



## Telephone Survey Analysis

A report prepared as part of the Altener project  
"Consumer Choice and Carbon Consciousness for Electricity (4C Electricity)"







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A paper prepared as part of the ALTENER project  
“Consumer Choice and Carbon Consciousness  
for Electricity (4CE)”

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# 4CE

**Consumer Choice and Carbon Consciousness for Electricity**



## Disclaimer

The project “Consumer Choice and Carbon Consciousness for Electricity (4C Electricity)” is supported by the European Commission through the Altener programme (contract no. AL 2001/88).

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Environmental Change Institute	IT Power	Öko-Institut	Stockholm Environment Institute	Energieverwertungs-agentur	Central European University
					



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## The 4C Electricity Project

The project “Consumer Choice and Carbon Consciousness for Electricity (4C Electricity)” is being carried out under the framework of the EU Altener programme. The aim of this project is to promote Electricity Disclosure, i.e. consumer information about the source of the electricity product they are currently buying and the implications of its generation.

By assisting consumers to make an informed choice in the liberalised market place, this project proposes to develop a label (and the information system behind it) that will provide them with details of the content of their supply mix and its resulting environmental implications.

By designing an information system which displays details about the primary energy sources used to generate a certain product, this label will provide a tool which can aid consumers and policy makers in greening Europe’s electricity supply.

The Electricity Disclosure scheme will be explored within the context of liberalisation, in order to ensure that a functional and practical scheme is proposed. An assessment of the opportunities and barriers to labelling, and especially for tracking electricity, from the changes to the European liberalised markets will therefore be undertaken.

These will be achieved through the following activities:

- Phase 1: A study of the ability of suppliers to access and provide the information needed for an electricity label within the context of liberalisation.
- Phase 2: A study of what the label will mean for consumers and what consumers want by consulting with them directly through focus groups and a telephone survey.
- Phase 3: Development of policies to maximise the impact of the label, as well as investigating the need for associated policies to ensure effectiveness. This final phase views the label as part of a policy framework towards a lower carbon future, and suggests a policy toolbox that can be employed to build on the label.

In the course of the project, two workshops will be held, which form key deliverables of the 4C Electricity project. The project final report will be available in October 2003.

This report presents the initial analysis of the telephone survey conducted under Phase 2 of the project. It is supported by a more extensive report on the findings of this phase.

For more information about the 4C Electricity project, please visit the project website: <http://www.electricitylabels.com>



## Executive Summary

As part of the 4CE project, a telephone survey investigating the attitudes and knowledge of domestic consumers and Small and Medium Enterprises (SMEs) regarding their electricity use and its environmental impact was conducted in 10 European countries: Austria, France, Germany, Greece, Hungary, Italy, Poland, Spain, Sweden and the UK. In each country, 200 households and 100 SMEs were surveyed giving a total of 3000 interviews. The fieldwork was conducted in January and February 2003. The key findings were as follows:

- Overall the reaction to a label was positive in all countries and amongst both domestic customers and SMEs. A label showing environmental impact in addition to fuel mix was favoured.
- The majority of respondents would like to receive information on the environmental impact of their electricity with their bill and would like to be able to compare the range of different electricity products on the market through an independent catalogue.
- The majority of respondents indicated that they would find comparative information on their fuel mix useful, but there was no strong opinion as to whether this should be company portfolio, country average or European average.
- Respondents want to be informed about the origin and proportion of any imported electricity.
- The effectiveness of including environmental impact information about electricity on a website, as specified in the proposed Directive, is unlikely to reach more than half the population – either because they do not have access to the internet, or would be unlikely to visit such a web site.
- The majority of households and SMEs would prefer to buy electricity generated from renewable sources rather than from coal, gas or nuclear.
- Confusion still exists about the causes of climate change, although people appear to be aware that it is a problem, with a large majority of both households and SMEs expressing a preference for electricity which has a low impact on climate change and results in no nuclear waste.
- Almost 50% of households and SMEs state that they would be willing to pay up to 5% more on their electricity bill for electricity associated with a low impact on climate change and no nuclear waste. Less than 30% of respondents said that they would not be prepared to pay any extra at all.

## 1 Introduction

The proposed European Directive on liberalisation of the European electricity market is due to be implemented in July 2004, enabling millions of households and small companies to choose their electricity supplier, in many cases for the first time ever.

Along with liberalisation of the electricity market, the European Commission has introduced the concept of electricity disclosure throughout Europe with the inclusion of a labelling provision in the proposed directive. As with liberalisation, electricity disclosure has already been introduced into a small number of European countries, such as Austria, although it is more widely established in the US.

Therefore it is within this context of liberalisation and disclosure in the European electricity market that the 4CE project is being carried out. Phase 1 of the project considered the implications of the European liberalised market, focusing on the ability to track the sources of electricity to ensure that any proposed label would be practical and functional.

Phase 2 is focused on the needs of the consumer - both domestic and non-domestic - in terms of what a label might mean to them and the extent to which a label can provide them with the information they require to make an informed choice about their electricity supply. This research is ultimately working towards developing a number of label design options.

The three main tasks under phase 2 are:

1. Focus groups with domestic and non-domestic customers in the 5 partner countries (Austria, Germany, Hungary, Sweden and the UK);
2. Individual interviews with a number of large non-domestic electricity customers in the 5 partner countries;
3. A telephone survey across 10 European countries.

Whereas the focus groups and industry interviews provide insights into how consumers would react to a label, the telephone survey is a social survey of a wider audience to explore consumer attitudes to energy and environmental information. The survey provides information about consumer attitudes, awareness of environmental issues including carbon emissions and climate change, importance of price, implications of energy consumption and knowledge of supply mixes.

This report presents the initial analysis of the results from the telephone survey and draws out some of the key findings relevant to the issue of electricity labelling. A discussion of the results from the focus groups and individual interviews are covered in separate reports.

## 2 Background and objectives

### 2.1 Background

In depth consumer research on an issue such as electricity disclosure is essential to ensure that the aims of any disclosure scheme can be met, given that it is how the consumers react to disclosure that will ultimately determine its effectiveness. One of the main aims of disclosure is to enable consumers to make an informed choice about their electricity supply and thereby reflect their value system through their purchasing decision. Whilst it is crucial that the disclosure scheme is functional (as researched under Phase 1), it is also imperative that the scheme can be understood and used by consumers – hence the need for consumer research.

Substantial consumer research on electricity disclosure has been carried out in the US as part of the Consumer Information Disclosure Project initiated by the National Council on Competition and the American Electricity Industry in November 1996. This project has employed a number of research methods, including focus groups and telephone surveys which have provided a useful background to the 4CE research, although many of the American states do not operate under a liberalised market as yet.

At a European level, whilst there have been some country specific studies on electricity labelling, such as the research by SKM in the Netherlands, the 4CE project is the first study to undertake pan-European consumer research on electricity disclosure.

A combination of focus groups and a telephone survey was chosen for the 4CE project, to give both in-depth qualitative discussions at a country level along with statistically significant results at a European level. The focus groups and telephone survey covered both domestic customers and Small and Medium Enterprises (companies with less than 250 employees), since it was felt that these businesses often get overlooked in any non-domestic analysis and are possibly more like householders in the way that they might behave due to their small size. In addition to this, a number of in-depth interviews were conducted with large companies in the five partner countries (Austria, Germany, Hungary, Sweden and the UK) to gain some understanding of the perspective of large electricity consumers.

A telephone survey is an effective way to collect information on knowledge, attitudes and preferences from a large number of people for relatively low cost. The main disadvantage of such an approach when dealing with a complex issues such as electricity disclosure is that there is a limit to how much explanation you can provide, particularly without any visual aids. This means that the design of the questionnaire and wording of the questions is particularly crucial.

The 4CE telephone survey represents a benchmark in peoples' understanding and knowledge of issues around electricity disclosure. Once disclosure has been implemented throughout Europe, it may be beneficial to carry out regular surveys of this nature to monitor the effectiveness of any disclosure scheme introduced.

## **2.2 Objectives of the telephone survey**

The telephone survey was designed to build upon and enhance the results of the focus groups by providing statistically representative data on labelling issues. The key areas covered by the telephone survey were:

- Preferences for the information displayed on a label
- Preferences for a system to transmit the information
- Preferences for electricity generation, in terms of fuel source and environmental impacts
- General support for a label
- Environmental knowledge
- Importance of price



## **3 Method**

### **3.1 Questionnaire design**

The questionnaires were designed primarily by the ECI with contributions from the project partners and ORC International, drawing upon other research and similar surveys. Results from the focus groups were used to help identify the issues to cover and particular terms that should be used or avoided. The length of the questionnaire was determined by a combination of needing to make it reasonably short to keep peoples' interest and working within the budget available

The questionnaires for the domestic customers and the SMEs were substantially the same, the main differences being in the classification questions. The same questionnaires were used in all countries, with a few country specific questions included in the SME questionnaire on issues such as the Climate Change Levy in the UK and the Austrian disclosure scheme.

Some questions were designed to test the wording of the directive and others investigated possible label design options (such as whether comparisons should be included on the bill).

One of the difficulties in designing the questionnaire was how to get across the complex issues involved in disclosure and any labelling system – particularly in those countries presently without a liberalised electricity market where most people are unaware that there is any way of differentiating between electricity suppliers, let alone products. The focus groups revealed that most people, even in those countries with liberalised markets, had never given much thought to where their electricity came from or what impact the source of their electricity might have on the environment.

The questionnaire was piloted on 10 households and 10 SMEs in the UK before it was finalised and translated. The translations were carried out through ORC International and checked by native speakers from each country to ensure appropriate language and terms were used throughout.

### **3.2 Fieldwork**

The telephone survey was carried out in 10 European countries: Austria, France, Germany, Greece, Hungary, Italy, Poland, Spain, Sweden, UK, with 200 households and 100 Small and Medium Enterprises (SMEs) interviewed in each country, giving a total of 3000 interviews in all.

This selection of countries was based on the five 4CE partner countries (Austria, Germany, Hungary, Sweden and the UK), with Italy, Spain and Greece as representatives of Southern Europe and Poland as the largest candidate accession country. The population of each of these countries is given in Table 1.

Table 1: Population figures for countries covered in Telephone Survey

	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>	<b>Total</b>
Population figures 2001 (million)	8.1	59.5	82.4	11.0	10.1*	58.1	38.6*	41.3	8.9	60.2	378.2
Percentage of EU	2%	16%	22%	3%	-	15%	-	10%	2%	16%	86%

Source: Eurostat 2001, \*www.prb.org

The EU countries surveyed represent 86% of the total population of the EU and the 10 countries surveyed represent just over 50% of the population of the whole of Europe.

The telephone interviews were carried out by an independent market research company, ORC International, from a central call station at their London headquarters. Interviews were conducted by native speakers for each language and lasted an average of 15 minutes for domestic consumers and 13 minutes for the SMEs. All fieldwork was conducted between 27 January and 19 February 2003.

### 3.3 Sample selection

ORC International carried out the sample selection for both the domestic customers and SMEs, selecting the sample against soft quotas defined by the ECI. The soft quotas were designed to ensure that the interviews carried out in each country were as representative as possible.

#### 3.3.1 Domestic customers

Telephone numbers were selected at random from a database and checked to ensure that the numbers were valid and were domestic not business numbers. Soft quotas were set on the following criteria:

- Age
- Number of people in the household
- Social class
- Region
- Gender

#### 3.3.2 SMEs

Telephone numbers were selected at random from the Dunn & Bradstreet database. This database also provided information on company size, region and Standard Industry Code. Company size was used as the soft quota in the selection of the SME sample.

### 3.4 Sample characteristics

#### 3.4.1 Domestic customers

The sample was made up of 44% males and 56% females, covering a range in age, education and social class. Details of the sample characteristics are given in Table 2.

Table 2: *Sample characteristics of domestic customers surveyed*

No of people in house	1	2	3	4	5+
% of sample	15%	29%	21%	23%	12%

Age (years)	Under 25	25 – 34	35 - 44	45 - 54	55 - 64	65+
% of sample	5%	18%	22%	21%	18%	16%

Level of education	Age 16	Age 18	University	Postgraduate	Other
% of sample	33%	31%	24%	8%	4%

Social class	A	B	C1	C2	D	E	Don't know
% of sample	8%	13%	23%	22%	16%	14%	3%

The social class definitions used were:

AB: Upper middle class, e.g. higher managerial, professional (Doctor, headmaster, lawyer, large company board director)

C1: lower middle class, e.g. clerical, junior managerial, administrative, student (office clerk)

C2: skilled working class, e.g. engineer

D: unskilled and manual workers, e.g. factory worker

E: lowest level of subsistence, e.g. state pensioner

These were assigned to each respondent by the interviewer, based on a number of standard classification questions, rather than asking respondents directly to state their social class, since many are unlikely to know.

### 3.4.2 SMEs

The majority (77%) of small and medium companies in each of the countries are made up of less than 10 employees. Therefore, to ensure a good spread of interviews amongst companies of different sizes, rather than selecting the sample on the basis of the distribution of company size (which would have concentrated most of the interviews within companies of less than 10 employees), 7 bands were selected to reflect the full range of company size, across which the selected sample was evenly distributed. The sample characteristics are given in Table 3 and Table 4.

