

Annex 3E

Public attitudes to energy and the environment

Introduction

3E.1 Access to and use of energy underpins modern day life. Without it individuals would be unable to drive their cars, light and heat their homes, use their TVs and computers or operate their washing machines and ovens. However it is something that we don't have to think about until it's not there or the price increases sharply since it has become such an essential part of everyday life. It can be difficult to picture the environmental impact of switching on a kettle to make a cup of tea when the main messages that we hear through the media focus on the global consequences of energy use. The purpose of this annex is to look at people's attitudes to energy and the environment and the links that they make to their own behaviour. A section on attitudes to and the role of government is included at the end.

3E.2 People's awareness, but not necessarily their understanding of environmental issues has increased over the last 20 years as academia, the media and politicians have brought issues such as global warming to our attention. However, this awareness does not often result in changes in the way that we use energy. This can be as a result of not knowing how to make an individual difference to a national issue, feeling that an individual action makes no difference anyway and is not, therefore, worth the effort or simply not being prepared or able to make the financial investment in more energy efficient technologies and appliances.

General awareness

3E.3 In addition to financial considerations, an awareness of energy efficiency and environmental issues may motivate individuals to take energy saving steps, but they may also make them simply because the available choices have changed. Many environmental and energy issues are discussed in the media, but how well do people understand them?

3E.4 A survey of public attitudes to quality of life and to the environment was carried out by DEFRA in 2001 and found that most people have heard of issues such as climate change, global warming and the greenhouse effect and think that the environment is an important issue for the government. Table 3E.1 shows how comparisons with previous surveys indicate that people understand much more about the causes of

climate change than a decade ago. The majority of people recognised that the destruction of forests, CO₂ emissions, and emissions from transport and industry were all factors contributing to climate change. However, the link is not always made to the energy use that creates the emissions. Just over a quarter thought that electricity and gas use in industry was a major contributor to climate change and only a fifth of people thought that use of gas and electricity in homes was a major cause.

Table 3E.1 Knowledge of major factors contributing to climate change

Which, if any, of the things listed do you think are major contributors to climate change?

| Statement | 1993 | Percentages | |
|-------------------------------------|------|-------------|------|
| | | 1996/7 | 2001 |
| Destruction of forests | 52 | 56 | 74 |
| Carbon dioxide emissions | 62 | 53 | 71 |
| Emissions from transport | 41 | 42 | 65 |
| Emissions from power stations | 49 | 45 | 56 |
| Use of gas, electricity by industry | 22 | 19 | 28 |
| Use of gas, electricity in homes | 16 | 12 | 20 |

