



Customer-Led Network
Revolution

Small and Medium Enterprises (SME) Survey Report

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1. Introduction

This report describes the results of a survey carried out as part of the CLNR project with the purpose of exploring the attitudes to energy, electricity and flexibility show by small and medium sized enterprises (SMEs). In CLNR, SMEs are defined as non-domestic, non-mandatorily half-hourly metered customers (i.e. non-residential customers with a maximum demand requirement of less than 100kW) and represent a broad range of sectors and company sizes.

The stated aims of the SME survey were¹:

- To verify the accuracy of classification data provided about the customer by British Gas, which was used in the stratification of the sample
- To gather information about the factors identified as important in the prior evidence review and reviews of EDRP and CER's trial in Ireland
- To gather information about SME perceptions of the ease, desirability, and prior experience of demand side management in the forms investigated within the study (perceptions of ability to shift loads away from peak, perceptions of ability to accept direct control of electricity supply by DNOs, interest in LCTs, and prior experience of time of use tariffs)
- To gather information about the presence of Low Carbon Technologies (LCTs) within SMEs in the study and interest in these among SMEs
- To gather information about energy practices within SMEs
- To make results comparable to previous studies where possible

The survey representation and responses are described in the rest of this report.

2. Business Sectors Represented

152 SME customers from the UK completed the online survey. Company Names were removed from the raw data on data cleaning. Most SMEs were either from unlisted "other" sectors or wholesale, retail and vehicle repair, manufacturing and accommodation and food

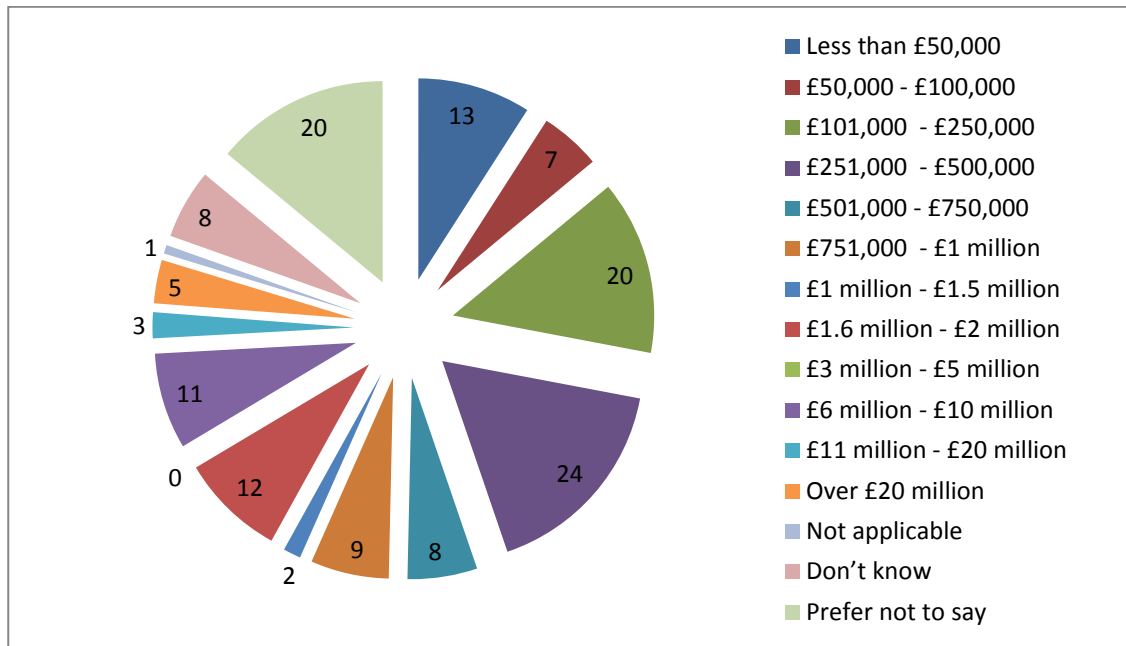
¹ CLNR document "SME Survey Design Rationale V1.0"

services. 105 SMEs operate from a single site, 46 are part of multi-site organisations and 89 of the SMEs are family owned. The approximate annual turnover of the participating SMEs is shown in Figure 1.

