       |
| Heavy curtains                                     | 36   | 23       | 39  | 13       | 44  | 6        |
| Thermostatic radiator valves                       | 17   | 15       | 39  | 14       | 29  | 12       |

\* data from the English House Condition Survey 1991

**Table 3.6** *Energy efficiency measures in the three survey groups*

*N.B. It must be stressed that this data only provides an indication of the householders perception of whether the particular measures are fitted or needed. ESD did not check whether these measures were indeed fitted, missing, required or even if it was practical to fit them.*

Householders were asked about 5 other energy saving methods, see Table 3.7. A common method of minimising heating costs is to heat only one room in the house or flat to an acceptable level. This kind of heating behaviour often indicates an ability to heat the home properly and is an indicator of fuel poverty. It can seem that a lower percentage of the control group indicated this activity.

An interesting response in the survey was a uniform zero to the question of whether householders used "other low energy appliances". This question was asked immediately after a question about low energy light bulbs which initiated a large response. The wording of the question may have led to a misunderstanding, but there are a large number of, low energy washing machines, refrigerators, computers and other appliances on the market and it was unusual to receive a negative response from a large sample. Awareness of these energy efficiency appliances appears to be low compared to some other European countries.

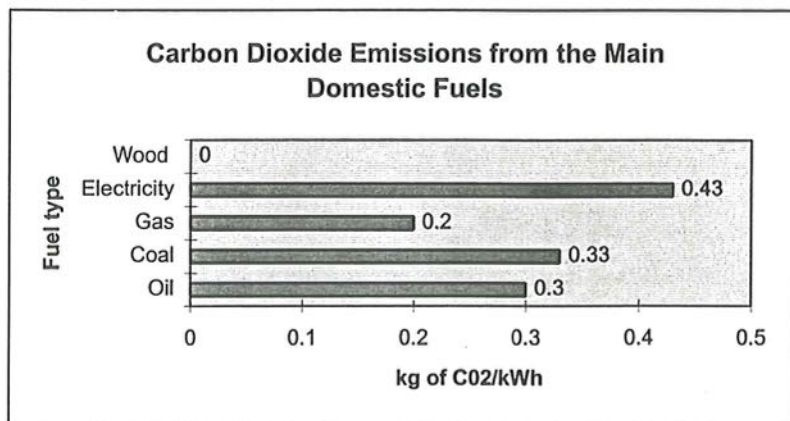
| Energy Saving Measure<br>(% of households) | Salisbury<br>District<br>Housing | Deverills<br>Parish | Day centres and<br>luncheon clubs |
|--|----------------------------------|---------------------|-----------------------------------|
| Heating only one room                      | 28                               | 14                  | 24                                |
| Turning off appliances<br>when not in use  | 91                               | 77                  | 62                                |
| Low energy light bulbs                     | 25                               | 26                  | 15                                |
| Other low energy<br>appliances             | 0                                | 0                   | 0                                 |
| Turning down<br>thermostats                | 30                               | 42                  | 12                                |

*Table 3.7 Other energy saving methods*

### 3.4 Environmental Analysis

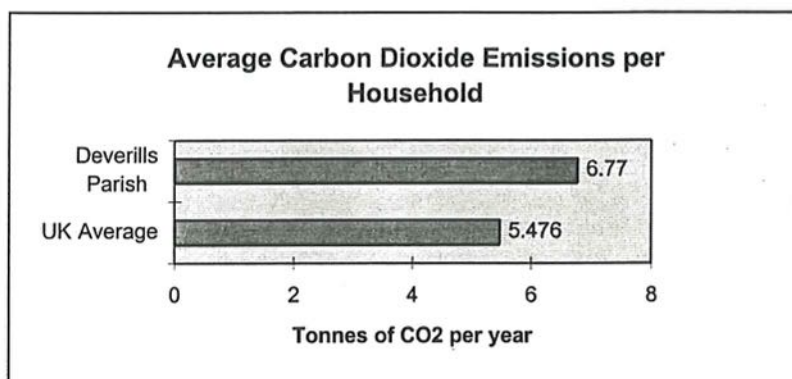
The predicted problems of global warming have made the environmental implications of energy use a prime concern of governments around the world. At a local level the Agenda 21 initiatives in the UK are trying to encourage local authorities and local communities to look at their emissions of greenhouse gases and try and reduce them. While this aspect of energy use may not be seen to link directly with fuel poverty it is worth some further analysis. Of particular interest is the effect the unique rural mix of fuels may have on the environmental effects of energy use. Figure 3.7 below shows the carbon dioxide emissions per kWh from the main domestic fuels. It can be seen from Figs 3.1 and 3.2 above that the fuels used more widely in the rural area than the national average, oil, coal and electricity have greater emissions of CO<sub>2</sub> than gas the predominate heating fuel in the UK.

Wood, however, which is prevalent in rural areas for heating, is taken as having zero net CO<sub>2</sub> emissions. This is really only the case if the wood comes from a sustainable source where as much new wood is grown, over time, as is removed for fuel.



**Figure 3.7 Carbon Dioxide Emissions from the Main Domestic Fuels**

An average figure for annual energy use in the RDA has been estimated at 24,000 kWh per annum<sup>7</sup>. Using the fuel mixes in Figs 3.1 and 3.2 and the data from Fig 3.7 the average emissions for the UK and the Deverills Parish are shown in Figure 3.8 below.



**Figure 3.8 Average Carbon Dioxide Emissions per Household**

Figure 3.8 is only an approximate assessment as a greater proportion of the fuel mix in each case will be electricity as this is used for other household needs. The effect of this would be to increase the emissions of each group by a similar amount so can be ignored. As can be seen from Fig 3.8 the CO<sub>2</sub> emissions for the Parish sample are over 1 tonne per annum greater than the national average, this is despite the effect of the use of wood with a neutral effect on CO<sub>2</sub> emissions.

<sup>7</sup> This figure has been estimated from annual figures for different tenures and the tenure statistics for the RDA.



This would suggest that for environmental reasons alone greater emphasis should be placed on energy efficiency in rural areas.

### 3.5 Specific Consultation - The Estate Sector

One aspect of rural areas, especially in Wiltshire, is a large Estate sector, These are large private land owners who frequently own and manage many farms, cottages and other residential properties located on their land.. These properties may be tied cottages for estate workers or let out on lease; often to ex-workers and their relations. Rents are often low and this can lead to a lack of funds for estates to make improvements. We consulted one large estate landlord with over 200 properties in the RDA and listed below are a selection of some of their comments:

- The Estate tends to convert existing solid fuelled heating systems to oil fired central heating when they become due for renewal. Solid fuel systems are thought only to be economic for those households who require heat all day long.
- Virtually every property on the Estate has one or more open fireplace, stove or wood burner.
- Very few tenants have approached the Estate for energy efficiency improvements such as loft insulation, draught proofing etc, however in the last 2 years some 5% of households have applied for permission for outside agencies to install such improvements.
- Rental income does place a limit on the income for improvements. To circumvent this problem long lease arrangements (16 years) have been entered into on a few semi-derelict cottages to provide the capital required to repair them and bring back into use.
- Government grant sources have not been found effective in assisting with improvements. Without long lease arrangements tenants are often not eligible. The Estate manager was interested in methods by which such public investment could be seen to benefit the householder and not just the Estate, for instance a period of reduced rent to reflect the level of grant received.
- When fitting closed wood burning appliances they have found the need for a lined chimney flue to prevent tar damage to chimney breasts. These are expensive, on average £1200 per chimney which outweighs any extra cost of an oil fired boiler and tank.

| <b>Property type</b>   | <b>Number</b>           |
|--|-------------------------|
| Farm house   | 13                      |
| Semi-detached  | 119                     |
| Detached   | 86                      |
| <b>Heating System</b>  |                         |
| Open Fire  | 214                     |
| Solid Fuel Central Heating (coal)  | 42 (+7 partial systems) |
| Solid fuel CH (wood)   | 9                       |
| Oil fired CH   | 46                      |
| Gas CH   | 3                       |
| Electric night storage heating   | 14                      |
| <b>Energy efficiency measures</b>  |                         |
| Double glazing (partial)   | 41                      |
| Double glazing (total)   | 7                       |
| Loft Insulation (not inc. those insulated by tenants without notifying landlord) | 125                     |

**Table 3.8** *The Estate's data on housing types, heating systems and energy efficiency measures.*

The above data would suggest that nearly 100 of the 218 properties do not have a more sophisticated heating system than open fires. The incidence of energy efficiency measures is also not high.

## **4. Rural indicators of fuel poverty**

This section looks at the effect that the rural domestic energy environment described in Section 3 may have on those vulnerable to fuel poverty.

### **4.1 Housing**

The condition and type of the housing stock has proved to be a good indicator of measure of difficulty in heating homes. The study looks at i) the types, ages, and tenures of the houses in the RDA, and ii) the energy efficiency measures of those households. Comparisons are made between the low income households, the control group, census statistics and national statistics. The data gathered in the survey has been analysed and the key results displayed in tables, see Annex 1, these are referenced in the text where appropriate.