*Table 3: Sample characteristics of SMEs surveyed - company size*

<b>SME size (No of employees)</b>	<b>No of SMEs surveyed</b>	<b>Percentage of survey sample</b>	<b>Total no of SMEs in all countries surveyed</b>	<b>Percentage of all SMEs by company size</b>
<b>1</b>	138	14%	1 097 460	25%
<b>1-5</b>	146	14%	1 770 303	41%
<b>6-9</b>	137	13%	496 102	11%
<b>10-25</b>	150	15%	638 359	15%
<b>26-49</b>	140	14%	168 831	4%
<b>50-149</b>	157	15%	145 463	3%
<b>150-250</b>	146	14%	33 359	1%
<b>TOTALS</b>	1014		4 349 877	

Source: Dunn & Bradstreet, Neil Whelpton Associates

*Table 4: Sample characteristics of SMEs surveyed - industry type*

<b>Industry type</b>	<b>Percentage of survey sam- ple</b>
<b>Agriculture, Forestry, Fishing</b>	3%
<b>Mining</b>	1%
<b>Construction</b>	10%
<b>Manufacturing</b>	22%
<b>Transportation, Communication &amp; Sanitary Services</b>	4%
<b>Wholesale Trade</b>	18%
<b>Retail Trade</b>	13%
<b>Finance, Industry &amp; Real Estate</b>	6%

Source: Dunn & Bradstreet, Neil Whelpton Associates

## 4 Findings

To obtain the percentage figures, the raw data are weighted by number of households in each country for domestic customers, and number of companies in each country for the SMEs. It should be remembered that with these types of surveys it is often common for respondents to overstate what actions they might take or give the answers they feel that they ought to give, rather than directly reflecting the reality. Therefore, all results should be considered with a certain degree of caution.

It should be noted that the percentages shown in the figures and tables may not always add up to 100% due to rounding or cases where questions had more than one answer. The order in which the findings are presented does not necessarily correspond to the order in which the questions were asked (the original questionnaires are included in Appendix B & C).

The statistical confidence of the results depends upon the sample size and observed percentage. Table 5 presents the 95% confidence intervals for the various sample sizes used<sup>1</sup>, indicating the range within which the real percentages fall for an observed percentage of 50%. This represents the widest confidence interval, with greater confidence in observed percentages above and below 50%.

Table 5 Confidence intervals for sample sizes used

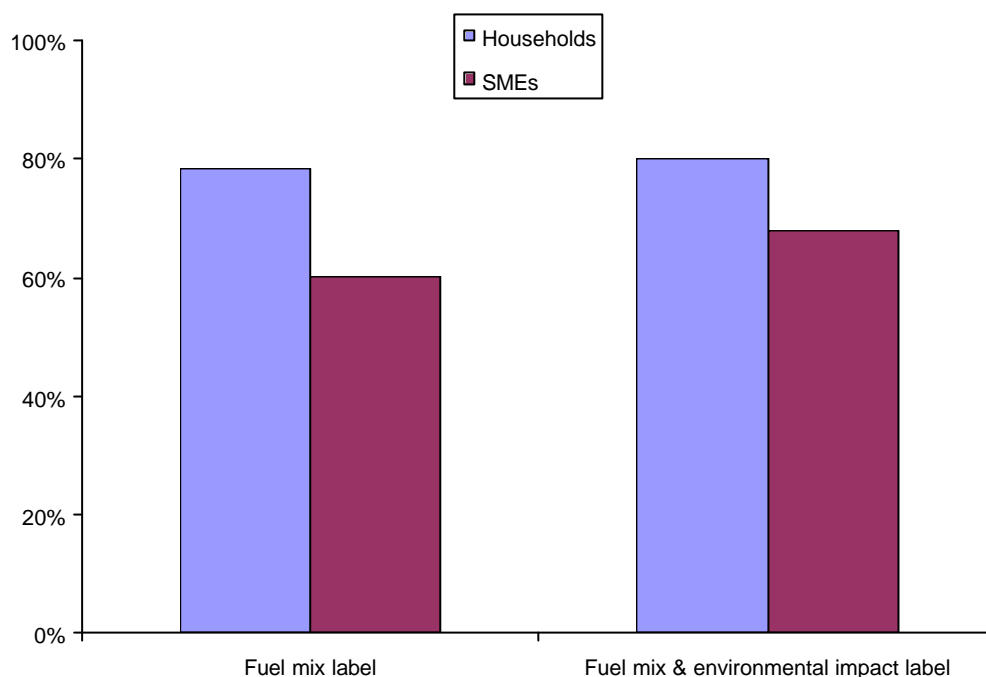
Sample size	100	200	1000	2000
Confidence interval for an observed percentage of 50%	+/- 9.8%	+/-6.9%	+/- 3.1%	+/- 2.2%

### 4.1 Support for an electricity label

There is strong support for an electricity label, with 78% of householders and 60% of SMEs stating that they would find it useful to have their electricity mix shown on a label and identified for them (see Figure 1): 46% of households actually said that such a label would be *extremely* useful, as opposed to just useful (32%). In general, SMEs appear to be slightly less enthusiastic about an electricity label than domestic customers. Support was particularly high in the three Southern European countries. It is encouraging that 83% of Austrian householders support a label, given that they already have a labelling scheme in place. Lowest support for a label amongst both households and businesses was in Poland (see Table 13 and Table 14 in Appendix A for more detailed figures).

<sup>1</sup> 95% confidence intervals are calculated using the formula:  $\pm 1.96 \div \sqrt{n}$ , where n=sample size

Figure 1: Percentage of respondents in support of an electricity label

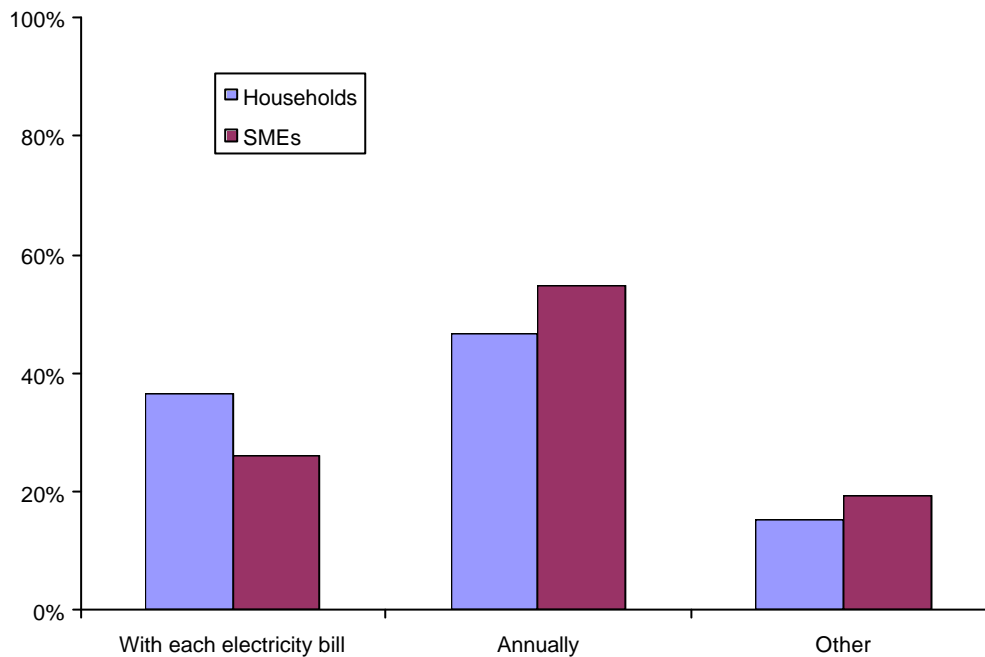


There was also strong support for a label which included both information on fuel mix and environmental impact of the electricity, at 80% of households and 68% of SMEs. Support for this more detailed label was particularly high amongst Hungarian households at 93% and Greek businesses at 94%. Lowest interest was amongst households and businesses in Poland and Sweden (see Table 15 and Table 16 in Appendix A for detailed figures).

Most households and businesses would prefer to receive information on their electricity mix annually or with their electricity bill (see Figure 2. More detailed figures in Table 17 and Table 18 in Appendix A).

Preference for information sent out with the bill was greatest in Spain (households: 62%, SMEs: 55%), with Swedish SMEs showing a marked preference for annual information (78%) which was also reflected amongst Swedish households (63%).

Figure 2 Preferred frequency of information – domestic customers and SMEs

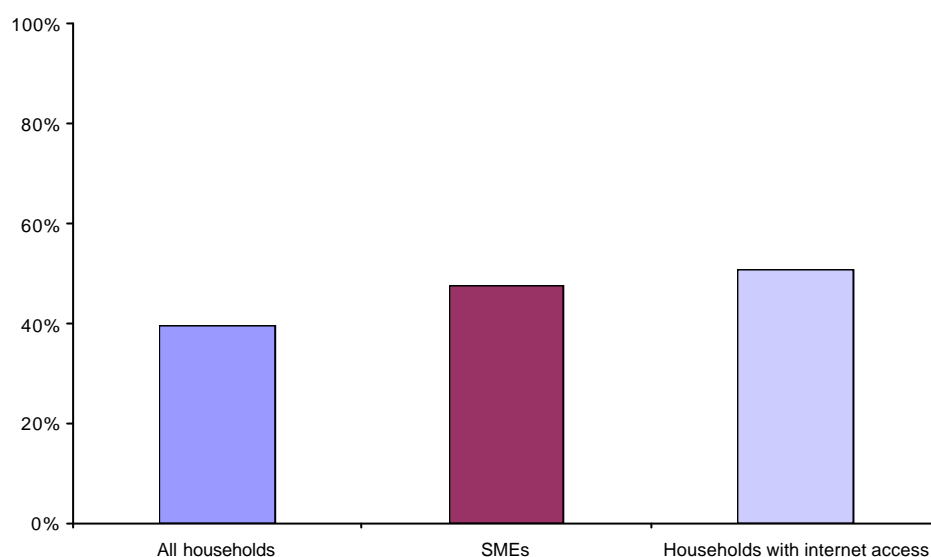


## 4.2 Effectiveness of a website

The labelling provision in the proposed directive on liberalisation of the European electricity market does not require information on the environmental impact of electricity to be included on or with the bill or promotional materials. The directive only requires a ‘reference to an external reference source, such as a website’ where this information is available. However, only 39% of households and 48% of SMEs say they will visit such a website (Figure 3), and in reality this is likely to be far lower since people generally over-estimate what they might do in practice when responding to these type of questions (detailed figures in Table 19 and Table 20 in Appendix A).

This is not necessarily because they do not want the information: 80% of households and 69% of SMEs were in favour of an electricity label which provided them with information on the fuel mix and environmental impact. Rather the internet does not appear to be a suitable medium for conveying this information. This is further supported by the Eurobarometer Energy survey (Eurobarometer 2002) in which only 10% of respondents in the EU cited the internet as the main source of information on energy issues at present.

*Figure 3 Percentage of respondents likely to use a website to look up environmental information – domestic customers and SMEs*



Another issue to bear in mind is the number of households who actually have access to the internet. This survey found that 22% of households do not currently have access to the internet (Table 6). This is somewhat low compared with the average across the EU of 62% of households without internet access (Eurobarometer 2001). An estimated 26%<sup>2</sup> of the European population, ie including households and businesses, is currently on-line. Therefore, the survey results appear to over-estimate the proportion of people with access to the internet. This implies that the current wording of the directive means that at least a fifth of households (but probably more) will immediately be excluded from being able to access information about the environmental impact of their electricity.