Table 1: Business Sectors Represented

SECTOR	Number of SMEs in Category
Agriculture, forestry and fishing	13
Mining and quarrying	0
Manufacturing	27
Electricity, gas, steam and air conditioning supply	1
Water supply and treatment	2
Construction	7
Wholesale and retail trade; repair of motor vehicles and motorcycles	23
Transportation and storage	2
Accommodation and food service activities	21
Information and communication	3
Financial and insurance activities	0
Real estate activities	2
Professional, scientific and technical activities	5
Administrative and support service activities	10
Public administration and defence; compulsory social security	0
Education	7
Human health and social work activities	4
Arts, entertainment and recreation	17
Other service activities	35
Don't know	1
Prefer not to say	0

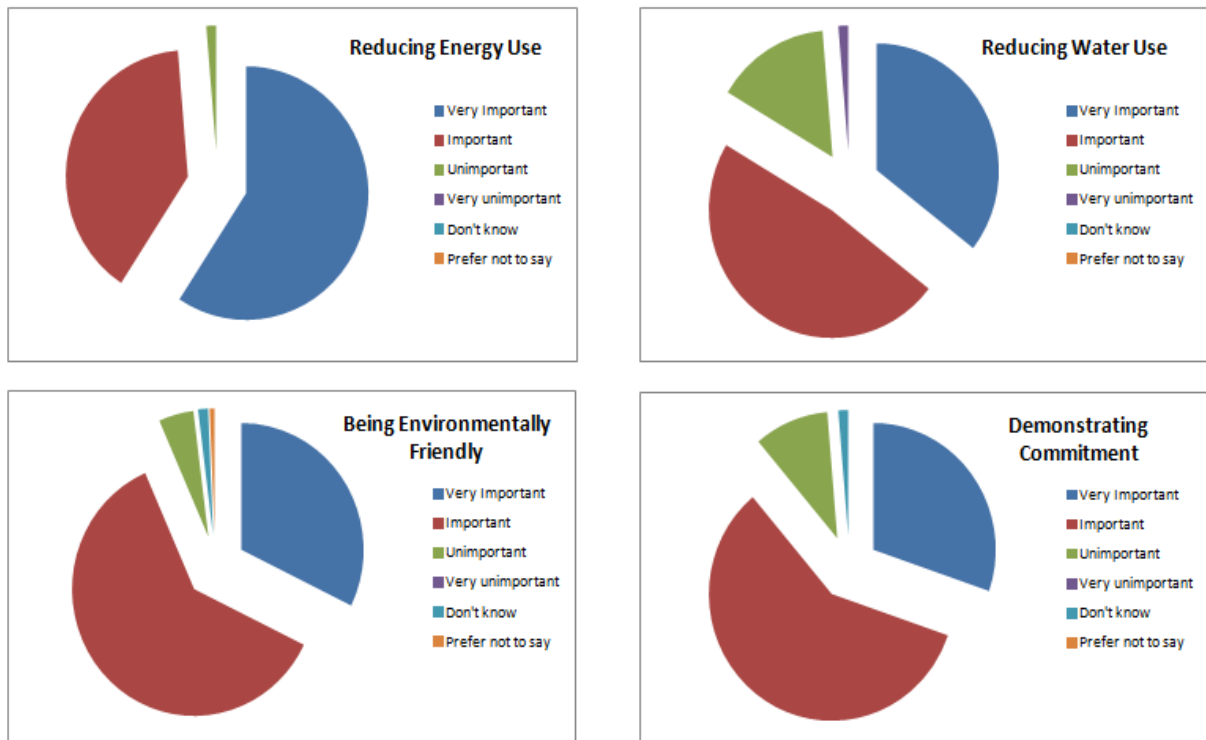
Figure 1: Turnover of SMEs in Survey



3. Energy Use/Behaviour

SMEs were asked how important it is for an organisation like theirs to reduce energy and water use, be more environmentally friendly and demonstrate a commitment to the environment (Figure 2). The responses showed that the majority of SMEs placed most emphasis upon reducing energy use.