#### **4.1.1 House type**

The study considered in detail the responses of the occupants of each house type to questions about the level of difficulty in heating homes and their ability to afford that heating, see Table 4.1.

Any correlation between the building type and the ability of the householder to heat it is not straight forward. This is illustrated in detached houses and bungalows, which are technically more difficult to heat due to greater heat loss area. The survey showed that respondents in detached housing give a low concern to questions regarding "difficulty to heat", whereas those living in bungalows gave a moderate concern. But neither group showed as much concern as those living in the other three house types which, technically, should be more energy efficient and therefore less expensive to heat.

An explanation is likely to be the relative incomes of those living in the different house types. Detached houses are often, but not always, occupied by wealthier householders.



| Percentage of each house type | Difficult to heat | Difficult to afford to heat |
|-------------------------------|-------------------|-----------------------------|
| Bungalow (68)                 | 38%               | 54%                         |
| Detached (38)                 | 26%               | 13%                         |
| Semi-detached (66)            | 65%               | 62%                         |
| Flat (14)                     | 57%               | 79%                         |
| Terraced (41)                 | 66%               | 76%                         |

**Table 4.1** *Difficult to heat or afford to heat home by house type*, (Source ESD Survey -Total sample) Sample size in brackets

#### 4.1.2 Age

Table 4.2 shows the survey results by age of the house. Differences between the age groups are not large but overall the 1900 -1960 age group is the most difficult to both heat and be able to afford to heat. It may have been expected that the pre-1900 properties would have been worse but it is likely that oldest properties are either of thick walled construction and therefore better insulated, or occupied by more affluent people. The fact that the 1900-1960 housing is also the largest single house age group as well as having the highest percentage dissatisfaction would indicate that this is a group where particular attention is needed. Significantly, the lack of any government requirement to upgrade the thermal efficiency of existing housing is highlighted as a problem.

| Percentage of each house age group responding yes | Difficult to heat<br>% | Difficult to afford to heat<br>% |
|---|------------------------|----------------------------------|
| Pre 1900 (49)                                     | 49%                    | 24%                              |
| 1900-1960 (64)                                    | 58%                    | 77%                              |
| 1961 -1980 (60)                                   | 38%                    | 57%                              |
| 1981-present (8)                                  | 38%                    | 38%                              |

**Table 4.2** *Heating difficulties linked with age of house*, (Source ESD Survey)

Sample size in brackets

The control group in the Deverills Parish showed a somewhat larger number of pre-

1900 households than the national average, 71% compared with the national figure for rural areas of 63%, see Table A1.2 in Appendix 1. The low income and Salisbury DC groups were both lower at 53% and 55% respectively.

#### 4.1.3 Tenure

Table 4.3 summarises the *difficulty in heating* linked to tenure. Other tenancies were almost all tied houses. The sample size for this group was very small, 11, so the absolute numbers have been given in brackets after the percentages. Table 4.3 summarises difficulty in heating linked to Tenure. The results indicate that it is the private rented and local authority tenures which have the highest percentage of householders who feel they cannot afford to or have difficulty heating their homes. This is interesting as the *difficult to heat* question initiated the highest percentage response from the private households whereas the *difficult to afford* initiated the highest percentage response from the local authority (LA) households.

| Percentage of each<br>tenure group responding<br>yes | Difficult to heat<br>% | Difficult to afford to<br>heat % |
|--|------------------------|----------------------------------|
| Owner Occupied (51)                                  | 24                     | 22                               |
| Local Authority (138)                                | 57                     | 71                               |
| Private Rented (25)                                  | 64                     | 40                               |
| Other tenancy*(11)                                   | 27 (3)                 | 9 (1)                            |

**Table 4.3 Difficulty heating and affording to heat by tenure**

Using benefit income as an indicator of low income, the numbers of the low income households in each tenure group can be shown in Table 4.4. The LA tenants have nearly twice the percentage take up of benefits than the private rented sector. The fact that the private rented sector responded highly to the difficult to heat question could indicate that the dominant effect in the private rented sector is thermally inefficient houses, whereas the LA sector shows low income to be dominant.

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| <b>Tenure group</b>   | <b>Drawing government<br/>benefits %</b> |
|-----------------------|--|
| Owner Occupied (51)   | 16                                       |
| Local Authority (138) | 59                                       |
| Private Rented (25)   | 32                                       |
| Other tenancy*(11)    | 9 (1)                                    |

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*Table 4.4 Percentage of each tenure group on low income*

#### **4.1.4 Conclusions from Housing Statistics**

A link between house construction types and difficulty experienced in heating was not clearly correlated.

The age of the house does seem to be an important factor, with those built between 1900 and 1960 cited as being particularly hard to heat.

Tenure is the single most important link to heating difficulty with local authority tenants experiencing the most difficulty followed by private sector tenants. There is more of a mix of incomes in the private sector than the local authority sector where low incomes predominate. This demonstrates the clear link between hard to heat homes and low income.

#### **4.1.5 Awareness of grants for energy efficiency and eligibility for assistance**

Awareness of grants for energy efficiency improvements in the home is low. Eligibility is much higher than the number of grants applications. An analysis has been carried out of the number of installations under the Home Energy Efficiency Scheme<sup>8</sup>. Table 4.5 shows the number of installations in the RDA in recent years. A total of 579 jobs were undertaken in the 1992 -1995 period.

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<sup>8</sup> see Section 4.2 for a description of this scheme



|        | Number of jobs completed |                  |               |
|--------|--------------------------|------------------|---------------|
|        | Loft Insulation          | Draught proofing | Energy Advice |
| 1995   | 150                      | 289              | 306           |
| 1994   | 133                      | 174              | 191           |
| 1993   | 32                       | 52               | 55            |
| 1992   | 17                       | 27               | 27            |
| Totals | 332                      | 542              | 579           |

*Table 4.5 Take up of HEES in the South West Wiltshire RDA* (Source: Eaga Ltd)

An analysis was made from readily available data sources such as census data and the ESD survey data of the likely numbers of households which could be eligible for free or subsidised loft insulation and/or draught proofing under the HEES scheme. This data is shown in Table A1.11 in Appendix 1. Numbers of people unemployed, over 65 years old and with long term illness were taken as households which would be likely to be eligible for HEES grants. The number of these households was 7648 compared with the HEES take up in the above table, Table 4.5, which shows 579 grants have been accessed (all households receive energy advice). This is a take up rate of 7.5%.

The ESD survey data only found three homes which had accessed a HEES grant although 100 of the households surveyed were receiving the passporting benefits required to claim HEES support, see below.

## 4.2 Home Energy Efficiency Scheme

This scheme is run by the Energy Action Grants Agency and covers England, Scotland and Wales. It is the only Government fund dedicated to improving energy efficiency of households. It is available for those in both owner occupied and rented accommodation. There are two categories of grant now available:

### i) Grants for those on certain benefits:

- Income Support
- Housing Benefit
- Council Tax Benefit
- Family Credit
- Disability Working Allowance

### Disability Living Allowance

These benefits are called passporting benefits as a recipient automatically receives the grant without the need for an additional means test.

The full cost of the energy efficiency work is paid for these households.

Grants for those over 60 : A reduced sum is paid towards the cost of the work if the householder is not receiving any of the above benefits.

Table 4.6 shows the work that is covered. Grant is paid to a company which carries out the work and covers the following:

| Measures or assistance available   | Benefit | Over 60 |
|--|---------|---------|
| 1. Draught proofing doors and windows<br>(and insulating hot water cylinder) | £198.70 | £49.68  |
| 2. Loft insulation   | £128.50 | £32.13  |
| 3. Both 1) and 2)  | £305.00 | £76.25  |
| 4. Energy Advice   | £10     | £10     |

**Table 4.6 : Work covered by HEES**

The householder can also carry out the work themselves, but the grant is lower in this case.

To apply for a HEES grant the householder first contacts EAGA to find out the details of installers in their area and then contacts them directly.

Since the scheme began in 1991 almost 2 million homes have accessed the grant. The average savings in annual fuel costs is £39 if the same heating patterns are maintained.

In December 1996 the Department of the Environment announced a broadening of the scheme to include cavity wall insulation and better heating system controls - no substantial extra finance has been added to pay for these extra measures. This change will come into effect in April 1997.

The annual budget for HEES grants for 1997 in Wiltshire will allow for only about 600 jobs. Obviously only a proportion of these funds will come to the RDA. This number is clearly inadequate to meet the identified need.