*Table 6: Use of a website for non-work related purposes – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Yes</b>	<b>43%</b>	46%	39%	48%	28%	29%	40%	35%	35%	62%	51%
<b>No</b>	<b>35%</b>	25%	48%	25%	39%	54%	50%	37%	36%	30%	21%
<b>No internet access</b>	<b>22%</b>	30%	14%	27%	34%	17%	11%	28%	26%	9%	28%
<b>Unlikely</b>	<b>0%</b>	-	-	-	1%	-	-	-	-	1%	1%
<b>Don't know</b>	<b>0%</b>	1%	-	-	-	-	-	-	4%	-	-
<b>Refused</b>	<b>43%</b>	46%	39%	48%	28%	29%	40%	35%	35%	62%	51%

Base: 2003 households

<sup>2</sup> [www.nua.ie/surveys/how\\_many\\_online/index.html](http://www.nua.ie/surveys/how_many_online/index.html)

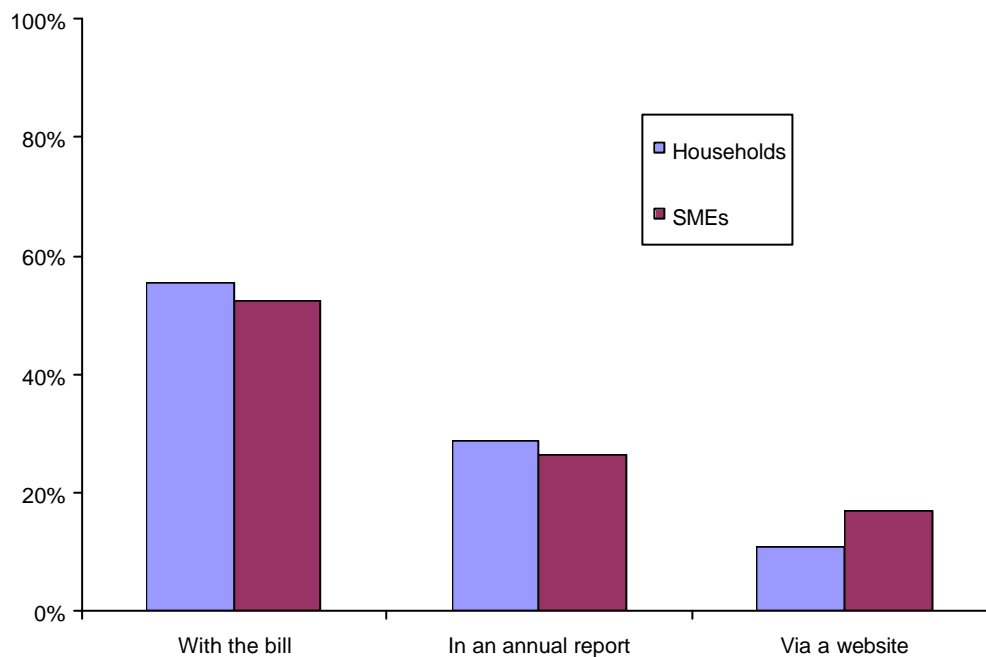


### 4.3 Information channels and sources

In this question, respondents were asked to choose one of the three options, rather than rating the usefulness of each. The term ‘annual report’ is somewhat ambiguous – it was intended to refer to a company annual report, but may have been interpreted by respondents as an annual statement on the environmental impact of their electricity.

Given the choice, the majority of householders and businesses would prefer to be provided with information on the environmental impact of electricity with their bill (Figure 4) than via an annual report or website. Support for a website providing this information is even lower under this question at 11% of householders and 17% of SMEs (detailed figures given in Table 21 in Appendix A) than in Figure 3.

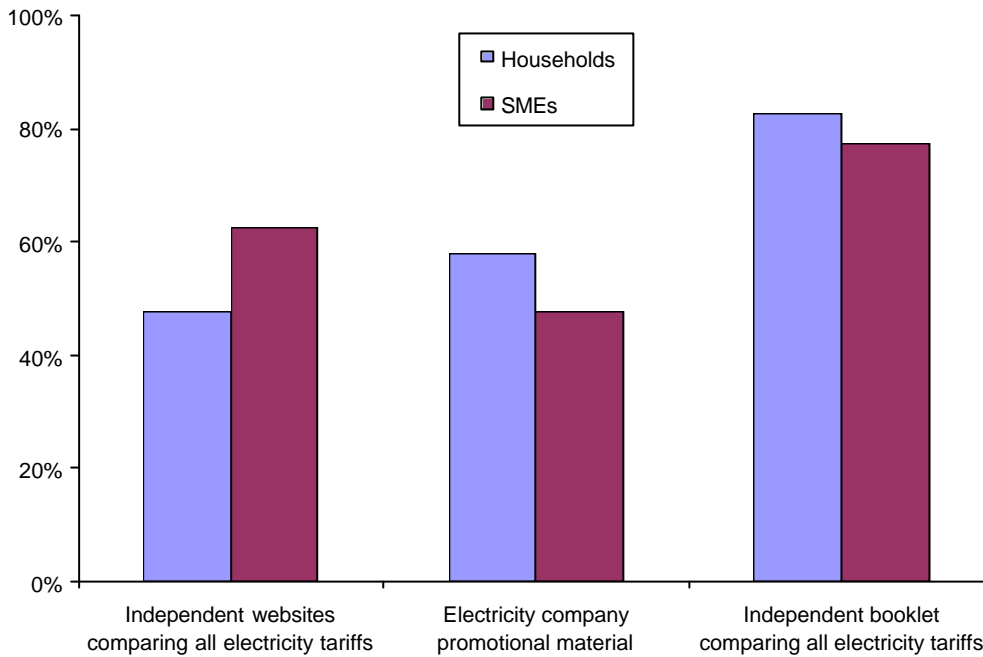
*Figure 4 Preferred channels for environmental impact information – domestic customers and SMEs*



In terms of the type of information source people think they would be most likely to use when making a decision about changing their electricity company, there was strong support for an independent catalogue listing all tariffs available at 82% of householders and 77% of SMEs (Figure 5). There was also a fair amount of support for an independent website comparing all tariffs, although this would be easy to create once a catalogue had been produced (detailed figures in Table 22 and Table 23 in Appendix A).

Promotional material from the electricity company is also an important factor in people’s decision making – more so for householders than for SMEs.

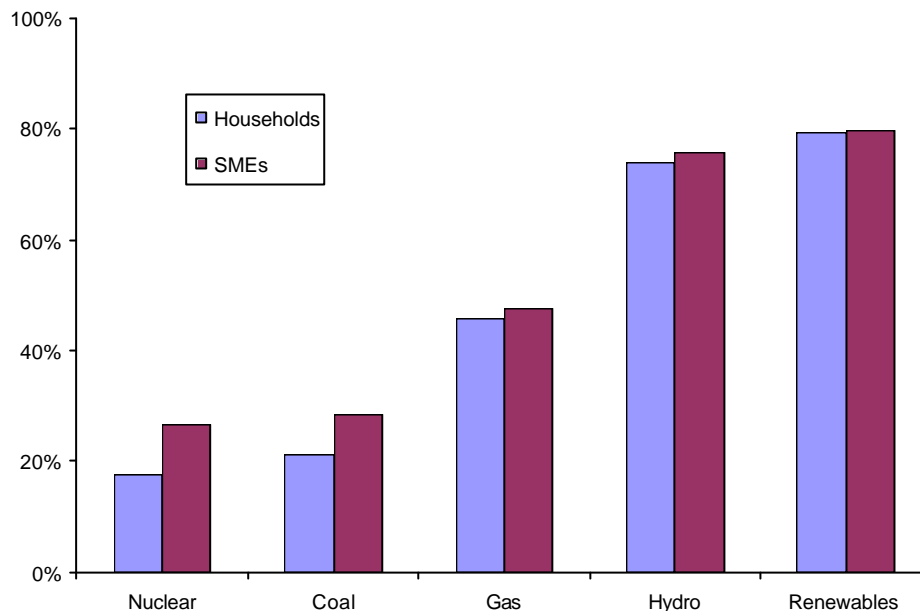
Figure 5 Likelihood to use an information source – domestic customers and SMEs



#### 4.4 Preference for fuel sources

People were asked how likely they or their organisation would be to buy electricity generated from various different sources, assuming that the cost is the same. Responses from the domestic customers and SMEs were very similar, with an overwhelming majority in favour of electricity generated from renewable sources (this category was not broken down into eg wind, solar etc, but a list was available for the interviewers to read out if respondents asked for more detail on what was included). Figure 6 shows the percentage of domestic customers and SMEs who stated that they would be either likely or extremely likely to buy each fuel source.

Figure 6 Likelihood to buy electricity generated from different fuel sources – domestic customers and SMEs



Support for coal and nuclear was at a low level for with a strong reaction against nuclear: 43% of domestic customers stated that they would be extremely unlikely to buy nuclear electricity (see Table 24 and Table 25 in Appendix A for detailed figures).

In France, the Member State with the highest level of nuclear generation, only 29% of households and 27% of SMEs state that they would be likely or extremely likely to buy electricity generated from nuclear sources. This compares to 81% of households and 76% of SMEs in France who say they would buy electricity generated from renewable sources.

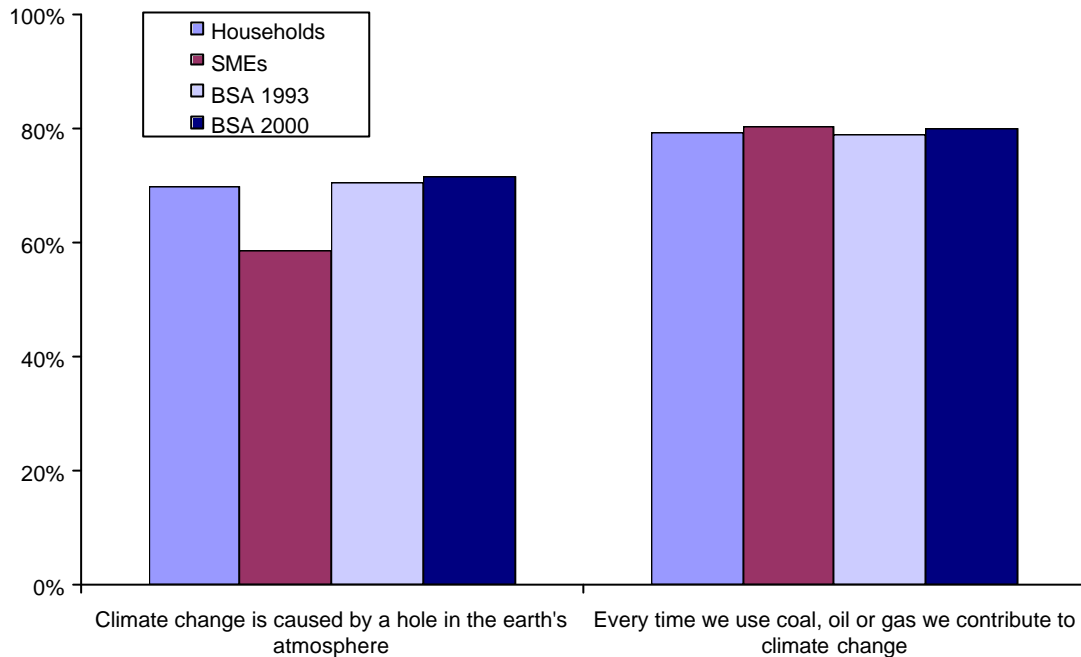
Interestingly, opinion on renewables was very clear-cut amongst all householders, with no-one giving ‘neither’ (likely nor unlikely) as a response. Even if respondents are overstating their actions in this case, support for renewables is still over three times greater than that for nuclear or coal, demonstrating a strong preference for electricity from renewable sources.

#### 4.5 Knowledge of climate change

There appears to be some confusion about the causes of climate change. Whilst the majority of households and businesses appeared to understand that the use of fossil fuels results in climate change, a high percentage also wrongly believed that climate change is caused by the ozone hole (Figure 7). These two questions were taken from the 1993 British Social Attitudes Survey (BSA 1993) on the Environment, repeated in 2000 (BSA personal communication), which shows a similar level of confusion about climate change amongst respondents: 71% (1993) and 72% (2000) believed that ‘the greenhouse effect is caused by a hole in the earth’s atmosphere’, whilst 79% (1993) and 80% (2000) thought that the statement ‘every time we use coal or oil or gas we contribute to the greenhouse effect’ was either definitely or probably

true. These figures are also reinforced by a recent Eurobarometer survey on Energy (Eurobarometer, 2002) which found that 75% of respondents in the EU are of the opinion that the use of fossil fuels contribute significantly to climate change.

*Figure 7 Knowledge of climate change: percentage of respondents who agree – domestic customers and SMEs*



The mis-conception about climate change is highest in Greece, with no countries (apart from SMEs in Germany) showing more than 30% of respondents who correctly understood the difference between the ozone hole and the causes of climate change (detailed figures are in Table 26, Table 27, Table 28 and Table 29).

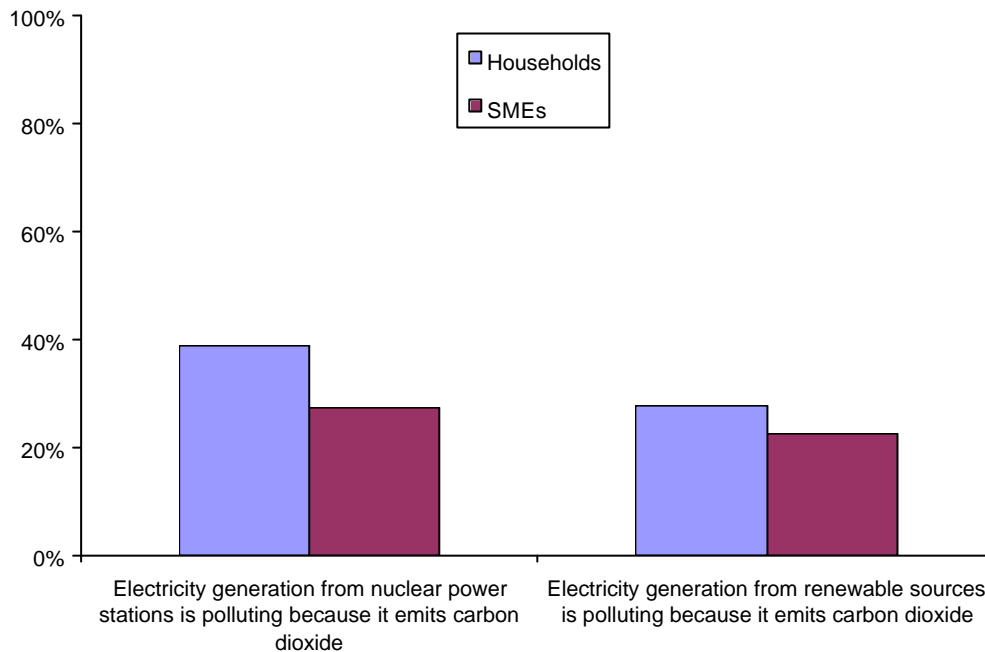
#### **4.6 Knowledge of environmental impact**

There also appears to be some confusion about the pollution resulting from electricity generated from both nuclear and renewable sources, although businesses appear to be better informed than householders (Figure 8). Around a third of all households wrongly believe that generation from these sources results in carbon dioxide emissions. This is supported by the results from the Eurobarometer Energy survey (Eurobarometer 2002) which found that 47% of respondents in the EU believed that nuclear energy contributes significantly to climate change. In theory, this could be due to respondents taking into account the fact that under a life cycle analysis the use of nuclear and renewable sources does result in carbon dioxide emissions to a certain extent, but most respondents are unlikely to have been aware of this fact.