Figure 2: Attitudes to Reducing Resource Use

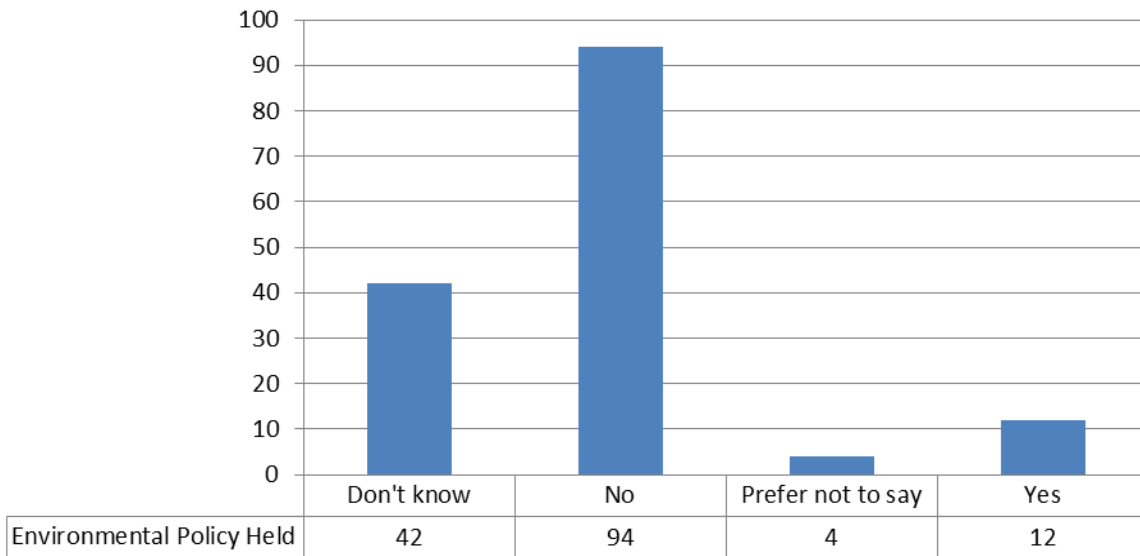


The majority (72%) of the SMEs (72 companies) agreed that both themselves and the people they work with need to reduce the amount of energy they use. The second most popular response (66% of SMEs) was that their organisation is interested in changing the amount of electricity they use if it helps the environment, demonstrating an intention to make changes.

The majority of SME customers (41%) were not on a time of use tariff, however 22% did not know what kind of tariff they were on. Most of the organisations (62%) have not previously participated in any other environmental or energy research projects and most (116 companies) have never had an energy audit and just over half do not have any site-wide environmental policies or practices. Few companies have people in designated environmentally orientated roles (e.g. energy manager, sustainability officer or environment manager) and the majority (125 companies) had never sought support for improving environmental sustainability.

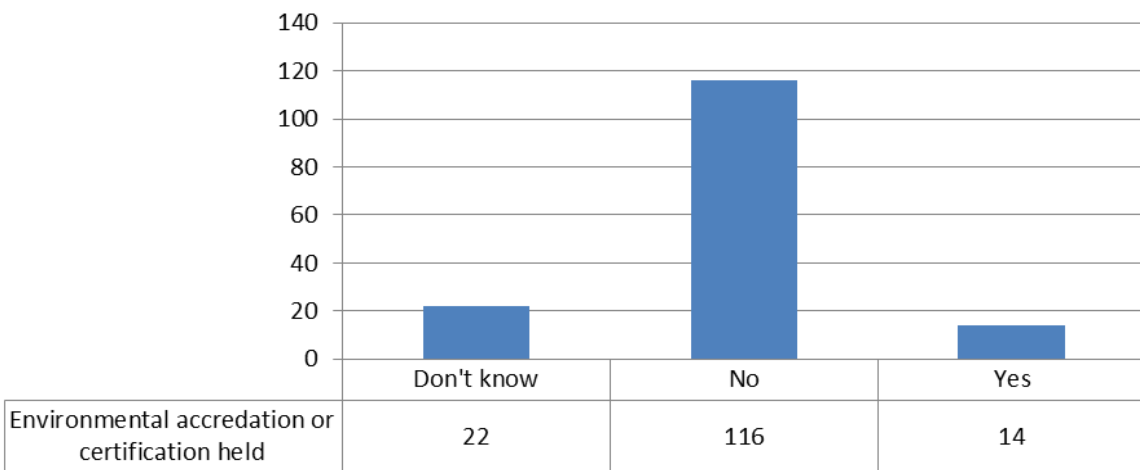
When asked if the business has an environmental policy of any kind 90% of respondents reported that they either did not know, or that there was no environmental policy held.