### 4.3 Fuel supply and heating systems

All groups surveyed had lower percentages of households with central heating than the national average. NB this is likely to be an anomaly for the control group as the census data for this parish indicates a higher percentage. For the Salisbury District Council Group central heating installation is only 36% compared with a national average of 84%. Table 4.7 shows how the control group perceived the “difficulty to heat” or “difficulty to afford to heat” criteria for the different heating fuels.

| Heating System<br>(Deverills Parish) | Difficult to Heat<br>% | Difficult to<br>afford to heat<br>% |
|--------------------------------------|------------------------|-------------------------------------|
| Electric main heating                | 47                     | 21                                  |
| Solid fuel main heating              | 29                     | 13                                  |
| Wood fires main heating              | 25                     | 13                                  |
| Oil central heating                  | 28                     | 33                                  |

**Table 4.7 : Difficulty to heat on the control group**

This data shows that of the four main fuels utilised, electricity stands out as the most difficult to heat with. It is interesting that oil is seen as an expensive fuel as Table 2.2 shows it to be relatively cheap. A possible reason for this is the requirement to bulk buy this fuel giving it a high perceived cost.

### 4.4 Analysis of the data for the target groups

This section presents a more detailed assessment of data collected from those considered to be vulnerable target groups, ie older people, those with young children, the disabled and invalids.

| Target group                         | Difficult to Heat<br>% | Difficult to<br>afford to heat<br>% |
|--------------------------------------|------------------------|-------------------------------------|
| 1. Older people (71)                 | 45                     | 54                                  |
| 2. Disabled and invalids (16)        | 31                     | 56                                  |
| 3. Families with young children (25) | 68                     | 76                                  |
| 4. Control group (Deverills Parish)  | 33                     | 25                                  |

**Table 4.8 Responses from target groups to “difficulty to heat” questions**

Sample size in brackets

It can be seen that target groups find it considerably more “difficult to afford to heat”



their homes on average than the control group. The difference is less marked with the "difficult to heat" question except for families with young children where the response was very high for both questions. This is a significant finding as often attention is paid more to elderly and the infirm, whereas it appears that families with young children have as much, if not more difficulty with heating. Young families are less likely to have significant savings, are more likely to be in rented property and may not receive as much support from social services, family and friends as the other two groups.

A comparison was made between the control group and those who responded that their homes were difficult to heat. The results are shown in Table 4.9. The percentage lacking certain energy efficiency measures is higher for all the measures for the "difficult to heat" group. A further significant statistic is that this group is less willing than the control group to invest in energy efficiency measures even though they have a greater need.

It is difficult to draw the conclusion from the above responses that all the people who state that their homes are difficult to heat or difficult to afford to heat are actually suffering fuel poverty. It is a subjective question similar to asking someone if the cost of living is too high, people are likely to say yes. However, it is interesting to note that the yes responses from the target groups thought to be at risk are significantly greater than the control group

| ENERGY EFFICIENCY MEASURES                     | Difficult to Heat<br>% | Control group<br>% |
|--|------------------------|--------------------|
| No draught proofing on windows                 | 74                     | 49                 |
| No draught proofing on doors                   | 72                     | 57                 |
| No loft insulation                             | 33                     | 20                 |
| No double glazing                              | 59                     | 36                 |
| Would invest in energy efficiency measures     | 28                     | 33                 |
| Would NOT invest in energy efficiency measures | 55                     | 48                 |

*Table 4.9 Comparison of "Difficult to heat" homes with the control group*

## 4.5 Other assessments of fuel poverty risk

### 4.5.1 Method of fuel payment

Another method of looking at those who may be in a fuel poverty situation is to look at how they pay their fuel bills. In recent years the gas and electricity utilities have brought in guaranteed payment methods for some consumers rather than allow them to get into debt or suffer disconnection. Often these methods are used to recover

existing debt while allowing current energy consumption.

| Survey  | Fuel direct or<br>Prepayment meters | Percentage of<br>total |
|---|-------------------------------------|------------------------|
| Upper Deverills Parish<br>(69)                | 7                                   | 10%                    |
| Salisbury DHD (129)                           | 26                                  | 20%                    |
| National figures 1989<br>22 million customers | 2.7 million customers               | 12%                    |

Sample size in brackets

**Table 4.10 Fuel direct and prepayment meter customers**

The two most common methods for both electricity and gas are pre payment meters and fuel direct. Prepayment meters formally used coins but now tend to require some form of prepayment card or key. Fuel direct is for householders on benefit, the payment for their fuel is made directly from the DSS to the utility and from the weekly benefit. It can be assumed that those obliged to have prepayment meters or fuel direct are those customers at risk of being in fuel hardship as it is likely that they have been in fuel debt at some point. Table 4.10 shows the figure for the Parish and Salisbury DH surveys compared with national figures. It is hard to prove from these figures that this rural area has similar levels of customers on fuel direct and using prepayment meters to the national level but the figures seem to indicate that in the control group the figures are slightly less but of the same order. The Salisbury District figure cannot be directly compared as it is a specially selected sample of council tenants, but again it illustrates that a higher concentration of those at risk from fuel poverty live in local authority housing.

#### 4.5.2 Damp and condensation

Householders were asked about damp and condensation problems. Rising and penetrating damp can have many causes normally linked to defects in the structure of the building. Condensation on walls and wood work and the resulting mould growth is, however, much more a feature of inadequate heating. The results are interesting. 30% of those responding in the Parish survey indicated that they suffered from this problem, the numbers were equally split between the rented and owner occupier sectors. In the Salisbury District housing 36% responded as suffering from this



problem. More research would be required to draw more exact conclusions but an initial opinion would be that in the Deverills sample the damp could well be due to rising or other structural forms of damp. However, it would be supposed that the Salisbury Housing Department have a statutory obligation to keep their properties free from structural damp, they can be prosecuted under the 1990 Environmental Protection Act if such conditions are prejudicial to health. It is much more common to find in public sector housing that damp is caused by condensation due to inadequate heating. This is another indicator of fuel poverty.

#### 4.6 Access to services

Only 19% of those whom responded to the question as to whether having no gas supply was a problem thought that it was. This is rather lower than expected given the predominance of gas in the heating market where it is available.

Of those responding to the question whether transport difficulties affected their access to fuel supplies or energy related services only 10% said that they did. However 10% of people having difficulties is quite a substantial number over the whole area, and it should be noted that 17 of the 19 respondents who indicated that it was a problem were benefit claimants.

45 households surveyed had key meters, the average distance travelled to obtain keys was 4.6 miles with the maximum being 12 miles. One aspect of concern was the closing of the electricity showrooms in nearby towns. It is worth stressing the importance of replacing these services with ones which are of use to all in the village. If consumers can then pay their bills at the local post office, if there is one, this is of use and if key meter services are also available here or at the village shop this is also useful. Provision of key meter charging points at garages is of use to customers with cars but is not helpful to those who travel by bus as the services are infrequent. It is more convenient for these customers to charge cards during a weekly visit to a nearby town when shopping and other activities can be carried out at the same time than to visit a garage which may be 5 - 10 miles away.

The survey asked households to rank everyday problems on a scale of 1 to 5 results are shown in Table 4.11 below. Apart from crime, most of the problems ranked on average about the same, lack of public transport was the worst problem with cold homes second worst.



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| <b>Problem</b> (The questionnaire asked for a score between 1, no problem, - and 5, large problem) | <b>Average of survey results</b> |
|--|----------------------------------|
| Availability of low cost housing   | 2.5                              |
| Availability of public transport   | 2.9                              |
| Availability of local services   | 2.6                              |
| Cold homes and heating problems  | 2.85                             |
| Crime  | 1.85                             |

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*Table 4.11 Perception of everyday problems to households in the RDA. (All surveys)*

## **5. Summary of findings and conclusions**

### **5.1 Fuel use in rural areas**

The survey looked at which fuels options were available in rural areas and their relative prices. It was found that the consumers in the control area were generally using the cheaper fuels wherever possible. This showed a good knowledge of which fuel was the most cost effective. The local authority housing had substantially less oil fired heating than the other tenancy groups but this decision of Salisbury District Housing department was backed up by a perception from all groups that oil was an expensive fuel to heat with.

### **5.2 Energy Efficiency**

Many of the households surveyed would benefit from improved energy efficiency measures. Draught proofing of doors and windows, a relatively low cost measure, was required by a large number of households particularly in the low income and target groups. Loft insulation, an essential measure in any traditional roofed dwelling is reported as being required in one fifth of the luncheon club sample. This group was also the one most reluctant to invest in energy efficiency measures; a general reluctance was found in all the surveys.

### **5.3 Perceived warmth and ease of heating**

High positive response levels to the questions about whether householders found their homes difficult to heat or difficult to afford to heat. One third of the control group found their homes difficult to heat and a quarter found them difficult to afford to heat. These fractions rose dramatically in the target groups of older people, disabled and invalids and young families with three quarters of families with young children saying they found it difficult to afford to heat their homes.

### **5.4 Take up of grants**

Despite the clear knowledge about the cheapest heating fuels and the perception of heating difficulties take up of available grants for energy improvement was very low, this particularly applies to the Home Energy Efficiency Scheme grants.