In the 4CE telephone survey, this mis-understanding regarding nuclear was greatest amongst Greek domestic and business customers and, regarding renewables, was highest amongst UK households and Swedish businesses (detailed figures in Table 30, Table 31, Table 32 and

Table 33 in Appendix A). This high figure for Swedish business could be partly explained by the use of biomass in Sweden, since this does result in carbon dioxide emissions (although is purported to be carbon neutral overall).

*Figure 8 Knowledge of environmental impact: percentage of respondents who strongly agree or agree – domestic customers and SMEs*



German households and SMEs appeared to have the best understanding the impacts from nuclear energy, with 51% of households and 69% of SMEs disagreeing with the statement shown in Figure 8. Hungary came out with the highest percentage of respondents disagreeing with the statement regarding electricity generation from renewable sources at 69% of households and 75% of SMEs.

#### 4.7 Level of environmental concern

Respondents were given a series of statements concerning the environmental impacts of electricity generation and asked how important they felt these impacts to be on a scale of 1 (not at all important) to 10 (extremely important). The mean scores for each impact are given in Table 7 and Table 8. In general, the level of concern is high for all impacts, with radioactive waste appearing to be of higher concern than climate change amongst domestic customers. SMEs appear to be most concerned about the use of fuels which will eventually run out.

Table 7: *Level of concern about the consequences of electricity generation – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Produces radioactive waste</b>	<b>7.5</b>	8.0	7.0	7.4	8.7	7.8	8.0	L 6.2	H 8.8	6.8	7.4
<b>Results in carbon dioxide emissions</b>	<b>7.0</b>	6.9	6.2	6.6	7.8	7.6	7.7	L 6.2	H 8.1	6.9	7.3
<b>Contributes to climate change</b>	<b>7.1</b>	6.8	6.4	7.0	7.6	7.7	7.5	L 6.1	H 8.0	7.2	7.2
<b>Uses fuel which will eventually run out</b>	<b>7.3</b>	7.2	6.5	7.3	7.0	H 8.1	7.8	L 6.0	8.0	6.9	7.6

Base: 2003 households, Key: H –highest score, L – lowest score

Table 8: *Level of concern about the consequences of electricity generation – SMEs*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Produces radioactive waste</b>	<b>6.4</b>	7.4	5.7	6.2	H 9.0	6.9	7.0	L 5.7	8.0	5.8	6.4
<b>Results in carbon dioxide emissions</b>	<b>6.0</b>	6.2	L 4.9	6.0	H 8.0	6.7	6.7	5.9	7.3	6.6	5.9
<b>Contributes to climate change</b>	<b>6.3</b>	6.3	L 5.3	6.3	H 7.9	7.1	7.1	5.4	7.6	6.2	6.2
<b>Uses fuel which will eventually run out</b>	<b>6.7</b>	6.6	6.0	7.0	7.1	7.1	H 7.3	L 5.6	7.1	6.7	6.3

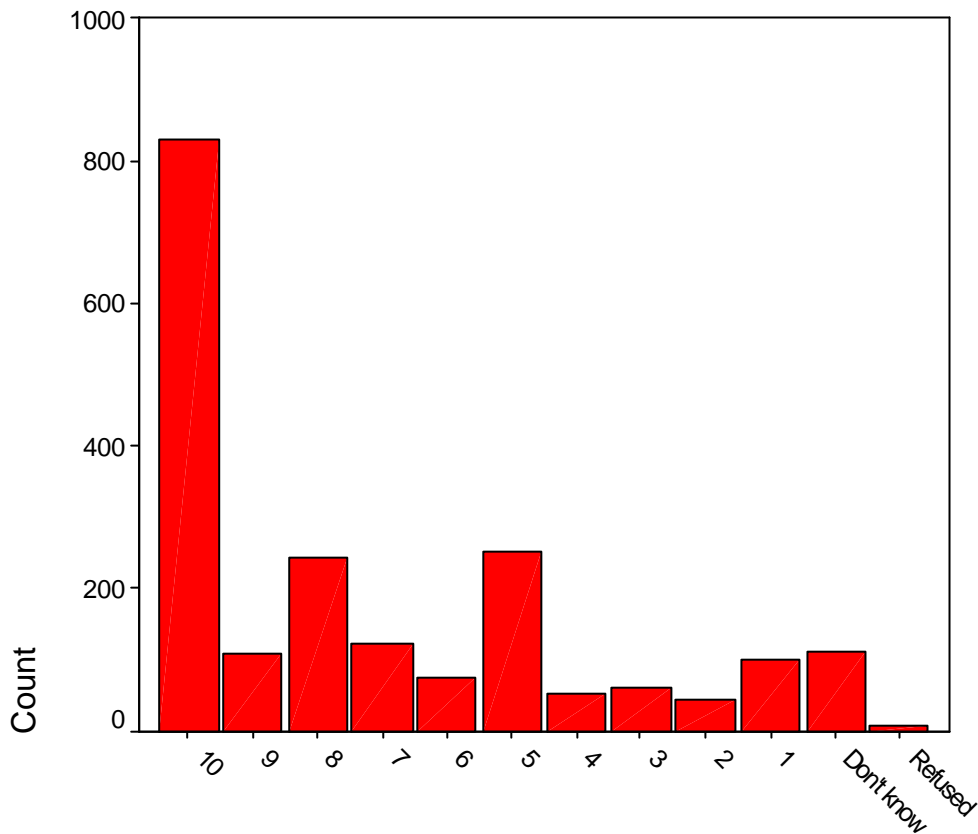
Base: 1015 companies, Key: H –highest score, L – lowest score

Spanish households and Greek SMEs appear to be the most concerned about the issue of radioactive waste and to a greater extent than countries that currently have a high nuclear capacity such as France and Germany.

Whilst the average scores indicate the general level of concern for each issue, the distribution of responses behind these averages appear to follow two general patterns. Figure 9 shows the distribution of scores amongst the domestic customers in response to the statement ‘electricity generation produces radioactive waste’, 41% of respondents indicating a high level of concern

(score of 10). A similar distribution was evident for the responses from SMEs. Therefore the level of concern about radioactive waste is particularly strong.

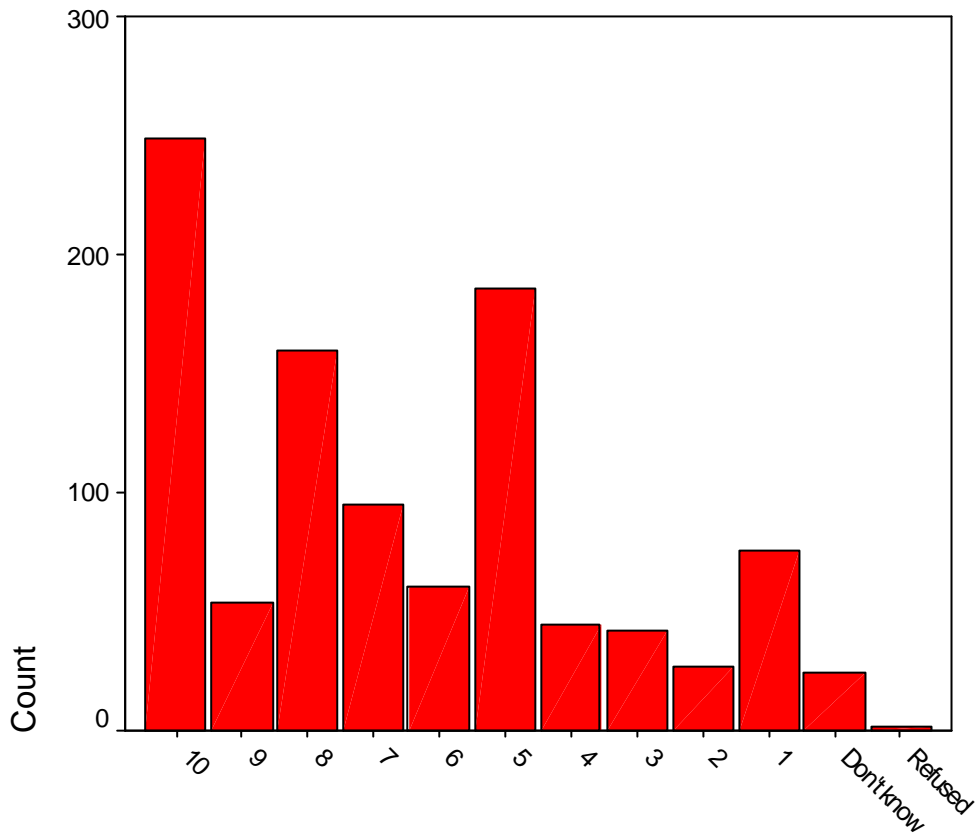
*Figure 9 Distribution of responses for level of concern that 'electricity generation produces radioactive waste' - households*



Base: 2003 households

Scores for the other three statements followed a slightly different distribution for both households and SMEs, as demonstrated in Figure 10. This distribution is more evenly spread across the various scores, with only 25% of SMEs indicating a high level of concern (score of 10) for this issue.

Figure 10 Distribution of responses for level of concern that ‘electricity generation uses fuel which will eventually run out’ - SMEs



Base: 1015 companies

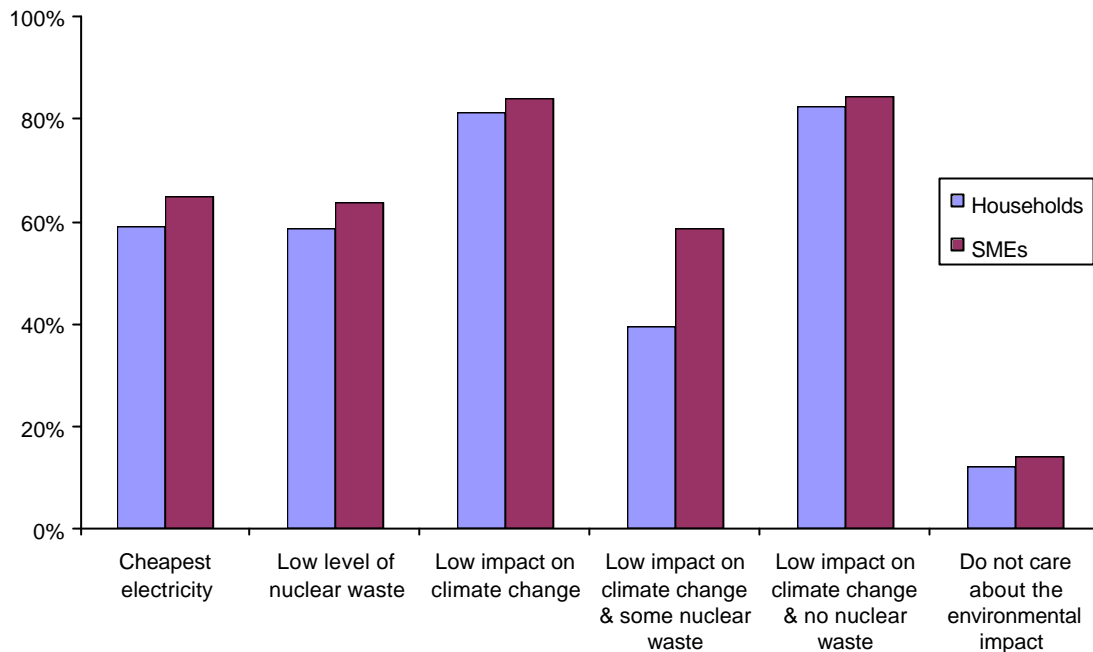
#### 4.8 Attitudes to the environmental impacts of electricity

Despite the apparent mis-understanding of the causes of climate change, people seem to be aware that it is something to be avoided. 81% of households were in favour of electricity with a low impact on climate change and 82% in favour of electricity with a low impact on climate change and no nuclear waste, while 85% of SMEs were in favour of both types of electricity (Figure 11). The message appears to be that people do not want their electricity use to result in climate change or nuclear waste and so are not prepared to accept nuclear energy as a solution to climate change (detailed figures in Table 34 and Table 35 in Appendix A). Only a very low proportion (12% of households and 14% of SMEs) say that they do not care about the environmental impact of their electricity.