Figure 3: Environmental Policy Held



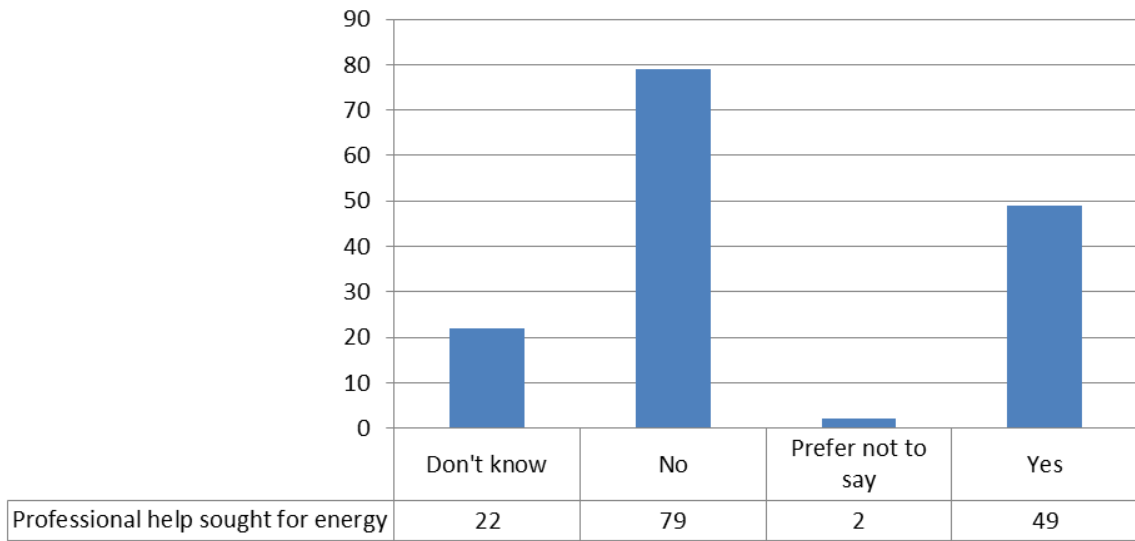
When asked if the organisation had any form of environmental accreditation and certification 91% of respondents indicated that they either did not know, or that no certification was held.

Figure 4: Environmental Accreditation or Certification Held



When asked if the organisation had ever sought advice from bodies such as the Carbon Trust or from environmental groups most responses were again negative, although a sizeable minority (32%) had sought out professional help on energy use.

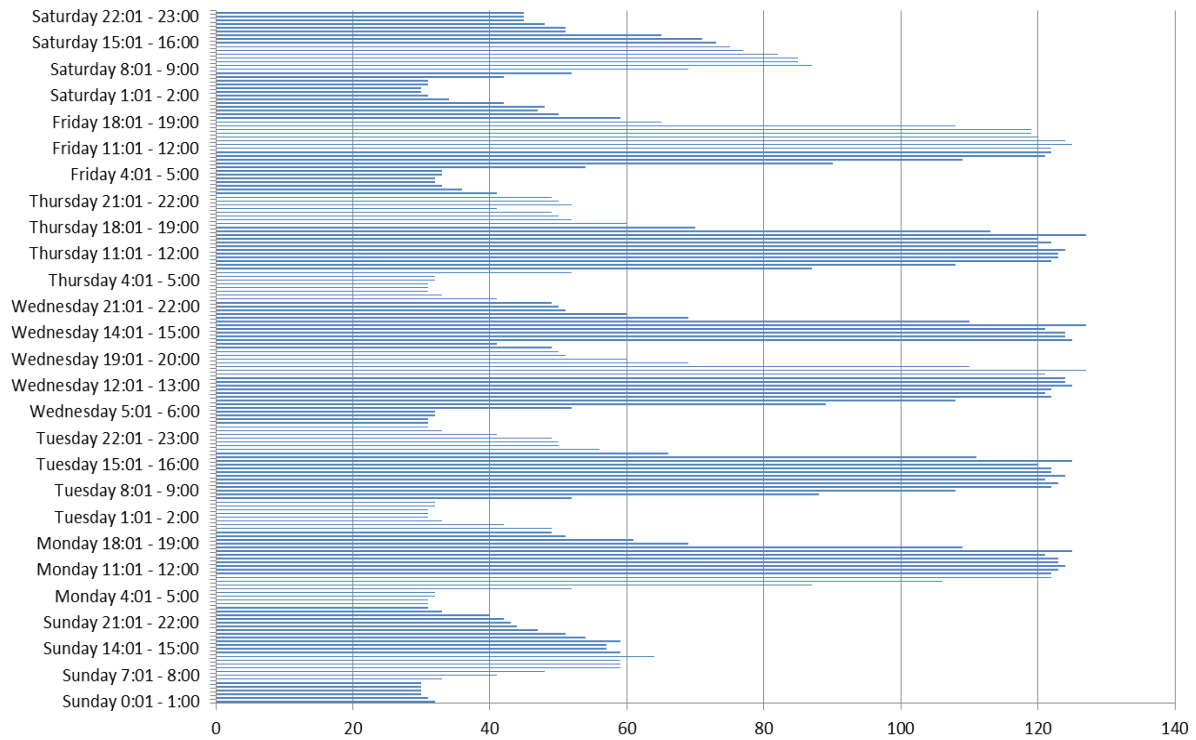
Figure 5: Professional Help Sought for Energy