### **5.5 Tenure and ability to heat**

The data indicates that it is those in rented accommodation who find it hardest to heat their home. The percentage on government benefits is also highest in the rented

sector. Taking this as an indicator of low income it provides the connection between low income and hard to heat problems. However, there is also an indication from the data in the private rented sector that it is not just low income that has a part to play and that the level of energy efficiency of the dwelling is also a factor.

## **5.6 Energy Advice**

A lack of awareness and low take up of grants for energy efficiency improvement, an unwillingness to invest in beneficial energy efficiency improvements many of which are low cost indicates a need for basic energy advice.

## **5.7 Wood as a fuel**

One area of interest for the study was to look at the use of wood for domestic energy needs in the RDA. Its use was found to be widespread in nearly all group, 23% of the control group used wood it was not the fuel of choice among the target groups. In the case of the local authority tenants this was largely because a lot of the SDHD properties do not have open fires or other wood burning appliances. In the case of the older people groups there were a number who were using coal but the interest in using wood was low. Wood was seen as expensive compared to coal, more difficult to use and gave off less heat. It may be that wood is a useful fuel in the rural area with a major part to play in the overall energy balance but it may be wrong to target its use at low income and special heating needs groups who may not find it ideal. If it can be made available at a reasonable price the choice is then the consumers, whether on a low income or not.

## **5.8 General Conclusions**

Addressing the questions put forward in Section 1.2 of the Introduction it would seem that some low income households in the RDA are suffering from fuel poverty. This is indicated by the following findings:

- i) High responses from local authority and private rented tenants to questions on difficulty heating and affording to heat their homes,
- ii) High responses from the target groups of older people, disabled and invalids and families with young children to the same questions,
- iii) The fact that those with difficult to heat homes have lower percentages of energy efficiency measures than the control group,
- iv) Levels of incidence of damp and condensation are high, this is often an indicator of inadequately heated housing and thus fuel poverty,



- v) Methods of payment which indicate a possibility of fuel debt are 10% in the control group and 20% in the Salisbury Housing group.

None of these findings are conclusive evidence but they all point to the likelihood that some of the houses surveyed are experiencing difficulties.

The question as to whether the situation is better or worse than in urban areas is not an easy one to answer. The main point to stress is the difference between the two situations. In the urban environment different parts of towns and cities are more polarised, wealthy suburbs and poor inner city areas, systems built council estates with many construction and heating problems and modern estates with good energy efficiency standards. Large areas of inner cities consist of Victorian terraced housing notoriously difficult to heat for low income families and improve in energy efficiency terms. In the rural setting the situation is more mixed, rich and poor households live side by side, much of the housing is old and of originally poor energy efficiency. It may now be occupied by a wealthy owner occupier who has improved the property and can afford to keep it well heated. Alternatively a similar property may be a tied house or privately tenanted with the householders having some difficulty in keeping the unimproved property warm.

There are unlikely to be organised tenants groups in rural areas campaigning for heating improvements as you find in urban situations. The "enveloping schemes" that have been applied to the older Victorian properties in some inner cities, improving loft insulation and rotten windows on a mass scale are unlikely to have touched the rural areas, except, perhaps, for public sector housing.

With virtually no local authority grants being available these days for energy related building improvements, see Appendix 3, it leaves the Home Energy Efficiency Scheme as the main source of funding for low cost energy efficiency improvements for low income households. The scheme relies upon households applying for the scheme themselves. They can be assisted in this process by the network installers targeting particular areas and advertising their services. The last place these services and promotional drives are likely to reach are the rural areas. The unit costs to a network installer will be greater if covering a spread out rural area than concentrating on streets in urban areas where transport times and costs can be kept down by carrying out a number of jobs in the same area. The RDA in South West Wiltshire is a case in point, none of the network installers covering the area are based in the area, none are even based in Wiltshire. The number of HEES jobs that have been carried out are consequently low and take up by eligible households in the RDA is low. It would appear that some form of incentive for installers to promote their services in rural areas is required.

The above paragraph highlights one of the specific problems faced by rural areas. It

does not appear at first glance that other problems which may have been predicted in the rural environment are having as much of an impact as we feared. The response to the lack of gas being a problem was relatively low at 20%. Only 10% felt that transport was a problem with regard to accessing energy services. However it must be noted that 17 of the 19 respondents who indicated that it was a problem were benefit claimants. The danger is that there is a 10% or so who are having particular difficulties in every rural community but due to the dispersed nature of this group and the lack of a focus for their concerns and problems they go unnoticed.

## **6. Routes for future action in the RDA to assist households with their energy needs**

Based on the findings of the project and discussions with interested parties to the project a number of ideas for measures which could assist households in the area have been drawn up. There is a need for energy advice services as the knowledge of assistance which may be available for low income households is low. Delivery of low cost energy services in the area is not well established. Mechanisms for promoting and delivering these services are examined and the pros and cons of each discussed.

### **6.1 Energy Advice**

Energy Advice services should be linked to existing advice services already operating in, or being set up in, the RDA. It would not be economically viable or cost effective to have a dedicated service purely giving energy advice in the RDA. An energy dedicated mobile service would be expensive to run and unlikely to generate the interest required to make it worthwhile in terms of energy saved. Tying in with existing services would be a more effective option. Existing services are likely to be targeted at different groups such as the unemployed, older people, the disabled and families, all of who have been identified as requiring energy advice.

The project has contacted some of the existing services. The advice service for young families, ASK, has been approached and is willing to incorporate information on energy use into their existing material, which could be useful for families in the area. They are preparing a directory to be distributed in villages throughout the RDA. A page of information on accessing energy services can be prepared as an output from this project and incorporated in their directory. This information will also be available to the telephone advice line run by ASK.

Other work with community groups in Wiltshire has indicated an interest in local people being trained to give energy advice in their village or Parish. This so called "Energy Steward" idea has been used in Local Authority estates in urban areas but has not, to the study's knowledge, been tried in the rural environment. This idea is currently being explored by the Wiltshire Agenda 21 group and any actions taken forward will be of interest to, and may involve, the RDA.

### **6.2 Combining Energy Advice and Money Advice**

The problem of hard to heat, energy inefficient homes occupied by lower income householders are described in Appendix 2. Capital for investment in improved energy



efficiency has been identified in this study as a key limitation to improved efficiency for low income groups through a combination of energy and financial advice. A number of projects have tried to address this problem over the last few years.

- A research study called “Fuelsavers” (1990) funded by British Gas and carried out by Community Energy Research and the Birmingham Settlement looked at the idea of linking advice on the best and most cost effective energy efficiency improvements with financial advice and mechanisms for delivering this finance.
- A number of local authorities over the last five to ten years have been using innovative ways of funding energy efficiency improvements in their properties. As their spending is capped by central government schemes where the tenant leases the heating equipment have been used. An example of this approach was the Heatlease scheme in Birmingham where Birmingham City Housing Department linked up with Midlands Electricity Board (MEB) to install electric storage heaters in high rise properties while at the same time improving the thermal insulation of the properties. The tenants leased the new heating systems directly from a third party, this extra cost was compensated for by reduced fuel bills and greater comfort.
- The Energy Club in Bristol is currently implementing a similar scheme which is available to local authority tenants and private tenants. The householder becomes a member of a “club” and as such becomes entitled to energy advice and the supply of energy services and financial services at discount rates. A fuller description of the Energy Club is given in Appendix 3.

### **6.3 Rural Energy Initiatives**

Rural areas have not been widely targeted for specific energy efficiency initiatives. There have been some programmes aimed at community buildings in Rural Area such as the NEA Oxfordshire Village Halls project.

The HEES scheme does cover rural areas as thoroughly urban and there is no information on HEES projects specifically targeting the rural situation.

#### **6.3.1 Energy Saving Village Competitions**

An interesting project operated by the Oxfordshire Local Energy Advice Centre is a competition they have organised called the Energy-Saving Village of the Year, part of their Rural Energy Action Project. This project has the aim of raising the awareness of energy efficiency issues in rural areas of Oxfordshire. Communities in rural Oxfordshire were encouraged to take part in the competition which involved making questionnaire based surveys of the energy efficiency and heating measures of

individual households.

These questionnaires were linked to the Local Energy Advice Centres scheme, enabling advice on the most effective energy efficiency measures to be given to each householder. Advice on possible grants they may claim is also given. After a period of about nine months an analysis is carried out of which measures the different households in the community have installed and points are awarded on this basis, the more installations the more points.

Finally the most energy efficiency improved winning village is selected and a substantial prize awarded for use by the community. The prize is several thousand pounds and is a clear incentive for the community to take part and motivate participants. The prize money can be used for energy related purposes such as insulating a community building in the village like the church or village hall or it could be used for some other community related purpose. This is a simplification of the overall scheme which is described in a draft case study report reproduced in the appendices.