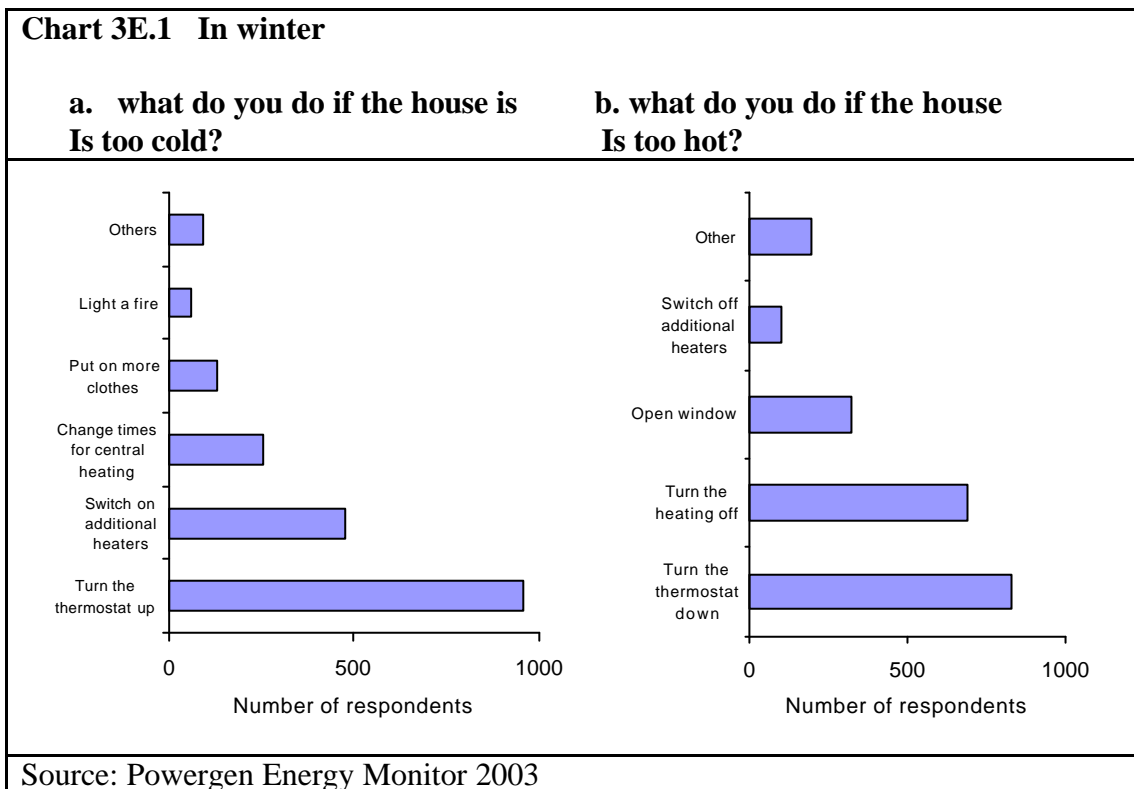
Source: DEFRA

3E.5 Lack of awareness of environmental issues can be a result of a lack of information or lack of trust in it. The British Social Attitudes Survey in 2000 showed that those with the least knowledge about the environment were more likely to be unconvinced of environmental dangers, giving environmental issues a low priority or thinking that many of the claims about environmental threats are exaggerated. However, explanation may confuse rather than clarify; research conducted for DEFRA has shown that information does not necessarily lead to awareness, or awareness lead to action.

How people use energy

3E.6 With increased accessibility to relatively cheap energy and the way that people pay for their energy, many are not aware of how much they personally consume or even how much they spend on it. When it is cold, many people simply turn up the heating while the direct debit automatically sends the money out of their account to pay for it and so long as their account is in credit, there is no need for concern. Convenience and personal comfort are often considered above environmental concerns.

3E.7 The 2003 Powergen Energy Monitor surveyed attitudes to energy use and the environment asked respondents how they would react to warm and cold indoor temperatures in the winter. The results are shown in Chart 3E.1 and shows that when faced with cold houses, the most popular reactions are to turn the thermostat up and switch on additional heaters rather than choose the options that consume less energy such as make a warm drink or put on more clothes. Similarly when a house is too hot, the most popular responses are to turn the thermostat down, switch the heating off and open a window rather than wear lighter clothing. Behaviour is more likely to be driven by issues of convenience (the quickest and easiest action) and perception (this is what I wear indoors) is also important. The use of fans and air conditioning is still low in the domestic sector, although may increase over coming years.



3E.8 Growth in insulation levels over recent years would indicate that people are more aware of the benefits of installing these sorts of energy efficiency measures into their homes. Most homes are now installed with loft insulation, although people are now increasing its thickness, aware that even more energy can be saved. Figures from the Building Research Establishment show that there has been massive growth in double-glazing installations over the last 20 years, while the proportion of homes with cavity wall insulation increased from 18 per cent of potential households in 1987 to 38 per cent by 2002. However, this leaves more than 60 per cent of homes with cavities that have not been filled and 48 per cent of homes have less than 10cm of loft insulation. Cavity wall

insulation sales have focused mainly on new build, social housing and grants (Warm Front and Energy Efficiency Commitment (EEC)); and millions of houses with solid walls and/or no loft spaces have been unable to benefit from insulation, except at very high cost and inconvenience.

3E.9 Energy labelling on appliances means that consumers can make an informed choice when it comes to purchasing new appliances, though choice may actually reflect special offers, price subsidies and which appliances are available at the time. DEFRA found that a third of respondents regularly use low-energy light bulbs, nearly twice the proportion claiming to have used them eight years earlier. Better design, rapidly falling prices and widely available free offers from energy suppliers have all contributed to their increased use.

3E.10 Many appliances in the home have a standby function including televisions, videos, microwaves and stereo systems. People are often unaware of how much energy is consumed while these products are in their stand-by mode and the perceived inconvenience of reformatting clocks and other functions, and the convenience of being able to switch the TV off from the armchair can make the prospect of turning the appliance completely off unattractive. However, the Powergen Energy Monitor showed that only one third of consumers use the standby function all, most or some of the time. There may be some scope for redesign so that machines not in use switch off after a certain amount of time or equipment not obviously 'on', such as mobile phone rechargers, have more red 'on' lights.