In order for people to be able to exercise these preferences, they need to be provided with information on the environmental impact of electricity from different sources.



*Figure 11 Preference for electricity associated with a certain environmental impact – domestic customers and SMEs*



Price is usually quoted as the key driving factor in the selection of an electricity supplier, but even though a majority of households (59%) and SMEs (65%) state that they would always buy the cheapest, support for electricity with low environmental impact was greater, implying that environmental issues are a considerable concern. However, this may not necessarily reflect what decisions people make in practise, when price may become a stronger motivator.

#### 4.9 Willingness to pay

Only a fifth of households and a quarter of SMEs state that they would not be willing to pay any extra for electricity associated with no nuclear waste or a low impact on climate change (Table 9). Nearly 50% of households and SMEs would be willing to pay up to 5% more for electricity associated with a low environmental impact, with only 19% - 27% of respondents stating that they are not prepared to pay any extra (14%-18% did not know). When this question was asked in the Eurobarometer Energy survey (Eurobarometer 2002), 54% of EU respondents stated that they would not be prepared to pay any more for green electricity, 24% were prepared to pay up to 5% more and 11% were prepared to pay 6-10% more.

These results should be interpreted with caution, since responses to willingness to pay questions are notorious for being optimistic – in reality, people will only contribute between 20% and 40% of what they state (Schulze 1994).

Table 9: Percentage extra willing to pay – domestic customers and SMEs

	Domestic customers		SMEs	
	No nuclear waste	Low impact on climate change	No nuclear waste	Low impact on climate change
<b>0%</b>	19%	20%	27%	25%
<b>1-5%</b>	27%	29%	26%	28%
<b>6-10%</b>	22%	18%	19%	18%
<b>11-25%</b>	12%	12%	8%	7%
<b>26%+</b>	6%	6%	2%	3%
<b>Don't know</b>	15%	14%	18%	18%

Base: 2003 households and 1015 companies

#### 4.10 Preference for comparative information

There was no strong preference for a particular reference for an electricity mix comparison, but over 60% of households and 50% of SMEs felt that some kind of comparison would be useful, either with the company portfolio<sup>3</sup>, the country average or the European average (Table 10). This question assumed that customers were provided with information on their specific product ('the electricity mix you buy').

Table 10: Preference for fuel mix comparisons – domestic customers and SMEs

	Domestic customers			SMEs		
	Portfolio	Country average	EU average	Portfolio	Country average	EU average
<b>Extremely useful</b>	22%	20%	19%	17%	16%	15%
<b>Useful</b>	44%	48%	42%	37%	44%	38%
<b>Neither</b>	14%	14%	16%	16%	13%	15%
<b>Not very useful</b>	11%	9%	12%	17%	13%	18%
<b>Not at all useful</b>	6%	5%	6%	10%	11%	12%
<b>Don't know</b>	3%	4%	6%	3%	3%	2%

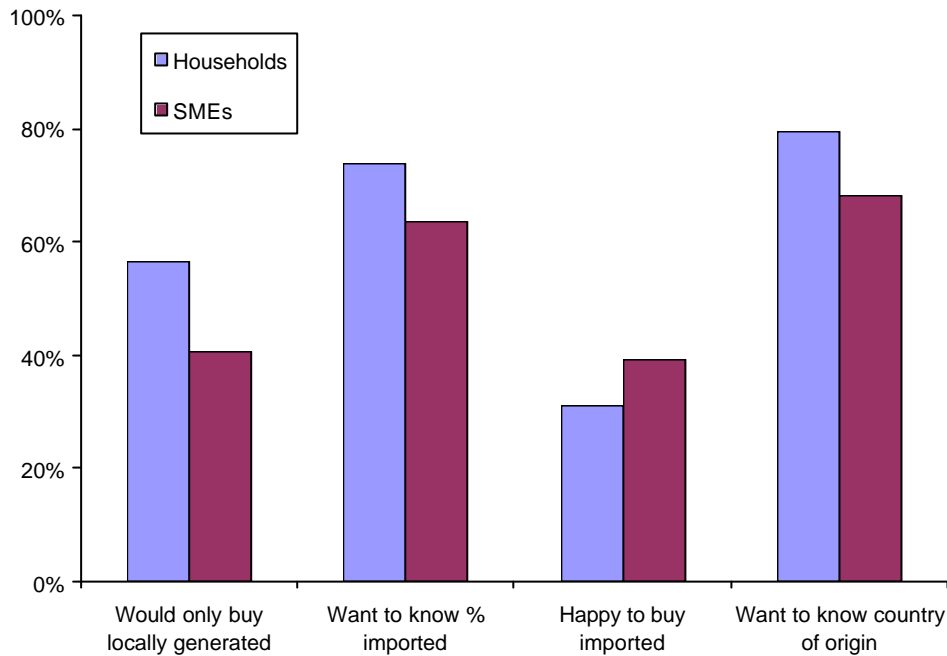
Base: 2003 households & 1015 companies

#### 4.11 Information on imported electricity

There was definite interest in being given information on the level and origin of any imported electricity (see Figure 12), with a similar level of interest across all countries. Domestic customers appear to be slightly more concerned than businesses about the issue of imported electricity (see Table 36 to Table 43 in Appendix A for detailed figures).

<sup>3</sup> Defined as 'the overall electricity mix sold by your (or your organisation's) electricity company' in the questionnaire

Figure 12 Attitudes towards imported electricity ('strongly agree' and 'agree' responses) – domestic customers and SMEs



The message appears to be that people, particularly domestic customers, would prefer not to buy imported electricity and if they do, they want to be given information about it. The highest percentages of domestic customers who wanted to know about the country of origin of the electricity (responses of 'agree' and 'strongly agree') were in Austria (88%), France (86%), Greece (86%) and Poland (86%).

#### 4.12 Frequency of bills

The majority of households surveyed receive their bills every two months, monthly bills being more common in Austria and Hungary and quarterly bills more common in Sweden and in the UK (see Table 11). This impacts on how often disclosure information could be distributed to households in each country if sent out in or with the bill.

Table 11: Frequency of electricity bills – domestic customers

	<b>Weighted total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Monthly</b>	<b>18%</b>	41%	30%	21%	2%	96%	7%	21%	3%	21%	9%
<b>Bi - monthly</b>	<b>40%</b>	22%	41%	14%	96%	1%	86%	54%	95%	24%	1%
<b>Quarterly</b>	<b>20%</b>	17%	11%	11%	2%	-	3%	11%	3%	53%	75%
<b>Six monthly</b>	<b>3%</b>	4%	7%	1%	-	-	1%	9%	-	1%	2%
<b>Annually</b>	<b>15%</b>	16%	10%	50%	-	2%	-	2%	-	-	2%
<b>Other</b>	<b>1%</b>	-	1%	-	-	-	1%	-	-	-	7%
<b>Don't know</b>	<b>2%</b>	2%	1%	2%	1%	-	4%	1%	1%	2%	5%

Base: 2003 households

For SMEs, monthly bills were most common, at 41% of companies, followed by an equal split between bi-monthly and quarterly bills (see Table 12).

Table 12: Frequency of electricity bills – SMEs

	<b>Weighted total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Monthly</b>	<b>46%</b>	36%	45%	43%	54%	97%	51%	70%	63%	37%	42%
<b>Bi - Monthly</b>	<b>21%</b>	16%	41%	7%	41%	1%	47%	23%	34%	19%	1%
<b>Quarterly</b>	<b>21%</b>	19%	9%	12%	3%	1%	1%	3%	-	43%	53%
<b>Annually</b>	<b>9%</b>	24%	2%	34%	-	-	-	-	-	-	-
<b>Other</b>	<b>1%</b>	2%	1%	-	-	-	-	3%	-	1%	2%
<b>Don't know</b>	<b>2%</b>	3%	2%	3%	1%	1%	1%	-	3%	-	2%

Base: 1015 companies

## 5 Conclusions

The telephone survey provides a useful insight into the current understanding of and attitudes towards electricity generation and its environmental impacts amongst domestic customers and SMEs. The survey also gives an indication of the level of support for an electricity label and the preferences for the type of information that should be displayed.

The statistically representative quantitative data offers a useful overview which can support the more detailed qualitative results from the focus groups and large industry interviews. This survey provides a benchmark of the current situation which could be beneficial to repeat at regular intervals in the future to monitor the impact and effect of any electricity disclosure scheme.

Overall, the survey found support for full electricity disclosure information, ie on the fuel mix and environmental impact, to be sent out with the electricity bills, rather than via a website. The majority of people would prefer to receive this information on an annual basis. They would also like an independent catalogue to allow them to compare the various electricity products available to them.

There is strong support for renewable sources of electricity with a substantial proportion of respondents stating that they are willing to pay more for electricity with a low impact on climate change and no nuclear waste.

The Eurobarometer Energy survey (Eurobarometer 2002) found that 88% of respondents in the EU felt that global warming and climate change are a serious issue and 47% of respondents would like to be consulted on the choice of energy sources for the future. Electricity labelling can give people the opportunity to exercise their choice and influence future energy generation, thereby allowing them to help tackle the issue of climate change.

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## Appendix A – Data tables

### Support for an electricity label

‘In reality, your electricity comes from a mix of these sources. Do you agree or disagree with the following statement:

I would find it useful to have my electricity mix shown on a label and identified for me’

Table 13: *Usefulness of a label with fuel mix – domestic customers*

	Weighted Total	Au	F	G	Gr	Hu	I	P	Sp	Sw	UK
<b>Extremely useful</b>	<b>46%</b>	51%	56%	47%	73%	28%	58%	17%	73%	24%	25%
<b>Useful</b>	<b>32%</b>	32%	30%	25%	11%	55%	31%	46%	19%	41%	46%
<b>Neither</b>	<b>10%</b>	7%	8%	15%	13%	4%	7%	8%	6%	18%	12%
<b>Not very useful</b>	<b>6%</b>	10%	5%	7%	3%	9%	2%	15%	-	8%	9%
<b>Not at all useful</b>	<b>2%</b>	1%	2%	3%	1%	1%	1%	3%	1%	9%	2%
<b>Don't know</b>	<b>3%</b>	1%	1%	2%	1%	2%	2%	10%	2%	2%	8%

Base: 2003 households

Table 14: *Usefulness of a label with fuel mix – SMEs*

	Weighted Total	Au	F	G	Gr	Hu	I	P	Sp	Sw	UK
<b>Extremely useful</b>	<b>23%</b>	25%	14%	23%	48%	12%	35%	14%	54%	15%	16%
<b>Useful</b>	<b>37%</b>	37%	42%	40%	29%	48%	43%	37%	15%	44%	32%
<b>Neither</b>	<b>14%</b>	19%	14%	11%	19%	6%	10%	7%	15%	16%	18%
<b>Not very useful</b>	<b>13%</b>	8%	16%	15%	2%	29%	9%	20%	5%	9%	14%
<b>Not at all useful</b>	<b>12%</b>	11%	11%	11%	1%	2%	1%	20%	9%	16%	20%
<b>Don't know</b>	<b>1%</b>	-	3%	-	1%	3%	2%	3%	2%	-	1%

Base: 1015 companies

‘How useful would you find it to have information on your electricity mix **and** the environmental impact of your electricity mix shown on a label and identified for you?’

*Table 15: Usefulness of a label with fuel mix and environmental impact – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Extremely useful</b>	<b>39%</b>	46%	41%	34%	66%	40%	50%	14%	59%	21%	32%
<b>Useful</b>	<b>41%</b>	33%	43%	39%	24%	53%	36%	55%	28%	46%	50%
<b>Neither</b>	<b>9%</b>	13%	9%	15%	9%	1%	6%	9%	10%	14%	4%
<b>Not very useful</b>	<b>6%</b>	6%	5%	6%	2%	5%	3%	13%	1%	10%	8%
<b>Not at all useful</b>	<b>4%</b>	3%	3%	4%	-	-	4%	6%	1%	9%	5%
<b>Don't know</b>	<b>2%</b>	-	1%	1%	1%	-	4%	1%	1%	2%	2%

Base: 2003 households

*Table 16: Usefulness of a label with fuel mix and environmental impact – SMEs*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Extremely useful</b>	<b>26%</b>	31%	21%	32%	70%	35%	28%	9%	53%	13%	17%
<b>Useful</b>	<b>42%</b>	31%	51%	39%	24%	44%	64%	40%	19%	12%	39%
<b>Neither</b>	<b>13%</b>	19%	12%	12%	5%	9%	3%	11%	18%	16%	17%
<b>Not very useful</b>	<b>11%</b>	10%	10%	12%	1%	8%	1%	20%	4%	40%	15%
<b>Not at all useful</b>	<b>7%</b>	9%	5%	3%	-	1%	3%	19%	6%	19%	13%
<b>Don't know</b>	<b>0%</b>	-	1%	1%	-	2%	-	2%	-	-	-

Base: 1015 companies



**Frequency of information**

‘How often would you like to receive information on your electricity mix?’