During the course of the project, and in particular through the household survey work, the barriers and issues concerned with delivering energy efficiency assistance to low income rural households have been examined. There are a number of facets to this energy efficiency competition approach which make it effective in promoting energy efficiency in villages especially among the low income groups:

- i) It is a pro-active method of delivering energy advice to rural communities.
- ii) By involving the whole community in the process low income households do not feel they are being singled out as special cases.
- iii) It is to the advantage of all the community that those eligible for grants apply and take them up.
- iv) It adds an element of fun and competitiveness to the subject of energy efficiency.
- v) The prize is an incentive and much of the local work can be done using volunteers thus keeping costs down.

#### **6.4 Community Energy Businesses**

Community energy businesses (CEBs) are local initiatives which deliver energy efficiency services to a specific area. What can make them different from a normal business is that they are tied directly to the community. Training of local unemployed, delivering services targeted particularly at the most vulnerable in the



community such as the elderly or disabled and communicating closely with local authority departments, are some of the activities which give CEBs their unique position. The long term grant support for a CEB is uncertain, as local authorities, and other organisations, who assist with start up funds and grants, will expect such an organisation to become self sufficient. A CEB must therefore be a commercial undertaking and may have to diversify its activities in order to be a viable business.

The aims of a community energy business would be to:

- i) Provide employment and training for people living in the RDA
- ii) Improve insulation and heating standards in the homes of families in the area, particularly those on low incomes who would have difficulties funding the improvements themselves.
- iii) Reduce fuel bills
- iv) Increase utilisation of available grants
- v) Develop other areas of energy efficiency work outside the scope of grant funding.

#### **6.4.1 Structure and size of a CEB**

A crucial issue for the continued functioning of any proposed CEB is the choice of target areas i.e. solely within the RDA or to have wider coverage. This choice would be an important factor in terms of the HEES funding. If the CEB were to be accepted by EAGA as an installer they would have to undertake to cover at least one of the HEES designated areas in the UK; Wiltshire is one such area. This suggests a number of options:

- i) A CEB for the RDA area only,
- ii) A CEB for the whole of Wiltshire based in the RDA,
- iii) A CEB set up for Wiltshire but with a local branch in the RDA.

In addition such an organisation can tie in with other bodies already supplying services in the area, an example being "Staying Put" - Salisbury - a care and repair organisation run by Anchor and supported by the County and District Councils.

The funding sources could be routed through a CEB. "Staying Put" - Salisbury are already routing their funding to private householders within Salisbury District, therefore a CEB might be unnecessary in this case.



The advantages of wider coverage would be based on the economies of scale which arise from the bulk purchase of materials and the more efficient use of resources including labour and transport facilities.

### **6.5 Recommendations to fuel utilities**

- Gas supplies are only available to a few of the larger centres in the RDA. There is an evident level of interest in the area to which private suppliers of gas may wish to respond.
- The electricity supply services should aim to make bill paying facilities and key charging services as widely available as possible in rural villages through sub post offices and shops.

### **6.6 Recommendations to local authorities**

Housing departments should continue their efforts to improve insulation standards in their properties and provide tenants with cost effective heating systems. The data indicates that many local authority tenants still experience difficulties in affording to heat their homes. This is because a significant proportion of these tenants are on low incomes. The opportunities provided by the further liberalisation of energy markets in 1998 give local authorities the chance to help their tenants receive discounted fuel supplies from suppliers.

### **6.7 Recommendations to the Home Energy Efficiency Scheme**

More study of the delivery of HEES in rural areas should be carried out to look into possible measures for increasing take up. The level of take up of HEES grants by those eligible is low according to the data collected. For example there may be justification for additional subsidies for rural jobs to compensate for the extra cost network installers incur when carrying them out.

### **6.8 Recommendations to the Estate sector**

The Estate sector, as a large private sector landlord in rural areas, needs to concentrate its efforts in improving the energy efficiency standards of its properties. Innovative financing schemes and routes for government assistance should be looked at and developed.

## Appendix 1      Results Tables

This section presents the Deverills Parish survey, Salisbury District Housing survey and day centres and luncheon club surveys. The parish survey was performed as a control sample of all households within a typical parish. The other survey types were targeted on those who may have heating difficulties. In the tables below comparison is made with national and local Census data.

**Table A1.1      House type**

| Percentage figures %                              | Detached | Semi | Terrace | Flat | Bungalow   |
|---|----------|------|---------|------|------------|
| National Statistics<br>(Table A3.9 p.146<br>EHCS) | 21       | 30   | 29      | 19   | No figures |
| Census 1991 in RDA                                | 51       | 21   | 18      | 6    | No figures |
| ESD Survey  |          |      |         |      |            |
| Control group                                     | 49       | 23   | 10      | 0    | 16.4       |
| Salisbury DHD                                     | 2        | 33   | 22      | 9    | 33         |
| Low income  | 0        | 32   | 20      | 8    | 40         |

**Table A1.2      Age**

| Percentage figures %                                      | pre 1900 | 1900 - 1965 | 1965 - 1980 | 1980 -pres. |
|---|----------|-------------|-------------|-------------|
| National figures for<br>rural areas (Table A3.23<br>EHCS) | 24       | 38          | 27          | 9           |
| National figures for<br>urban areas (Table<br>A3.24 EHCS) | 15       | 52          | 22          | 8           |
| ESD Survey*   |          |             |             |             |
| Control group   | 56       | 15          | 20          | 9           |
| Salisbury DHD   | 5        | 50          | 42          | 3           |
| Low income  | 12       | 41          | 46          | 1           |

\* The survey data is only for the households which responded with a positive answer to these questions. Low income households are deemed to be those receiving some form of benefit payments.

**Table A1.3 Tenure**

| Percentage figures %                 | Owner<br>Occupier | Local<br>Authority/<br>HA | Private<br>Rented |
|--------------------------------------|-------------------|---------------------------|-------------------|
| National Statistics<br>(Table A3.22) | 65                | 22                        | 8                 |
| Urban                                | 63                | 25                        | 7                 |
| Rural                                | 74                | 12                        | 10                |
| Census 1991 in RDA                   | 63                | 16                        | 21                |
| Kingston Deverill                    | 59                | 8                         | 32                |
| ESD Survey                           |                   |                           |                   |
| Control group                        | 54                | 12                        | 34                |
| Low income                           | 8                 | 81                        | 9                 |

**Table A1.4 Energy efficiency measures**

Households were asked whether certain energy efficiency measures were installed in their homes and, if not, whether they thought they were needed.

| Energy Efficiency Measure (% is national average)* | Salisbury District Housing (Sample size 129) |          | Deverills Parish (Sample size 69) Control group |          | Day centres and luncheon clubs (Sample size 34) |          |
|--|--|----------|---|----------|---|----------|
|  | Fitted %                                     | Needed % | Fitted %  | Needed % | Fitted %  | Needed % |
| Cylinder lagged                                    | 85   | 7        | 91  | 1        | 74  | 9        |
| Window draught stripping (36%)                     | 28   | 40       | 51  | 19       | 32  | 32       |
| Doors draught stripping                            | 29   | 48       | 43  | 23       | 38  | 32       |
| Loft insulation (91%)                              | 78   | 9        | 80  | 10       | 53  | 21       |
| Cavity wall insulation (26%)                       | 57   | 19       | 29  | 7        | 18  | 12       |
| Solid wall insulation                              | 9  | 12       | 19  | 10       | 3   | 6        |
| Secondary/double                                   | 49   | 39       | 64  | 13       | 32  | 26       |



glazing (52%)

|                              |    |    |    |    |    |    |
|------------------------------|----|----|----|----|----|----|
| Heavy curtains               | 36 | 23 | 39 | 13 | 44 | 6  |
| Thermostatic radiator valves | 17 | 15 | 39 | 14 | 29 | 12 |

\* data from English House Condition Survey 1991

N.B. It must be stressed that this data only provides an indication of the householders perception of whether the particular measures are fitted or needed. ESD did not check whether these measures were indeed fitted, missing, required or even if it was practical to fit them.