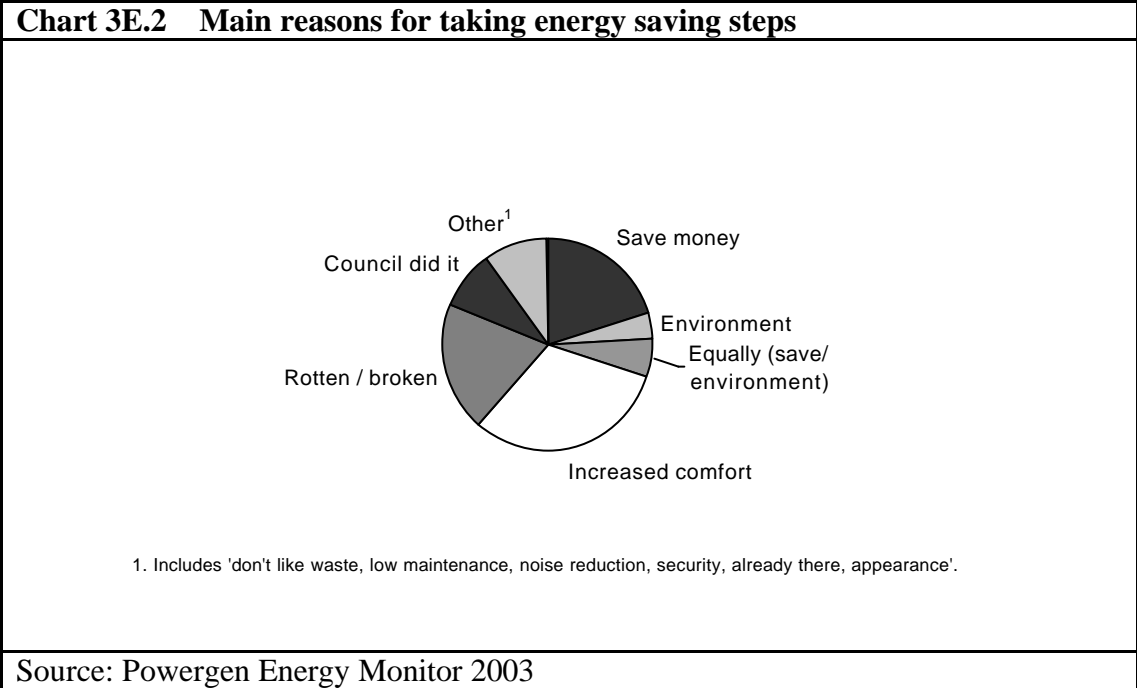
3E.11 Cars remain a popular choice for personal transport and people use their cars for many reasons: for work, shopping, education and to visit friends. The Department for Transport's National Travel Survey shows that in Great Britain in 2002, travel by car accounted for four fifths of the total distance travelled per person and the distance travelled has increased by ten per cent over ten years. However, cars were still being used for 22 per cent of trips under one mile, a small increase on ten years earlier, and for 60 per cent of trips of between 1 and 2 miles, similar to 1991/93 levels. When people change the way that they travel it usually has more to do with a change in circumstances rather than a desire to change for the sake of the environment and the 2002 British Social Attitudes Survey showed that many drivers value their cars as a very convenient way to travel.

Motivations to consume less energy

3E.12 Two in five people in England claimed to have cut down their use of electricity and gas in 2001, according to the DEFRA survey, and 80 per cent of

those who had made cuts had done so to save money. Only 15 per cent, equivalent to 6 in every 100 of all respondents to the survey, mentioned environmental concerns as a motivation to cut their energy consumption.

3E.13 When it comes to making energy saving steps, which includes replacing appliances with more efficient models and increasing insulation levels, Powergen found that the main reasons for action in the UK in 2003 were financial, to increase comfort levels and to replace rotten or broken items (appliances, boilers and windows). The results are shown in Chart 3E.2 below.



3E.14 However, while cost can be a motivating factor in making cuts in energy consumption, it can also be a deterrent when it comes to making energy efficiency improvements, particularly to those who feel that they cannot afford to invest in an energy audit or to make energy efficiency improvements such as installing cavity wall insulation or a new boiler. People may prefer to spend their cash on something that has a greater visual impact, such as re-decorating. A 2004 study on behalf of the Energy Saving Trust (EST) and Central Office of Information (COI) Communications shows that energy efficiency is a low priority both on a day-to-day basis and over the longer term. Energy saving actions are not always seen as a priority since many people live in houses that are already warm and comfortable that do not cost a fortune to heat, despite the promise of lower energy bills if the energy savings were made.