*Table 17: Frequency of information – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>With each electricity bill</b>	<b>37%</b>	26%	34%	26%	51%	39%	47%	30%	62%	21%	35%
<b>Annually</b>	<b>47%</b>	57%	58%	52%	31%	52%	34%	46%	18%	63%	55%
<b>Never</b>	<b>6%</b>	6%	3%	9%	5%	2%	3%	9%	2%	10%	6%
<b>Other</b>	<b>8%</b>	11%	4%	10%	11%	6%	16%	13%	17%	7%	2%
<b>Don't know</b>	<b>2%</b>	1%	1%	2%	3%	-	2%	1%	3%	-	3%

Base: 2003 households

*Table 18: Frequency of information – SMEs*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>With each electricity bill</b>	<b>26%</b>	26%	16%	22%	33%	21%	43%	26%	55%	10%	24%
<b>Annually</b>	<b>55%</b>	60%	70%	62%	43%	70%	41%	50%	27%	78%	47%
<b>Never</b>	<b>10%</b>	7%	8%	10%	6%	6%	2%	11%	6%	7%	18%
<b>Other</b>	<b>8%</b>	5%	6%	6%	16%	3%	14%	13%	10%	3%	9%
<b>Don't know</b>	<b>1%</b>	2%	-	-	2%	-	-	-	2%	2%	3%

Base: 1015 companies

### Effectiveness of a website

'If there is no environmental information on the label, but this information is available on a website, how likely would you be to use this website?'

Table 19: *Likely to visit a website giving environmental information – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Extremely likely</b>	<b>12%</b>	18%	12%	12%	12%	12%	17%	9%	15%	8%	9%
<b>Likely</b>	<b>27%</b>	29%	34%	28%	17%	54%	24%	34%	15%	28%	24%
<b>Neither</b>	<b>8%</b>	10%	13%	10%	7%	1%	10%	1%	6%	16%	4%
<b>Unlikely</b>	<b>19%</b>	15%	10%	16%	23%	30%	21%	19%	18%	17%	29%
<b>Extremely unlikely</b>	<b>32%</b>	29%	29%	30%	42%	1%	26%	36%	47%	31%	34%
<b>Don't know</b>	<b>2%</b>	-	3%	4%	1%	1%	2%	-	-	2%	1%

Base: 2003 households

Table 20: *Likely to visit a website giving environmental information – SMEs*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Extremely likely</b>	<b>15%</b>	23%	9%	18%	29%	21%	24%	18%	29%	18%	7%
<b>Likely</b>	<b>33%</b>	31%	34%	33%	32%	44%	51%	38%	19%	20%	27%
<b>Neither</b>	<b>12%</b>	12%	6%	13%	19%	5%	5%	5%	21%	14%	17%
<b>Unlikely</b>	<b>21%</b>	18%	17%	24%	14%	22%	18%	25%	18%	30%	24%
<b>Extremely unlikely</b>	<b>18%</b>	16%	33%	11%	6%	6%	2%	13%	12%	18%	24%
<b>Don't know</b>	<b>1%</b>	-	1%	-	-	2%	-	1%	1%	-	2%

Base: 1015 companies

**Information channels and sources**

‘What would be the most useful way for you to receive information on the environmental impact of your electricity?’

*Table 21: Preferred channels for environmental impact information – domestic customers and SMEs*

	<b>Households</b>	<b>SMEs</b>
<b>With the bill</b>	55%	52%
<b>In an annual report</b>	29%	26%
<b>Via a website</b>	11%	17%
<b>Other</b>	3%	2%
<b>Don't know</b>	2%	1%

Base: 2003 households and 1015 companies

‘How likely would you be to use the following sources of information when making a decision about changing your electricity company?’

*Table 22: Likely to use an information source – domestic customers*

	<b>Independent website comparing all tariffs</b>	<b>Independent catalogue comparing all tariffs</b>	<b>Electricity company promotional material</b>
<b>Extremely likely</b>	21%	37%	14%
<b>Likely</b>	27%	45%	44%
<b>Neither</b>	8%	7%	12%
<b>Unlikely</b>	17%	6%	19%
<b>Extremely unlikely</b>	21%	3%	8%
<b>Don't know</b>	2%	1%	2%

Base: 2003 households

*Table 23: Likely to use an information source – SMEs*

	<b>Independent website comparing all tariffs</b>	<b>Independent catalogue comparing all tariffs</b>	<b>Electricity company promotional material</b>
<b>Extremely likely</b>	27%	28%	12%
<b>Likely</b>	36%	49%	36%
<b>Neither</b>	8%	6%	13%
<b>Unlikely</b>	17%	10%	26%
<b>Extremely unlikely</b>	10%	4%	11%
<b>Don't know</b>	2%	1%	2%

Base: 1015 companies

### Preference for fuel sources

‘Now, I’d like you to think about electricity power stations and the different ways in which they generate electricity. If the electricity costs the same, how likely would you be to buy the following?’

Table 24: Preference for fuel sources – domestic customers

	<b>Nuclear</b>	<b>Coal</b>	<b>Gas</b>	<b>Hydro</b>	<b>Renewables</b>
<b>Extremely likely</b>	4%	4%	10%	29%	47%
<b>Likely</b>	14%	17%	36%	45%	33%
<b>Neither</b>	9%	11%	16%	9%	-
<b>Unlikely</b>	24%	33%	19%	8%	7%
<b>Extremely unlikely</b>	43%	26%	12%	4%	4%
<b>Don’t know</b>	6%	6%	7%	6%	4%

Base: 2003 households

Table 25: Preference for fuel sources – SMEs

	<b>Nuclear</b>	<b>Coal</b>	<b>Gas</b>	<b>Hydro</b>	<b>Renewables</b>
<b>Extremely likely</b>	7%	6%	10%	33%	44%
<b>Likely</b>	20%	16%	38%	43%	36%
<b>Neither</b>	12%	12%	17%	9%	7%
<b>Unlikely</b>	27%	39%	22%	7%	5%
<b>Extremely unlikely</b>	28%	24%	8%	4%	3%
<b>Don’t know</b>	4%	4%	5%	4%	5%

Base: 1015 companies

### Knowledge of climate change

‘Please tell me how much you agree with the following:

- Climate change is caused by a hole in the earth’s atmosphere
- CO<sub>2</sub> emissions are the same as carbon dioxide emissions
- Every time we use coal, oil or gas we contribute to climate change
- Electricity generation from nuclear power stations is polluting because it emits carbon dioxide
- Electricity generation from renewable sources is polluting because it emits carbon dioxide’

Table 26: 'Every time we use coal, oil or gas, we contribute to climate change' – domestic customers

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>34%</b>	47%	30%	27%	45%	40%	44%	30%	46%	60%	27%
<b>Agree</b>	<b>45%</b>	35%	44%	48%	40%	48%	35%	60%	36%	29%	54%
<b>Neither</b>	<b>7%</b>	10%	7%	12%	6%	1%	8%	1%	7%	5%	5%
<b>Disagree</b>	<b>6%</b>	5%	10%	7%	5%	6%	4%	4%	4%	2%	7%
<b>Disagree strongly</b>	<b>2%</b>	3%	3%	2%	1%	1%	3%	1%	1%	1%	3%
<b>Don't know</b>	<b>5%</b>	2%	8%	3%	4%	3%	7%	4%	8%	3%	6%

Base: 2003 households

Table 27: 'Every time we use coal, oil or gas, we contribute to climate change' – SMEs

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>36%</b>	49%	32%	36%	58%	38%	32%	49%	65%	52%	27%
<b>Agree</b>	<b>45%</b>	32%	47%	39%	30%	50%	57%	41%	22%	34%	52%
<b>Neither</b>	<b>9%</b>	10%	9%	17%	8%	-	4%	1%	3%	7%	5%
<b>Disagree</b>	<b>5%</b>	5%	3%	6%	1%	6%	6%	4%	3%	2%	8%
<b>Disagree strongly</b>	<b>1%</b>	2%	-	2%	-	1%	-	3%	3%	3%	2%
<b>Don't know</b>	<b>4%</b>	1%	9%	-	3%	5%	1%	3%	4%	1%	6%

Base: 1015 companies

Table 28: 'Climate change is caused by a hole in the earth's atmosphere' – domestic customers

	Weighted Total	Au	F	G	Gr	Hu	I	P	Sp	Sw	UK
<b>Agree strongly</b>	<b>29%</b>	37%	26%	25%	53%	34%	39%	23%	34%	31%	23%
<b>Agree</b>	<b>41%</b>	29%	40%	37%	38%	46%	39%	55%	41%	33%	46%
<b>Neither</b>	<b>9%</b>	12%	9%	19%	4%	2%	5%	5%	8%	5%	5%
<b>Disagree</b>	<b>10%</b>	13%	11%	12%	4%	13%	7%	8%	7%	10%	12%
<b>Disagree strongly</b>	<b>5%</b>	9%	5%	4%	-	1%	5%	2%	4%	13%	5%
<b>Don't know</b>	<b>6%</b>	2%	11%	1%	2%	3%	7%	6%	8%	10%	10%

Base: 2003 households

Table 29: 'Climate change is caused by a hole in the earth's atmosphere' – SMEs

	Weighted Total	Au	F	G	Gr	Hu	I	P	Sp	Sw	UK
<b>Agree strongly</b>	<b>21%</b>	28%	22%	24%	60%	15%	20%	35%	36%	22%	11%
<b>Agree</b>	<b>38%</b>	33%	36%	26%	32%	47%	59%	49%	25%	33%	44%
<b>Neither</b>	<b>11%</b>	14%	10%	14%	5%	4%	9%	3%	8%	10%	10%
<b>Disagree</b>	<b>19%</b>	11%	17%	27%	3%	24%	9%	9%	10%	11%	22%
<b>Disagree strongly</b>	<b>7%</b>	12%	5%	8%	-	2%	1%	1%	14%	17%	7%
<b>Don't know</b>	<b>5%</b>	1%	10%	1%	-	8%	2%	4%	7%	6%	7%

Base: 1015 companies

### Knowledge of Environmental Impact

'As a result of the way in which electricity is generated, your electricity use has an impact on the environment. On a scale of 1-10, please indicate how much the following environmental impacts of electricity generation concern you, where 1 means it does not concern me at all and 10 means it concerns me greatly.

- Electricity generation produces radioactive waste
- Electricity generation results in carbon dioxide emissions
- Electricity generation contributes to climate change
- Electricity generation uses fuel which will eventually run out'

Table 30: *‘Electricity generation from nuclear power stations is polluting because it emits carbon dioxide’ – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>15%</b>	17%	11%	11%	38%	9%	24%	12%	17%	6%	15%
<b>Agree</b>	<b>24%</b>	18%	31%	16%	28%	37%	21%	20%	23%	5%	36%
<b>Neither</b>	<b>9%</b>	7%	9%	16%	6%	2%	9%	2%	9%	8%	4%
<b>Disagree</b>	<b>20%</b>	26%	22%	24%	14%	37%	11%	28%	13%	22%	16%
<b>Disagree strongly</b>	<b>17%</b>	27%	12%	27%	3%	1%	15%	13%	14%	40%	10%
<b>Don’t know</b>	<b>16%</b>	7%	16%	5%	12%	13%	22%	24%	26%	20%	20%

Base: 2003 households

Table 31: *‘Electricity generation from nuclear power stations is polluting because it emits carbon dioxide’ – SMEs*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>9%</b>	12%	5%	13%	30%	3%	5%	6%	16%	1%	7%
<b>Agree</b>	<b>19%</b>	10%	25%	10%	29%	17%	22%	11%	6%	4%	27%
<b>Neither</b>	<b>6%</b>	8%	9%	4%	9%	-	4%	2%	4%	6%	6%
<b>Disagree</b>	<b>30%</b>	28%	38%	37%	19%	64%	34%	34%	11%	26%	23%
<b>Disagree strongly</b>	<b>20%</b>	31%	11%	32%	5%	4%	7%	27%	35%	54%	11%
<b>Don’t know</b>	<b>17%</b>	10%	12%	4%	7%	12%	28%	21%	28%	9%	27%

Base: 1015 companies

Table 32: 'Electricity generation from renewable sources is polluting because it emits carbon dioxide' – domestic customers

	Weighted Total	Au	F	G	Gr	Hu	I	P	Sp	Sw	UK
<b>Agree strongly</b>	<b>8%</b>	4%	7%	3%	10%	8%	14%	6%	4%	13%	11%
<b>Agree</b>	<b>20%</b>	13%	26%	16%	18%	17%	14%	18%	8%	18%	38%
<b>Neither</b>	<b>10%</b>	11%	9%	18%	9%	1%	8%	6%	7%	12%	6%
<b>Disagree</b>	<b>24%</b>	32%	26%	23%	26%	65%	27%	36%	14%	13%	18%
<b>Disagree strongly</b>	<b>22%</b>	36%	14%	33%	25%	4%	18%	12%	42%	22%	9%
<b>Don't know</b>	<b>16%</b>	5%	20%	6%	13%	4%	21%	21%	26%	22%	19%

Base: 2003 households

Table 33: 'Electricity generation from renewable sources is polluting because it emits carbon dioxide' – SMEs