**Table A1.5 Energy Efficiency Investment**

Householders were also asked whether they would be willing to invest in energy efficiency improvements. For the Salisbury survey 25% said yes and 53% said no, for the Deverills survey 33% said yes and 48% said no. For the luncheon clubs for older people only 12% said yes they would invest while 68% said no.

| %                                       | Salisbury Housing | District | Deverills Parish (Control group) |    | Day centres and luncheon clubs |    |
|---|-------------------|----------|----------------------------------|----|--------------------------------|----|
|   | Yes               | No       | Yes                              | No | Yes                            | No |
| Invest in energy efficiency improvement | 23                | 53       | 33                               | 47 | 12                             | 68 |

**Table A1.6 Other energy saving methods**

Householders were asked about 5 other energy saving methods

| Energy Saving Measure (% of households using) | Salisbury District Housing | Deverills Parish | Day centres and luncheon clubs |
|---|----------------------------|------------------|--------------------------------|
| Heating only one room                         | 28                         | 14               | 24                             |
| Turning off appliances when not in use        | 91                         | 77               | 62                             |
| Low energy light bulbs                        | 25                         | 26               | 15                             |
| Other low energy appliances                   | 0                          | 0                | 0                              |
| Turning down thermostats                      | 30                         | 42               |                                |

**Table A1.7 Awareness of grants for home improvements**

The questionnaire asked if householders were aware of grants for which they may be eligible.

| %                   | Salisbury District Housing |           | Deverills Parish |           | Day centres and luncheon clubs |           |
|---------------------|----------------------------|-----------|------------------|-----------|--------------------------------|-----------|
|                     | Aware                      | Not aware | Aware            | Not aware | Aware                          | Not aware |
| Awareness of grants | 5                          | 71        | 10               | 68        | 12                             | 53        |

**Table A1.8 Perception of household energy supply problems**

|  | Salisbury District Housing |      | Deverills Parish (Control) |      | Day centres and luncheon clubs |      |
|--|----------------------------|------|----------------------------|------|--------------------------------|------|
|  | % Yes                      | % No | % Yes                      | % No | % Yes                          | % No |
| Do you find it difficult to heat your home properly?                       | 57                         | 39   | 33                         | 61   | 38                             | 59   |
| Do you find it difficult to afford fuel bills?                             | 74                         | 21   | 25                         | 65   | 29                             | 56   |
| Are there energy efficiency improvements you would like to make but cannot | 53                         | 39   | 41                         | 46   | 18                             | 41   |

**Table A1.9 Willingness to use wood as a fuel**

| Survey question   | Salisbury District Housing |       | Deverills Parish |      | Day centres |      |
|---|----------------------------|-------|------------------|------|-------------|------|
|   | % Yes                      | % No* | % Yes            | % No | % Yes       | % No |
| Would like to use wood if available at a reasonable price | 23                         | 40    | 25               | 16   | 9           | 32   |

\* Many of the Salisbury "No" responders were influenced by their lack of wood burning facilities.

Interestingly, given the low response for the use of wood by the day centre group, 41% of this group uses coal or other solid fuel for their main source of heat in fires, central heating systems or both.

**Table A1.10 Central heating**

| Percentage figures % |            | Central heating |
|----------------------|------------|-----------------|
| National             | Statistics | 83.7            |
| (Table A5.7)         |            |                 |
| Census 1991 in RDA   |            |                 |
| All RDA              |            | 80              |
| Deverills Parish     |            | 87              |
| ESD Survey           |            |                 |
| Control group        |            | 72.4            |

**Table A1.11 HEES Eligibility**

| Estimate of HEES eligible households in the RDA                              |                            |                        |        | No. of eligible households |
|--|----------------------------|------------------------|--------|----------------------------|
| <b>A) Statistics from RDA Strategy document</b>                              |                            |                        |        |                            |
| Eligible groups  |                            |                        |        |                            |
| 1  | Elderly                    | Pensioner in household | 43.50% |                            |
|  |                            | Total households       | 9708   | 4223                       |
| 2  | Limiting long term illness |                        |        | 2295                       |
| 3  | Unemployed                 | Unemployment rate 5.2% |        | 1130                       |
| Total who could be eligible  |                            |                        |        | 7648                       |
| Present HEES take up of 579 jobs is 7.50% of the total who could be eligible |                            |                        |        |                            |
| <b>B) From survey data</b> 100 households eligible from passporting benefits |                            |                        |        |                            |
| 3 households found who had accessed a HEES grant                             |                            |                        |        |                            |
| HEES take up is 3% of those who could be eligible                            |                            |                        |        |                            |



## Appendix 2

### A2. Fuel poverty - A description of the problem

#### A2.1 Introduction

This appendix describes the features of fuel poverty in general terms. It provides an overview of fuel poverty derived from the many reports and studies undertaken on the subject.

#### Definition

The most complete definition of fuel poverty is:

"The inability to afford adequate warmth because of the energy inefficiency of the home." <sup>9</sup>

This definition suggests that the poverty is not just caused by a shortage of money but also has as one of its causes characteristics of the home itself.

#### Causes of Fuel Poverty

##### i) Energy inefficient properties

Whenever the temperature outside a building is lower than that inside, heat will flow from inside to outside and be lost. The heat is lost in two ways, firstly by conduction through the building fabric, and secondly through natural ventilation air changes. A building, in this country, with high insulation levels and carefully controlled ventilation can have a very low heating requirement. Internal heat gains from occupants, appliances and solar radiation can supply almost all the heat necessary, except in particularly cold spells.

Unfortunately most people do not live in dwellings like this. Many homes are not energy efficient letting heat flow quickly out of the dwelling through poorly insulated walls, floors, roofs and windows. Additional heat loss due to draughts through windows and doors, and even floors and walls, can also occur. This situation can be likened to a 'leaky bucket' which has to be topped up constantly to keep it at the correct level. If the heat leaks were stopped or reduced, far less energy would have to be used to heat the home.

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<sup>9</sup> Fuel Poverty - Cold homes to affordable warmth, Brenda Boardmann

**ii) Fuel and heating system choice**

The method by which the heat is generated is often as important as reducing heat losses from the home. There are a range of different heating systems available to the householder. The costs of the fuel used and the efficiency of the appliances combine to give the overall cost of the useful heat produced. It is often the case that the systems that have the lowest running costs have the highest investment costs. This precludes their use by low income households which do not have the capital to invest in improved heating systems. The systems with the cheapest investment costs such as plug in electric heaters and bottled gas heaters are the most expensive to run. These two factors combine to encourage householders and landlords to rely on the cheapest capital cost appliances, which, paradoxically, turn out to be the most expensive to run.

**iii) Low income and special heating needs**

While the factors identified in i) and ii) above are the prime reasons why homes are difficult and expensive to heat, it is of course possible for someone with enough money to heat an energy inefficient property. This is wasteful and may have wider future resource and environmental implications. Those on low incomes do not have this choice. Already those in the lowest ten percent income group spend 11% of their household expenditure on fuel and power whereas the average for all households is just 4.6%<sup>10</sup>.

In addition, some groups such as the elderly, the unemployed, the disabled and those with young families may require heat for longer periods each day than working families. This is likely to result in greater heating cost.

Some of these groups also require a higher room temperature than the average to maintain their body temperature. This may mean they can only afford to heat one room to an adequate temperature, thus leaving the rest of the house cold. This exemplifies the uncomfortable living conditions eg moving from a warm living room to a freezing bathroom or bedroom, that is typical of the phenomenon of fuel poverty. NB It may cost the same amount to warm one room in an energy inefficient house as it does to keep the whole of an energy efficient house warm

**The uniqueness of fuel poverty**

The above discussion highlights the important difference between fuel poverty and

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10 1994-95 Family Expenditure Survey



other forms of deprivation. The problem cannot be solved simply by increasing the weekly pension or benefit payment, unlike other forms of poverty such as food poverty (a lack of money for providing a healthy diet) which can be alleviated by education programmes accompanied by more weekly spending power. On the contrary, converting a "hard to heat" home into one where the household budget can maintain warm conditions takes a significant capital input, not readily available to low income households.

### **The issue of tenure**

Low income families primarily live in rented accommodation. There is almost no incentive to invest in the energy efficiency of their home as the benefits are seen to go to the landlord. Improvements to the property are deemed to be the responsibility of the landlord, whether private sector or public. This is potentially a short sighted view as families can live for many years in rented accommodation and would benefit from investing in measures that could result in a reduction of their energy bills.

Government legislation under the Fitness Standard for human habitation requires only that a fixed heating appliance capable of maintaining the temperature of the living room at 18°C be present and a means for heating other areas to 16°C when the outside temperatures are -1°C. This can be satisfied by a wall mounted electric fire in the living room and electric power points throughout the rest of the house. This is not a requirement that encourages landlords to provide cost effective heating systems.

The Building Regulations only apply to new buildings. There are no requirements for landlords or owner occupiers to upgrade the thermal insulation of their properties to acceptable higher standards. However there is legal provision under the 1990 Environmental Protection Act if the "condition of a dwelling constitutes a statutory nuisance or is prejudicial to health". This will normally only apply in cases where cold homes result in serious condensation problems and resultant mould growth.

### **Dangers of fuel poverty**

There is an inherent sense of misery when having to live in a home which you cannot afford to heat properly. However, it is not just severe discomfort that can be caused by fuel poverty. The health effects of cold temperatures on the human body are well documented and can cause conditions from an increased risk of heart disease to the extreme condition of hypothermia. Another effect of cold homes is an increased incidence of condensation on walls, wood work and furnishings which can lead to mould growth. As well as being highly unsightly and damaging to furnishings, decorations and wood work, mould produces airborne spores which are linked to respiratory problems particularly in young children.