3E.15 When it comes to personal travel, results from a Department for Transport funded survey show that two in five people claimed they deliberately used public transport, walked or cycled instead of using a car or cut down the use of a car for short journeys in 2001. The main reason was to get more exercise (59 per cent), while other reasons included to save money (25 per cent), to help the environment/reduce pollution (17 per cent, equivalent to seven in every 100) and to save petrol (17 per cent). Those with environmental motivations tended to be older (19 per cent of 25-64 year olds compared with 10 per cent of 18-24 year olds) and held higher qualifications (28 per cent were educated to degree level, compared with 15 per cent of those educated to A-level). Results from the 2002 National Travel Survey show that there has been little change since the 1999/2001 results in the number of trips made by car under 2 miles. In any case, less than one in 10 cut down on car use for environmental reasons, which can be perceived as distant and long term, while the biggest motivation was to get more exercise, which has a more immediate and personal impact.

How the government influences attitudes and behaviour

3E.16 The government and other organisations publicise the benefits of energy efficiency to change people's attitudes and behaviour to ensure that environmental targets will be met. But many other levers may be needed simultaneously and have been used, including legislative and fiscal measures as well as market and infrastructure transformation. Attitudes may be changed through the provision of clear and accurate information about the impacts of energy consumption on the environment and the benefits of energy efficiency through the use of publicity campaigns. However, evidence from the British Social Attitudes Survey in 2000 shows that least trust is placed in government and business and industry to provide correct information about environmental issues such as pollution and that people are more likely to trust university research centres and environmental groups. Research also shows that people most trust information from their peers, and their behaviour is likely to be most influenced by those around them.

3E.17 The availability of grants to invest in energy efficient boilers and appliances can also encourage greater energy efficiency behaviour, although people are not always aware of existing grant schemes such as EECs and Warm Front, which are described in more detail in Chapter 4. The Warm Front scheme was set up in June 2000 and approximately 770,000 households had received assistance under it by February 2004. A review in 2003/04 of Warm Front by the National Audit Office and DEFRA showed that although Warm Front has made a difference to a large number of households in England, areas for improvement were identified with respect to targeting, eligibility and the

measures offered under the scheme. Other methods to encourage behaviour change may include raising and enforcing standards for manufacturers; increasing support such as training for retailers and installers which improves the market infrastructure; and other measures to overcome barriers and identifiable market failures.

3E.18 There is great potential to make energy efficiency savings through improved insulation, particularly through cavity wall insulation where two thirds of potential houses are not insulated. A quarter of the UK's boilers are over 20 years old. Under the EEC, electricity and gas suppliers are required to achieve targets for installing energy efficiency measures in the household sector. The targets do not prescribe how suppliers should attain these improvements, and they can fulfil their obligations by carrying out any combination of approved measures including insulation or supplying low-energy light bulbs, high efficiency appliances or boilers. However, fewer options may be available in older properties, which may be occupied by the fuel poor, and unavoidable energy use may have to be addressed in other ways, such as introducing less expensive, low carbon renewable alternatives.

3E.19 When it comes to people's own perceptions about priorities for the government, results from DEFRA's surveys of public attitudes that have been carried out every few years have found that environmental concerns have remained fairly high up the priority list over the last couple of decades. In 2001 it was considered to be the fourth most important issue for the government to be dealing with, behind health, education and crime.

3E.20 The 2001 DEFRA survey of public attitudes asked participants whether they would support some potential government policies to protect the environment. Not surprisingly the more popular policies tended to be those that did not directly affect the individual, such as imposing stricter controls on factory emissions. The study on behalf of the EST and COI also addressed the possibility of using incentives or penalties in council tax or stamp duty to encourage people to make their homes more energy efficient and concluded that while it could prove to be a powerful motivation, the issue is controversial and would make people think that the government is more interested in raising tax revenue, if that was the consequence, than tackling energy efficiency. It would also be unfair on people who may not be able to afford to make their homes more energy efficient unless they could benefit from either Warm Front or EEC assistance. However, some in old properties could not do much anyway.

3E.21 Green tariffs provide consumers with an opportunity to support the green electricity market and to turn their environmental concerns about electricity generation into action. Take up of these tariffs, which are more expensive, has

been slow. However, more than a third of respondents to the 2003 Powergen Energy Monitor said that they would be willing to pay 5-10 per cent more for 'green electricity', although three quarters thought that electricity from renewable sources ought to cost less than electricity from sources that pose a greater environmental threat, either through increased taxation for carbon fuels or subsidies for green energy to encourage uptake.

3E.22 Some energy suppliers have been developing new markets in energy services, which includes support for consumers to improve their energy efficiency. Energy services can benefit consumers through lower bills, companies through new business opportunities and longer-term retention of customers, and the environment through lower emissions from the combustion of fuel. However, the Energy Services study for EST and COI shows that consumers need to be convinced that the company is not trying to sell them something that they don't need.

Sources/further reading:

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