4. Hours of Business

The SMEs were asked about their hours of business (Figure 6). There are around 30 SMEs in the study (e.g. hotels) that operate 24 hours a day and between 60 and 80 are open at weekends.

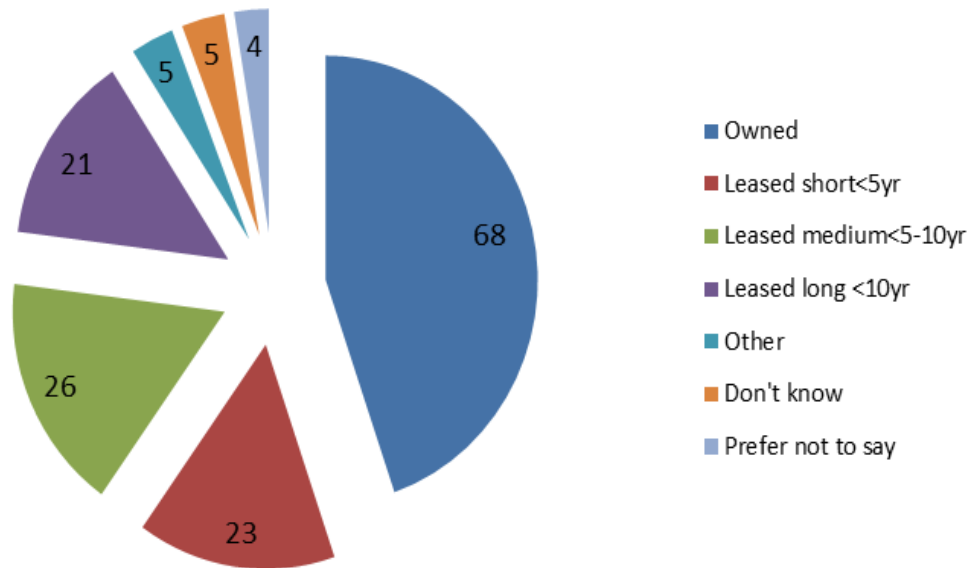
Figure 6: Hours of Business



5. Business Tenure

The majority of companies (68%) own their own premises (Figure 7) but most (98 premises) were not built for purposes and the date of construction was unknown by 87% of the SMEs.

Figure 7: Tenure of Business Premises in the Survey



6. Energy Performance of Premises

109 of the 152 SMEs (72%) that responded do not have a Display Energy Certificate (DEC), the rest did not know whether they had one and 2 declined to respond. Most of the premises have central heating and about half have programmable thermostats. 25 have air conditioning and 4 have air conditioning that is unused (Table 2). If these groups are representative of SMEs across the UK, there is clear scope for improvements to heating control. Energy use at the premises is dominated by lighting, administration and office equipment, cooling and heating equipment (Table 3).