	Weighted Total	Au	F	G	Gr	Hu	I	P	Sp	Sw	UK
<b>Agree strongly</b>	<b>6%</b>	4%	7%	4%	2%	2%	6%	8%	6%	11%	6%
<b>Agree</b>	<b>17%</b>	12%	19%	11%	14%	16%	19%	12%	7%	24%	21%
<b>Neither</b>	<b>8%</b>	14%	3%	8%	8%	2%	3%	4%	7%	11%	12%
<b>Disagree</b>	<b>33%</b>	28%	34%	39%	35%	64%	49%	33%	12%	15%	26%
<b>Disagree strongly</b>	<b>21%</b>	38%	18%	31%	36%	9%	7%	28%	49%	27%	11%
<b>Don't know</b>	<b>16%</b>	3%	18%	6%	5%	7%	16%	16%	19%	12%	25%

Base: 1015 companies

### Preference for electricity associated with certain environmental impacts

'Assuming that you could choose your electricity and you were given information on its environmental impact, please indicate how much you agree with the following:

I would buy:

- the cheapest electricity
- electricity with a low level of nuclear waste
- electricity with a low impact on climate change
- electricity with a low impact on climate change and some nuclear waste
- electricity with a low impact on climate change and no nuclear waste
- I do not care what the environmental impact of my electricity is (ALWAYS LAST)



Table 34: Preference for electricity associated with a certain environmental impact – domestic customers

	Always buy the cheapest	Low level of nuclear waste	Low impact on climate change	Low impact on climate change & some nuclear waste	Low impact on climate change & no nuclear waste	Don't care about environmental impact
<b>Agree strongly</b>	33%	26%	40%	13%	51%	4%
<b>Agree</b>	26%	33%	41%	27%	31%	8%
<b>Neither</b>	15%	8%	7%	12%	7%	4%
<b>Disagree</b>	18%	17%	6%	27%	6%	33%
<b>Disagree strongly</b>	6%	14%	3%	18%	3%	49%
<b>Don't know</b>	2%	4%	3%	4%	2%	2%

Base: 2003 households

Table 35: Preference for electricity associated with a certain environmental impact – SMEs

	Always buy the cheapest	Low level of nuclear waste	Low impact on climate change	Low impact on climate change & some nuclear waste	Low impact on climate change & no nuclear waste	Don't care about environmental impact
<b>Agree strongly</b>	34%	25%	38%	21%	47%	4%
<b>Agree</b>	31%	38%	47%	37%	38%	10%
<b>Neither</b>	16%	13%	9%	14%	8%	9%
<b>Disagree</b>	14%	14%	3%	17%	5%	44%
<b>Disagree strongly</b>	3%	7%	1%	7%	1%	31%
<b>Don't know</b>	2%	2%	2%	3%	2%	2%

Base: 1015 companies

### Information on imported electricity

'Please tell me how much you agree with the following:

- I would only want to buy electricity that has been generated locally
- I would want to know how much of my electricity has been imported
- I would be happy to buy imported electricity
- I would like to know the country of origin of my electricity'

Table 36: *Want only want to buy locally generated electricity – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>23%</b>	38%	19%	18%	14%	10%	32%	29%	32%	24%	20%
<b>Agree</b>	<b>33%</b>	31%	39%	29%	20%	35%	37%	41%	30%	22%	34%
<b>Neither</b>	<b>16%</b>	17%	11%	19%	21%	18%	15%	11%	22%	19%	12%
<b>Disagree</b>	<b>17%</b>	13%	19%	21%	23%	27%	11%	13%	7%	23%	25%
<b>Disagree strongly</b>	<b>8%</b>	3%	10%	10%	23%	2%	2%	3%	7%	13%	7%
<b>Don't know</b>	<b>3%</b>	-	3%	1%	1%	8%	4%	2%	4%	1%	4%

Base: 2003 households

Table 37: *Want only want to buy locally generated electricity – SMEs*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>16%</b>	25%	19%	21%	6%	8%	12%	22%	23%	8%	10%
<b>Agree</b>	<b>25%</b>	33%	33%	14%	18%	35%	36%	27%	12%	25%	25%
<b>Neither</b>	<b>21%</b>	23%	20%	25%	10%	3%	26%	12%	22%	11%	17%
<b>Disagree</b>	<b>26%</b>	16%	18%	31%	19%	44%	22%	26%	16%	28%	37%
<b>Disagree strongly</b>	<b>10%</b>	3%	7%	9%	46%	2%	1%	11%	24%	23%	10%
<b>Don't know</b>	<b>2%</b>	-	3%	-	2%	8%	3%	3%	3%	4%	2%

Base: 1015 companies

Table 38: *Want to know the proportion of imported electricity – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>30%</b>	47%	29%	26%	50%	11%	39%	32%	29%	38%	27%
<b>Agree</b>	<b>44%</b>	37%	46%	43%	30%	75%	39%	42%	46%	35%	45%
<b>Neither</b>	<b>12%</b>	9%	12%	15%	16%	5%	13%	3%	15%	12%	8%
<b>Disagree</b>	<b>9%</b>	6%	8%	9%	3%	8%	5%	18%	5%	8%	14%
<b>Disagree strongly</b>	<b>4%</b>	2%	3%	6%	1%	-	4%	2%	3%	7%	4%
<b>Don't know</b>	<b>2%</b>	-	3%	-	2%	-	2%	2%	3%	1%	3%

Base: 2003 households

Table 39: *Want to know the proportion of imported electricity – SMEs*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>21%</b>	34%	17%	23%	55%	14%	21%	31%	34%	29%	15%
<b>Agree</b>	<b>43%</b>	40%	50%	35%	25%	57%	62%	48%	20%	37%	42%
<b>Neither</b>	<b>17%</b>	13%	15%	16%	16%	7%	11%	5%	25%	15%	22%
<b>Disagree</b>	<b>10%</b>	8%	10%	13%	3%	18%	5%	7%	10%	7%	13%
<b>Disagree strongly</b>	<b>8%</b>	5%	5%	12%	1%	1%	-	8%	8%	11%	9%
<b>Don't know</b>	<b>1%</b>	-	3%	-	1%	3%	1%	2%	3%	-	-

Base: 1015 companies

Table 40: *Happy to buy imported electricity – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>8%</b>	1%	15%	4%	12%	-	5%	9%	18%	8%	6%
<b>Agree</b>	<b>23%</b>	11%	36%	11%	29%	23%	18%	30%	30%	18%	26%
<b>Neither</b>	<b>18%</b>	21%	7%	27%	19%	25%	17%	10%	24%	23%	13%
<b>Disagree</b>	<b>29%</b>	42%	25%	32%	32%	38%	33%	39%	15%	25%	33%
<b>Disagree strongly</b>	<b>17%</b>	26%	14%	22%	7%	4%	24%	9%	11%	24%	17%
<b>Don't know</b>	<b>4%</b>	-	4%	1%	2%	8%	4%	2%	4%	4%	7%

Base: 2003 households

Table 41: *Happy to buy imported electricity – SMEs*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>10%</b>	3%	12%	8%	13%	-	3%	11%	33%	7%	9%
<b>Agree</b>	<b>29%</b>	12%	42%	15%	34%	26%	28%	39%	24%	25%	37%
<b>Neither</b>	<b>20%</b>	22%	13%	31%	26%	17%	21%	5%	17%	18%	14%
<b>Disagree</b>	<b>25%</b>	41%	18%	26%	19%	46%	36%	26%	11%	30%	28%
<b>Disagree strongly</b>	<b>11%</b>	21%	4%	18%	4%	2%	6%	14%	13%	18%	8%
<b>Don't know</b>	<b>5%</b>	1%	11%	2%	4%	9%	6%	5%	2%	1%	5%

Base: 1015 companies

*Table 42: Want to know the country of origin of electricity – domestic customers*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>35%</b>	59%	38%	30%	61%	15%	41%	38%	41%	46%	24%
<b>Agree</b>	<b>44%</b>	29%	48%	45%	25%	69%	43%	48%	40%	31%	46%
<b>Neither</b>	<b>10%</b>	5%	9%	11%	11%	4%	8%	3%	13%	9%	13%
<b>Disagree</b>	<b>6%</b>	6%	3%	6%	2%	10%	5%	8%	3%	6%	11%
<b>Disagree strongly</b>	<b>4%</b>	2%	2%	7%	1%	-	3%	2%	3%	8%	5%
<b>Don't know</b>	<b>1%</b>	1%	1%	-	2%	1%	1%	-	1%	1%	2%

Base: 2003 households

*Table 43: Want to know the country of origin of electricity – SMEs*

	<b>Weighted Total</b>	<b>Au</b>	<b>F</b>	<b>G</b>	<b>Gr</b>	<b>Hu</b>	<b>I</b>	<b>P</b>	<b>Sp</b>	<b>Sw</b>	<b>UK</b>
<b>Agree strongly</b>	<b>28%</b>	43%	29%	30%	60%	17%	26%	35%	43%	31%	18%
<b>Agree</b>	<b>40%</b>	36%	48%	35%	19%	64%	58%	38%	18%	42%	38%
<b>Neither</b>	<b>13%</b>	8%	7%	14%	18%	2%	9%	3%	20%	10%	18%
<b>Disagree</b>	<b>9%</b>	9%	8%	9%	3%	15%	6%	11%	8%	8%	16%
<b>Disagree strongly</b>	<b>7%</b>	3%	6%	11%	1%	-	-	11%	10%	8%	9%
<b>Don't know</b>	<b>1%</b>	1%	2%	1%	-	2%	1%	2%	1%	-	2%

Base: 1015 companies

**Appendix B– Household survey**

4CE Telephone Survey Household questionnaire Final version	Jane Palmer 27/1/03
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Good evening. My name is ..... and I am calling from ORC International We are conducting a telephone survey on behalf of the University of Oxford (UK)/European Union (all other countries). We are interested in your views and opinions on different sources of electricity and their environmental impacts. This survey should take no longer than 12 minutes and any answers you provide will remain strictly confidential. Would you be prepared to answer a few questions now?

Q1. Firstly, are you the person most responsible or jointly responsible for decisions about your electricity?

YES, myself – CONTINUE

NO, someone else – ASK TO SPEAK TO THAT PERSON, REPEAT INTRO

NO, someone else not available – THANK & CLOSE

**Classification**

*Interviewer check*

*What is the sex of the person being interviewed? Male/Female*

*What is the area code?*

Firstly, I would like to ask you a few questions about you and your household

Q2. a. How many people aged over 18 years, including yourself, currently live in your household?

b. And how many children under 18?

Q3. Can I just check what your age was last birthday? (*Note to interviewers – allow people to give actual age and record. If reluctant, give bands*)

Under 25/25-34/35-44/45-54/55-64/65+

Q4. What is the occupation of the chief wage earner of the household?

If DK/Refused go to Q5

Q4b- Record Social Class of the chief wage earner of the household: A, B, C1, C2, D, E

Q5. How often do you receive electricity bills? Do not read out unless necessary  
 Monthly/bi-monthly/quarterly/bi-annually/annually/other (specify)/don't know

Q6. Do you use electricity as the main fuel to heat your home? YES/NO

**Electricity source**

Q7. Now, I'd like you to think about electricity power stations and the different ways in which they generate electricity. If the electricity costs the same, how likely would you be to buy the following? READ LIST AND RANDOMISE

	Extremely unlikely	Unlikely	Neither	Likely	Extremely likely -
Nuclear					
Coal-fired					
Gas-fired					
Hydro-electric					
Renewable energy					

Q8. In reality, your electricity comes from a mix of these sources. Do you agree or disagree with the following statement:

I would find it useful to have my electricity mix shown on a label and identified for me

Do you : Agree strongly /Agree slightly / Neither agree nor disagree/ disagree / disagree strongly

Q9. The electricity mix you buy may be different to the electricity mix sold by your electricity company to other customers and will be different to the average mix sold in your country and in Europe. How useful would you find it to have a label which compares your electricity mix with (scale of 'not at all useful' to 'extremely useful'):

- a. the overall electricity mix sold by your electricity company
- b. the average electricity mix in the UK (*change to appropriate country in translations*)
- c. the average electricity mix in Europe

Q10. How often would you like to receive information on your electricity mix? PROMPT

With each electricity bill/ /annually/never/other (specify)/don't know/refused

Q11. Please tell me how much you agree with the following: (scale of 'strongly disagree' to 'strongly agree'): READ LIST AND RANDOMISE

- I would only want to buy electricity that has been generated locally
- I would want to know how much of my electricity has been imported
- I would be happy to buy imported electricity
- I would like to know the country of origin of my electricity

### **Environmental knowledge**

In order to help us design an electricity label, we would like to find out about your understanding of some environmental issues.

Q12. Please tell me how much you agree with the following (scale of 'strongly disagree' to 'strongly agree'): READ LIST AND RANDOMISE

- Climate change is caused by a hole in the earth's atmosphere
- CO<sub>2</sub> emissions are the same as carbon dioxide emissions
- Every time we use coal, oil or gas we contribute to climate change
- Electricity generation from nuclear power stations is polluting because it emits carbon dioxide
- Electricity generation from renewable sources is polluting because it emits carbon dioxide

### **Environmental Impact**

Q13. As a result of the way in which electricity is generated, your electricity use has an impact on the environment. On a scale of 1-10, please indicate how much the following environmental impacts of electricity generation concern you, where 1 means it does not concern me at all and 10 means it concerns me greatly . READ LIST AND RANDOMISE

- Electricity generation produces radioactive waste
- Electricity generation results in carbon dioxide emissions
- Electricity generation contributes to climate change
- Electricity generation uses fuel which will eventually run out

Q14. How useful would you find it to have information on your electricity mix **and** the environmental impact of your electricity mix shown on a label and identified for you?