## **Appendix 3**

### **A3 Assistance for energy efficiency for low income households**

This appendix provides details on the possible sources of assistance for low income households to reduce their energy bills.

#### **A3.1 Assistance from local and national government**

##### **A3.1.1 Home Energy Efficiency Scheme**

This scheme is described fully in Section 4.2. above. 572 HEES installations have been completed in the RDA area in the 1992-1995 period. There are 3 Network Installers for this work all located outside the area at Weston Super Mare, Bristol and Cheltenham.

##### **A3.1.2 Social Fund - Community Care Grants**

For those in receipt of Income Support and facing the possibility of requiring "institutionalised care", the DSS can make Community Care Grant awards available from the Social Fund. These grants are severely cash limited, discretionary and are not targeted specifically on energy efficiency improvements. Grants can be made available for minor structural repairs to housing and for internal redecoration/refurbishment, re-siting fuel meters, and for heaters or cooking equipment.

##### **A3.1.3 House Renovation Grants**

These grants are for a wide range of building improvements some of which may be relevant to energy efficiency. There are many different options available and full details can be found in brochures produced by the Dept. of Environment. Below is a summary of those particularly relevant to energy issues and those in particular need.

There are 4 types of house renovation grant:

Renovation grant - available to most (some tenants may not be eligible)

Disabled facilities grant - available to all

Common parts grant - available to landlords and some tenants

Houses in multiple occupation grant - only available to landlords

Only the renovation grant and disabled facilities grant are of particular interest for

energy efficiency purposes. The grants are means tested according to specific rules laid down by each scheme. The amount an applicant receives depends on the cost of the work and the fraction they are expected to pay according to the means test. All mandatory house renovation grants and disabled facilities grants are subject to a grant ceiling of £20,000. The relevant schemes are outlined in detail below.

#### **A3.1.3.1 Renovation grant**

Owner occupiers and tenants, who are liable under the terms of their lease for carrying out the types of work specified, can apply for these grants. They can be used for home insulation work and for heating improvements but are always discretionary. Mandatory grants are available to bring a house up to the fitness standard (i.e. make a home fit for human habitation) In terms of heating requirements, only the living room or bedroom to have an electric socket and there is no statutory insulation standard on old buildings.

The Renovation Grant is to become discretionary in the near future. It will be up to local authorities to decide if they are to carry on funding the improvements presently available under this grant. Many are likely to provide discretionary grants to improve properties up to the fitness standard and drop the presently discretionary activities such as heating improvement.

#### **A3.1.3.2 Adaptation grant**

This is a special grant available to install a broad range of necessary home adaptations required by disabled people. The grants are intended to make the home more suitable and enable people to live more independently. It can include labour and material costs related to energy efficiency improvement relevant to such households e.g. special heating systems and controls, adaptations to heating appliances, etc. Grants are subject to the same means test as Renovation Grants in addition to a specific disability test. Grants for heating system improvement and adaptation are mandatory providing the council is satisfied that the work is *necessary, appropriate, reasonable* and *practicable*.

#### **A3.1.3.3 Minor works grant**

These grants are available as an alternative to Renovation Grants for smaller, but necessary repair work up to £1080 per application, and a maximum of £3240 in relation to a single property over 3 years. Grants are for specific types of work but prominent amongst these are thermal insulation and heating improvements to houses, especially for the elderly. All grants are discretionary, available only to those on low income who must be owner occupier or private sector tenants (including housing association).



The Minor works Grant is soon to be replaced by the new Home Repair Assistance Grant which will be similar and still discretionary. It is likely to be increased somewhat in value and be available to a wider range of people. The new grant will take up some of the reduction in Renovation Grants.

#### **A3.1.4 Assistance available in the RDA**

The grants described above, with the exception of HEES, are the responsibility of the District Council to administer. Some of the grants are discretionary, others are mandatory, with some containing both a discretionary and a mandatory component. Each Council has the discretion to set their own policy towards grant award. Below we describe the present policy of the two district councils involved in this study.

##### **A3.1.4.1 Salisbury District**

“Staying Put” Salisbury is an organisation which assists older and disabled home owners in Salisbury District to organise home improvement work on their homes and apply for grants. The project manager of this organisation supplied us with the information on the present grant situation in Salisbury.

Energy efficiency work such as draught proofing and loft insulation is generally done under the HEES scheme. Loft insulation would only be carried out under a minor works grant if other work was being carried out at the same time. The only discretionary grant in Salisbury is the Minor Works Grant, therefore only mandatory work can be carried out under Renovation Grants, excluding energy efficiency improvements. The same applies to Adaptation Grants unless there is a medical reason to improve heating or insulation.

The Benefits Agency has no budgets for Community Care Grants aimed at heating or insulation work.

##### **A3.1.4.2 West Wiltshire District**

Information received from the Environmental Health Department of West Wiltshire DC indicates that their approach is very similar to Salisbury. Most requests for insulation or draught proofing are passed on to the HEES scheme. Most of the budget for House Renovation Grants goes on Disabled Facilities Grants and this would only be used for heating or insulation work accompanied by a health recommendation.

#### **A3.1.5 Home Energy Conservation Act**

The Home Energy Conservation Act (HECA) is the most recent Government initiative to promote energy conservation. Responsibility is placed upon District or Unitary Authorities to assess the present level of energy efficiency in all housing within their



boundaries. Based on this assessment each authority must propose the most cost effective measures to raise the energy efficiency of these households to an acceptable level. Large scale assistance for implementing these measures has not been set in place but there are some initiatives which do offer support to selected Authorities for work under the Act.

#### **A3.1.6 HECA Action Fund**

One of these initiatives is the HECA Action Fund which is financed through the Energy Savings Trust and administered by the Association for the Conservation of Energy, ACE. Grants are awarded to local authorities on a competition basis. About 30 grants are awarded each year ranging in value from £50,000 - 500,000 for LAs who put forward proposals for energy efficiency work under the terms of the HECA.

#### **A3.2 Assistance from fuel utilities**

The Director General of Electricity Supply has set Energy Efficiency Standards of Performance (SOP) for the period 1 April 1994 - 31 March 1998. These apply to all the Regional Electricity Companies (RECs) in England and Wales. These SOPs set specific targets for each REC, to be achieved over a four year period, for energy savings measured in Gigawatt hours (GWh). The way in which these savings can be made are carefully laid out in the SOP document and specify that the savings are achieved primarily by customers not simply by efficient improvements in the distribution system.

Southern Electric, the REC covering Wiltshire, have been set a target of 622 GWh. To achieve these targets, Southern Electric have set up a number of schemes in their area, those initiated since 31 March 1995 include:

- Energy saving measures are offered to customers who use electric heating in selected postcode areas. The measures include cavity wall insulation, loft insulation, cylinder lagging, low energy lamps and improved heating controls. Customers in low income groups receive a 100% subsidy while other customers receive an average subsidy of 46%.
- Social housing grant scheme. This assistance was organised in the form of a competition open to Local Authorities and Housing Associations. Grants were given to the best energy saving schemes for insulation and other energy saving work up to the value of £200,000 per project.
- Cavity wall insulation under the HEES scheme. Cavity wall insulation (CWI) is not normally offered under the HEES scheme. In selected areas Southern electric are funding CWI where a HEES installer is already providing the other energy

efficiency improvements.

- Communal lighting improvement. Also aimed at Local Authorities and Housing Associations this initiative substituted existing lighting in communal areas of blocks of flats with low energy lighting. Another scheme focused on lighting in nursing homes.
- Free low energy light bulbs for low income households.

These are just some of their initiatives with the scheme continuing until 1998.

### **A3.3 Energy Advice Services**

Sources of energy advice are already existence, some at a national level but mostly delivered locally.

- Home Energy Efficiency Scheme. Run by the Energy Action Grants Agency (EAGA) it provides information and grants for those on benefits or who are over the age of 60. It is a national scheme but delivered locally by Network installers. The advice is only available to those who also receive energy efficiency improvements through the scheme.
- The Energy Efficiency Office produces leaflets aimed at the householder.
- Local Energy Advice Centres (LEAC). Set up by the Energy Saving Trust, this is a nation-wide scheme operated at a local level. It is operated using a telephone questionnaire system accessed by a Freephone number. Computer software enables the LEAC to quickly enter information from the householder and respond with best advice on the most cost effective energy efficiency measures. They will also notify callers of any grants they may be eligible for and put them in contact with HEES installers.
- Local Electricity or Gas companies have a responsibility to deliver good advice to their customers on energy saving issues.
- Local Authorities often provide advice in the form of leaflets for older people and other vulnerable groups within their area.
- Double glazing, insulation installation companies. Although clearly not impartial these companies do offer advice and services for energy efficiency work.