Table 2: Appliances in the Premises

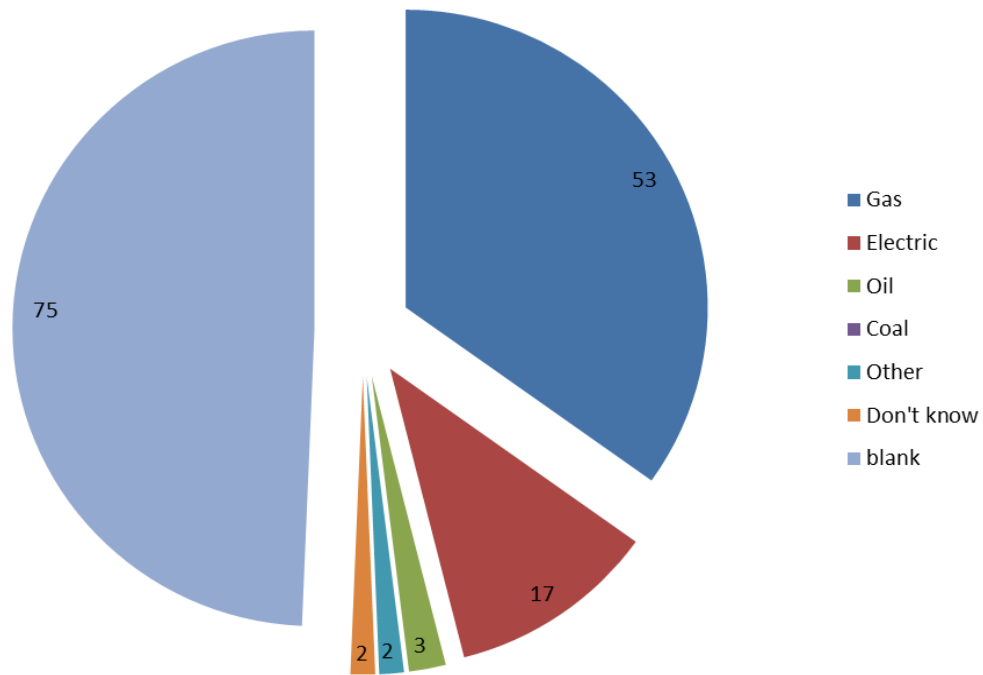
Appliance	Yes	Yes but unused	No	Don't Know	Declined to Say
Air Conditioning	25	4	120	1	2
Central Heating	102	Not Applicable	48	2	0
Programmable Thermostats	77	Not Applicable	61	13	2

Table 3: Appliances in the Premises

Installed Measure/Technology	Number of SMEs that have the technology/measure
Cooling	116
Heating	107
Lighting	149
Admin/Office Equipment	136
Manufacturing/Processing	72
Don't Know	0
Prefer not to say	1

Around half of the SMEs did not state their main source of heating energy. Of the 77 that chose to state their energy source, most use gas, followed by electricity and oil (Figure 8). With respect to electricity, the majority of SMEs (138 companies) have a contract directly with their supplier rather than through an intermediary. Around half of the SMEs in the survey use plug in electric heaters and have an average of three on their premises. One company uses 16 plug in electric heaters but do not state which other energy sources they use (i.e. this might be their sole source of heating).

Figure 8: Source for Heating SME Business Premises



7. Use of Low Carbon Technology and Energy Efficiency Measures

Few of the SMEs who responded have any micro-generation systems installed (Table 4). Just under half of the premises have double glazing which is the most selected energy efficiency measure followed by unspecified measures and loft insulation (Table 4).

Table 4: Appliances in the Premises

Installed Measure/Technology	Number of SMEs that have the technology/measure
Wind turbine	0
Photovoltaic cells/solar panels	2
Heat pump (ground source or air source)	1
Gas micro combined heat and power (CHP)	0
Liquefied petroleum gas (LPG) micro combined	0
Biomass micro combined heat and power	0
Micro hydro turbine	0
Solid wall insulation	3
Cavity wall insulation	17
Loft insulation	43
Under floor insulation	1
Double glazing	65
None of the above	57
Don't know	16
Prefer not to say	0

8. Conclusions

This report presents the analysis of the online survey of 152 small and medium enterprises (SMEs) from the UK. The local SMEs were asked about their energy use and behaviour, such as reducing energy and water use, being more environmentally friendly, using low carbon technology and energy efficiency measures.

The majority of SMEs (105) operate from a single site, 46 are part of multi-site organisations and 89 of the SMEs are family owned. The majority of SME customers (41%) were not on a time of use tariff.

The responses showed that the majority of SMEs that responded placed most emphasis upon reducing energy use and the majority of the SMEs (72%) agreed that both themselves and the people they work with need to reduce the amount of energy they use. Reducing water use, being environmentally friendly and demonstrating commitment were also reported as important or very important (Figure 2) although majority of the business have no environmental policy of any kind in place (Figure 3).

There are around 30 SMEs in the study (e.g. hotels) that operate 24 hours a day and between 60 and 80 are open at weekends (Figure 6). Only a few of the SMEs who responded have any micro-generation systems such as loft insulation, cavity wall insulation, or double glazing installed (Table 5).



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