Not at all useful/not very useful/neither/quite useful/extremely useful

Q15. If there is no environmental information on the label, but this information is available on a website, how likely would you be to use this website? (scale of 'extremely unlikely' to 'extremely likely'):

Q16. How useful would you find it to have a label comparing the environmental impact of **your** electricity with electricity sold by other electricity companies?

Not at all useful/not very useful/neither/quite useful/extremely useful

Q17. Assuming that you could choose your electricity and you were given information on its environmental impact, please indicate how much you agree with the following: (scale of 'strongly disagree' to 'strongly agree'): RANDOMISE 1-5

I would buy:

- the cheapest electricity
- electricity with a low level of nuclear waste
- electricity with a low impact on climate change
- electricity with a low impact on climate change and some nuclear waste
- electricity with a low impact on climate change and no nuclear waste
- I do not care what the environmental impact of my electricity is (ALWAYS LAST)

Q18. What % extra would you be prepared to pay on top of your current electricity bill for electricity with no nuclear waste?

Code as open end respond

Pre-code list/ single code/ do not read out unless necessary

0% / 1-5% / 6-10% / 11- 15% / 16-20% / 21-25% / 26-30% / 31-35% / 36-40% / 41-45% / 46-50% 51% and above /dk / refused

Q19. What % extra would you be prepared to pay on top of your current electricity bill for electricity with a low impact on climate change? Code as open end respond

Pre-code list/ single code/ do not read out unless necessary

0% / 1-5% / 6-10% / 11- 15% / 16-20% / 21-25% / 26-30% / 31-35% / 36-40% / 41-45% / 46-50% 51% and above /dk / refused

Q20. What would be the most useful way for you to receive information on the environmental impact of your electricity? PROMPT Single code

With the bill



In an annual report  
Via a website  
Other (specify)  
Dk/refused

### ***Electricity switching***

*There is a law going through the European Parliament that will allow you to choose the type of electricity provided and the company from which you buy your electricity in much the same way that you are able to choose your telephone/cable TV company.*

How likely would you be to use the following sources of information when making a decision about changing your electricity company? READ LIST & RANDOMISE. (would you say: very likely/ likely/neither/unlikely/very unlikely/dk/refused)

- Independent websites comparing all electricity tariffs
- Electricity company promotional material
- Independent booklet comparing all electricity tariffs

### **Further Classification**

Finally, I would like to ask you a couple more questions about yourself and your household.

Q21. Do you buy green electricity in your household? YES/NO

IF NO, why is this? (DO NOT PROMPT)

Didn't think it was possible

Did not know it was available

It costs more/too expensive

Only one electricity supplier in my area

Not interested

Other (specify)

Q22. Do you use the internet for non-work related purposes? YES/NO/do not have access to the internet

Q23. At what level did your formal education finish? READ LIST  
Age 16/Age18/University/Postgraduate/other (specify)

Q24. What is your approximate annual household income, before tax? (*Note to interviewers – allow people to give income figure and record. If reluctant, give bands*)

Less than 5000 euros/5000-7499/7500-9999/10000-14999/15000-19999/20000-29999/30000-49999/50000-59999/60000+/refused

THANK AND CLOSE

## Appendix C– Small and Medium Enterprise survey

4CE Telephone Survey SME questionnaire Final version	Jane Palmer 27/1/03
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At reception; Good morning/afternoon. My name is ....and I am calling on behalf of the European Union. Could I speak to the office manager or person responsible for checking your organisation's electricity bill.

### ONCE CONNECTED TO THE RIGHT PERSON:

Good morning/afternoon. My name is ..... and I am calling from ORC International We are conducting a telephone survey on behalf of the University of Oxford (UK)/European Union (all other countries). We are interested in your views and opinions on different sources of electricity and their environmental impacts. This survey should take no longer than 12 minutes and any answers you provide will remain strictly confidential. Would you be prepared to answer a few questions now?

*Q1. Firstly can I just check that you are the person responsible for checking your organisation's electricity bills?*

*YES, myself – CONTINUE*

*NO, someone else – ASK TO SPEAK TO THAT PERSON, REPEAT INTRO*

*NO, someone else not available – THANK & CLOSE*

*NO, do not receive electricity bills because included in the rent – THANK & CLOSE*

*Q2. Please could you tell me your job title? Do not prompt*

*Owner/Managing Director/Office Manager/Office Administrator/*

*PA/Secretary/Facilities manager/Finance director/manager/Other (please specify)*

*Refused*

### Electricity information

*Q3. Does your organisation contract out your energy management to a consultant?  
YES/NO*

*Q4.*

*Q5. Does your organisation have a fixed term contract with an electricity supplier?  
YES/NO*

**IF YES**

*Q6. How long does this contract run for? Do not read out unless necessary*

*3 months/6 months/1 year/2 years/3 years/5 years/no time period or set by me/other (specify)*

*Q7. How often does your organisation receive electricity bills? Do not read out only read out if necessary*

*weekly/monthly/bi-monthly/quarterly/annually/other (specify)/DK/Refused*

*Q8. Could you tell me the approximate size of your organisation's last electricity bill in kilowatt-hours?*

*Yes/NO/ Refused*

*If yes record kilowatt hours*

*If NO at Q7*

*Could you tell me approximately how much you paid for your last electricity bill*

*Record figure rounded up to the nearest Pound( for Uk only)/Euro/Forint (Hungary)/Zloty (Poland)/Kroner (Sweden)*

*If NO at Q7*

*And could you tell me the approximate unit price for your electricity in pence/cent per kWh– Record unit price.*

*Q9. What percentage of your organisation's electricity is green electricity?*

*Pre-coded list: 0% / 1-5%/ 6-10% / 11-20% / 21-30% / 31-40%/ 41-50% / 51-60% / 61-70%/ 71-80% / 81-90% / 91-100% / dk refused*

*IF >0%,*

*Q8b Why does your organisation buy green electricity? Read out / multicode*

- To avoid a tax YES/NO*
- Because of environmental concerns YES/NO*
- Other (specify)*
- Dk/refused*

*Q10. Does your organisation produce an environmental report? YES/NO*

***UK specific***

*Q11. Does your organisation pay the Climate Change Levy on its total electricity bill? YES/NO*

*IF NO, is this because my organisation: PROMPT. SINGLE RESPONSE*

- *has a low electricity consumption*
- *uses electricity which is exempt*
- *is part of a negotiated agreement*
- *Other (specify)*
- *Don't know/Refused*

***Austria specific***

*Q11. Are you aware of the existing Austrian electricity disclosure scheme? YES/NO*

*If YES, how much do you think this scheme has influenced your organisation's choice of electricity supplier? Not at all/hardly at all/neither/a little/a lot*

**Electricity source**

Q12. Now, I'd like you to think about electricity power stations and the different ways in which they generate electricity. If the electricity costs the same, how likely do you think your organisation would be to buy the following? READ LIST AND RANDOMISE. Add DK/Refused

	Extremely unlikely	Unlikely	Neither	Likely	Extremely likely
Nuclear					
Coal-fired					
Gas-fired					
Hydro-electric					
Renewable energy					

*Q13. If your organisation were required to disclose the source of its electricity in its annual report, how likely do you think your organisation would be to buy electricity generated from (scale of 'extremely unlikely' to 'extremely likely'):*

- a. nuclear sources?*
- b. green electricity?*

Q14. In reality, electricity comes from a mix of sources. How useful do you think your organisation would find it to have its electricity mix shown on a label and identified ?

Not at all useful/not very useful/neither/quite useful/extremely useful/dk/refused

Q15. The electricity mix your organisation buys may be different to the electricity mix sold by the same electricity supplier to other customers and will be different to the average mix sold in your country and in Europe. How useful do you think your organisation would find it to have a label which compares its electricity mix with (scale of 'not at all useful' to 'extremely useful'):

- a. the overall electricity mix sold by your organisation's electricity supplier
- b. the average electricity mix in the UK (*change to appropriate country in translations*)
- c. the average electricity mix in Europe

Q16. How often do you think your organisation would like to receive information on its electricity mix? PROMPT

With each electricity bill/ /annually/never/other (specify)/ don't know/refused

Q17. Please tell me how much you agree with the following (scale of 'strongly disagree' to 'strongly agree'): READ LIST AND RANDOMISE

My organisation

- would only want to buy electricity that has been generated locally
- would want to know how much of its electricity has been imported
- would be happy to buy imported electricity
- would like to know the country of origin of its electricity

### **Environmental knowledge**

In order to help us design an electricity label, we would like to find out about your understanding of some environmental issues.

Q18. Please tell me how much you agree with the following (scale of 'strongly disagree' to 'strongly agree'): READ LIST AND RANDOMISE

- Climate change is caused by a hole in the earth's atmosphere
- CO<sub>2</sub> emissions are the same as carbon dioxide emissions
- Every time we use coal, oil or gas we contribute to climate change
- Electricity generation from nuclear power stations is polluting because it emits carbon dioxide
- Electricity generation from renewable sources is polluting because it emits carbon dioxide

**Environmental Impact**

Q19. As a result of the way in which electricity is generated, your organisation's electricity use has an impact on the environment. On a scale of 1-10, please indicate how much you think the following environmental impacts of electricity generation concern your organisation where 1 means it does not concern my organisation at all and 10 means it concerns my organisation greatly add dk/refused. READ LIST AND RANDOMISE:

- Electricity generation produces radioactive waste
- Electricity generation results in carbon dioxide emissions
- Electricity generation contributes to climate change
- Electricity generation uses fuel which will eventually run out

Q20. How useful do you think your organisation would find it to have information on its electricity mix **and** the environmental impact of its electricity mix shown on a label and identified (scale of 'not at all useful' to 'extremely useful')?

Q21. If there is no environmental information on the label, but this information is available on a website, how likely do you think your organisation would be to use this website (scale of 'extremely unlikely' to 'extremely likely')?

Q22. How useful do you think your organisation would find it to have a label comparing the environmental impact of its electricity with electricity sold by other electricity suppliers (scale of 'not at all useful' to 'extremely useful')?

Q23. Assuming that your organisation could choose its electricity and was given information on its environmental impact, please indicate how much you agree with the following: (scale of 'strongly disagree' to 'strongly agree'): READ LIST AND RANDOMISE 1-5

My organisation would buy

- the cheapest electricity
- electricity with a low level of nuclear waste
- electricity with a low impact on climate change
- electricity with a low impact on climate change and some nuclear waste
- electricity with a low impact on climate change and no nuclear waste
- My organisation is not concerned with the environmental impact of its electricity use (ALWAYS LAST)

Q24. What % extra do you think your organisation would be prepared to pay on top of its current electricity bill for electricity associated with no nuclear waste?

Code as open end respond

Pre-code list/ single code/ do not read out unless necessary

0% / 1-5% / 6-10% / 11- 15% / 16-20% / 21-25% / 26-30% / 31-35% / 36-40% / 41-45% / 46-50% 51% and above /dk / refused

Q25. What % extra do you think your organisation would be prepared to pay on top of its current electricity bill for electricity associated with a low impact on climate change? Code as open end respond

Pre-code list/ single code/ do not read out unless necessary

0% / 1-5% / 6-10% / 11- 15% / 16-20% / 21-25% / 26-30% / 31-35% / 36-40% / 41-45% / 46-50% 51% and above /dk / refused

Q26. What would be the most useful way for your organisation to receive information on the environmental impact of its electricity? PROMPT single code

With the bill

In an annual report

Via a website

Other (specify)/Dk/refused

### **Electricity switching**

Q27. How likely do you think your organisation would be to use the following sources of information when making a decision about changing its electricity supplier (scale of 'extremely unlikely' to 'extremely likely')? READ LIST & RANDOMISE.

Independent websites comparing all electricity tariffs

Electricity supplier promotional material

Independent booklet comparing all electricity tariffs

*Q28. Are you responsible for choosing your organisation's electricity supplier, or is this decision made at a different level or department within the organisation?  
YES/DIFFERENT LEVEL OR DEPARTMENT*

*IF DIFFERENT: if dk/Refused route to thank and close*

*a. Who makes this decision? If dk/refused route to thank and close*

*All members/Senior Manager/Company Director/Board Director/Landlord/Company Board/Executive Committee/Other Department (specify)/Other (specify) SINGLE CODE*



*b. If you received information about your organisation's electricity with the electricity bill, would you pass this information onto these people? YES/NO*

THANK AND CLOSE

Electricity Disclosure is on the political agenda in Europe. It will provide customers with information about the electricity they are buying and therefore can facilitate informed purchasing decisions. It can be an important tool to intensify market competition and product diversification.

This paper presents an introduction to the concept of Electricity Disclosure and discusses main issues for implementation. It has been prepared as part of the Altener project „Consumer Choice and Carbon Consciousness for Electricity (4CE)“.

For more information about this project: [www.electricitylabels.com](http://www.electricitylabels.com)