Some of the issues for investigating sources of energy advice:

-Availability



- Ease of use
- Quality of the information/ impartiality
- Is there any form of information or advice that is missing
- Could the advice be provided in a better form, easier to understand, in a more applicable format, make it easier to compare different options

Experience in energy advice centres in urban areas shows it is more effective to have a telephone advice line than a centre where people can drop in for face-to-face energy advice. Since, telephone contact can often allow more focused advice to be given.

### **A3.3.1 Rural Advice Services for Households**

Access to energy advice can be problematic in rural areas where a lack of private transport can be compounded by poor public transport services. In some areas this is being addressed by providing mobile energy advice services which can take information out into rural communities.

West Wales LEAC has set up one such mobile service and has had considerable success in visiting rural towns on market days, open air shows and local community groups. This form of energy advice delivery can be cost effective where the rural area covered is large, in a smaller rural area, such as the Wiltshire RDA, a dedicated mobile energy advice service may not be cost effective.

In many rural areas advice services have been set up to disseminate many types of information. It makes particularly good sense to integrate energy conservation and energy efficiency advice with these existing information dissemination networks. Existing initiatives may already be visiting the areas of interest, from an energy advice perspective, with an overlap between the target groups eg employment and energy efficiency information. Both groups are likely to be low income groups and have special heating needs. Using existing dissemination structures and community groups can be a very effective method. Though it may be necessary to tailor energy based programmes to the local circumstances, where the active groups will differ, from the local parish council to 'lunch clubs' to residents associations.

There is no one ideal solution to the problem of better dissemination of energy efficiency information. It relies on a combination of promotional activities offering free or reduced cost energy efficiency equipment, telephone advice lines, grants for energy efficiency capital investments, presentations, training tailored to the local requirements.

A good example of a novel method of local dissemination is the Neighbourhood Energy Action Programme in Oxfordshire. The aim is to improve the efficiency of



community buildings such as village halls, church halls and schools. These buildings are often used as day centres, lunch clubs and social clubs for the elderly, play groups, youth clubs. These services are often of particular help to the most disadvantaged groups. Improving these buildings is also a good, public, demonstration of the benefits of energy efficiency to those groups most likely to benefit from it. It encourages users to make energy saving improvements to their own homes. It is vital to establish good co-operation with the user groups in order that follow up presentations, seminars, 'energy efficiency evenings' and information can fully exploit the dissemination potential of the energy saving improvements to the community building.

### **A3.3.2 Advice Services in the RDA**

There are various mobile information dissemination initiatives such as the Work Out 'Tele-Home'. This is a mobile bus taking employment and training information out into the Wiltshire Rural Development Area.

A new service called ASK is being set up in the RDA in co-operation with the Community Council for Wiltshire. This service provides advice and support to young families in the area. ASK operates by means of a telephone help line and also by compiling a directory of services and activities for young families in the RDA. The directory will be located centrally in each neighbourhood to ensure it is easily accessible to available.

This report has not identified any energy advice services provided locally.

### **A3.3.3 Energy Club**

The Energy Club already briefly mentioned in Section 6.3 is an example of an Energy Service Company or ESCO. The Energy Club aims to operate in both the private and public housing sectors providing energy services which may include energy supplies (e.g gas and electricity), heating systems, and energy efficiency measures. The aim is to provide cost effective energy services and the enabling financial structures. It hopes to take advantage of two recent developments in the domestic energy scene, the HECA and the liberalisation of the domestic electricity and gas markets.

**Service to home owners** -This service is likely to appeal to more affluent households initially as low income households will still be unable to afford the more expensive energy efficiency improvements needed to make their homes affordable to heat. Low income households will be able to join to take advantage of cheaper fuel prices negotiated through the Club.

**Service to local authorities** - Local authorities do not have sufficient funds available

to continue to improve the energy efficiency levels of all their housing stock to acceptable levels. Alternative, innovative methods of funding need to be found. The Energy Club is one such route and with this service it will be delivering improved energy services to low income households and reducing fuel poverty.

## Appendix 4 Organisations Contacted

### Voluntary, Public and Utilities Sector

| Organisation  | Address  | Contact         |
|---|--|-----------------|
| ACRE<br>Action with Communities in Rural England                          | Somerset Court<br>Somerset Road<br>Cirencester<br>GL7 1TW          | Ro Lion         |
| ASK Advice on Services for Kids   | Wyndhams<br>St Joseph's Place<br>Devizes<br>SN10 1DD               | Allison Herbert |
| Community Council for Wiltshire   | Wyndhams<br>St Joseph's Place<br>Devizes<br>SN10 1DD               | Diana Farrow    |
| Edington Friendly Circle<br>Parish Hall<br>Edington                       | Contact Address<br>53 Westbury Road<br>Edington<br>Wilts.          | Mrs Webb        |
| Energy Action Scotland  | 21 West Nile St<br>Glasgow<br>G1 2PJ                               |                 |
| Health Commission for Wiltshire and Bath                                  | Southgate House<br>Pans Lane<br>Devizes<br>SN10 SEQ                | Mr Barry Webb   |
| Horningsham WRVS Luncheon Club<br>Horningsham Village Hall<br>Horningsham | Contact Address:<br>212 Pottle Street<br>Horningsham<br>Warminster | Jane Yates      |
| Kennet District Council   | Browford<br>Bath Road<br>Devizes<br>Wilts SN10 2AT                 | Alan Houghton   |
| Longleat Estate Office  | Longleat<br>Warminster<br>BA12 7NW                                 | James Perks     |
| National Local Government Forum Against Poverty                           | 2 Nightingale Close<br>Nightingale Court                           | Pat O'Brian     |



|  |  |                  |
|--|--|------------------|
| Local Organiser  | Moorgate<br>Rotherham<br>S60 2HZ<br><br>PO Box 2125<br>Reading Borough<br>Council<br>Reading RG1 7TD | Margeret Ounsley |
| Longleat Estate Office                                     | Longleat,<br>Warminster<br>Wiltshire   | James Perks      |
| Neighbourhood Energy Action                                | St Andrews House<br>90-92 Pilgrim St<br>Newcastle<br>NE1 6SG   | Steve Gillan     |
| OFFER<br>Office of Electricity Regulation                  | 30-31 Friar St<br>Reading<br>Berks RG1 1DX   | Brian Rayner     |
| Rural Forum Scotland                                       | Highland House<br>St Catherine Rd<br>Perth<br>PH1 5YA  |                  |
| Salisbury District Council<br>Dept of Housing              | 26 Endless St<br>Salisbury<br>SP1 1DR  | Mr Rob Barclay   |
| Salisbury District Council<br>Dept of Environmental Health | 26 Endless St<br>Salisbury<br>SP1 1DR  | Mr Rick Wells    |
| Southern Electricity                                       | Littlewich Green<br>Maidenhead<br>Berkshire SL6 3QR  | Stephen Millward |
| Staying Put - Salisbury                                    | Chequers Court<br>33 Brown Street<br>Salisbury, Wiltshire<br>SP1 2AS                                 | Mr David Wardle  |
| West Wiltshire District Council<br>Housing Department      | Bradley Road<br>Trowbridge<br>BA14 0RD   | Judith Jeffrey   |
| West Wiltshire District Council                            | West Wilts District  | Lesley McWilliam |

|  |   |  |
|--|---|--|
| Agenda 21  | Council<br>Corporate Unit<br>Bradley Road<br>Trowbridge                                     |  |
| Wiltshire Agenda 21  | c/o English Nature<br>Prince Maurice Court<br>Hambleton Avenue<br>Devizes<br>Wilts SN10 2RT | Jane Laurie  |
| Wiltshire County Council<br>Social Services Dept<br>Western District           | County Hall (East)<br>Trowbridge<br>Wilts<br>BA14 8JQ                                       | Sue Redmond<br>Policy Planning and<br>Development<br>Officer |
| Wiltshire County Council<br>Social Services Dept<br>Housing and Community Care | County Hall<br>Trowbridge<br>Wilts BA14 8LE   | Sue Forber   |
| Wiltshire County Council<br>Social Services<br>Southern District               | Fault Lane<br>Salisbury<br>SP1 1DU  | Liz Gilbert<br>Policy Planning and<br>Development<br>Officer |
| Wiltshire County Council<br>Chief Executives Dept                              | County Hall<br>Trowbridge   | Jeff Rattle<br>Business<br>Coordinator                       |

### Fuel Suppliers

| Suppliers                          | Fuel/s                     |
|------------------------------------|----------------------------|
| F.G. Collier and Son Ltd, Westbury | Coal; Smokeless Fuel; Logs |
| Bath Solid Fuel Supplies           | All types of coal product  |
| British Fuel Co, Bristol           | Coal wholesalers           |
| Sutton Veny Woodlands              | Wood suppliers             |
| E. G Martin Ltd, Westbury          | Domestic heating oil       |
| Darchfuels, Glastonbury            | Heating oils               |

## Appendix 5    References

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**Appendix 6**  
**The survey questionnaire form**