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# **The Economic Contribution of the Renewable Energy and Energy Efficiency Sectors in the South West of England**

A survey for Regen SW

Final Report

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## Executive Summary

### Introduction

Regen SW commissioned DTZ to undertake a study to calculate the contribution of the Renewable Energy (RE) sector and Energy Efficiency (EE) sector to the South West economy in March 2008. This work follows on from a previous study to assess the contribution of the Renewable Energy sector to the South West economy in 2005.

The key objectives of the study are to:

- Carry out a survey of 150 businesses active in Renewable Energy and/or Energy Efficiency
- Identify the economic contribution of the RE and EE sectors to the SW economy in terms of jobs and Gross Value Added (GVA)
- Identify the business attitudes to future growth and support services that businesses working in RE and EE need

The Environmental Technologies sector is recognised as an important sector for the South West, including in the Regional Economic Strategy (RES) where it is identified as a priority sector. Whilst Energy Efficiency is a larger sector at present nationally, the Renewable Energy sector is expected to grow strongly due to UK and EU legislation. The South West is well placed to take advantage of growth in this sector given its natural and knowledge assets.

Over three hundred businesses have been identified as active in the Renewable Energy and/or Energy Efficiency sectors in the South West, of which 152 were surveyed in this study: 64% of the sample population are active in RE only, 20% in EE only, and a further 16% are active in both sectors. Data from this survey was used to identify a range of characteristics and needs of the two sectors' sample populations and was scaled up to estimate the overall direct and indirect economic contributions of the RE sector and EE sector in the South West.

The study found that the combined impact of the RE and EE sectors is to directly support in excess of 7,200 jobs with a GVA of over £500m.

### The Renewable Energy (RE) Sector

The Renewable Energy sector was estimated to be worth £290m in the UK in 2005.<sup>1</sup> It is estimated that the UK market for Renewable Energy will experience double-digit growth to reach £3.7bn by 2010 and £7.5bn by 2015.<sup>2</sup>

The results of this study demonstrate very strong growth in the Renewable Energy sector in the South West when compared with our 2005 report on the sector:

- RE directly employs 2,900 FTE jobs in the region today compared with 1,140 FTE jobs in 2005, equivalent to an average annual growth rate of approximately 37%.
- The sector directly contributes £215m of GVA to the regional economy, compared with £34m in 2005.

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<sup>1</sup> DTI (2005) Study of Emerging Markets in the Environmental Industries Sector

<sup>2</sup> UK CEED (2006) Emerging Markets in the Environmental Industries Sector

- Productivity (GVA per employee) in the RE sector is on average £51,000, up from £30,000 in the previous study, indicating that the RE sector has become much more productive since 2005.

The growth in employment has occurred through a combination of larger firm size and an increase in the number of firms. However the sector is still dominated by small businesses, as these results show:

- In the sample population each RE firm has an average of 13 FTEs.
- 61% of businesses employed less than 10 employees.
- 22% of the firms surveyed were start-ups, established since 2005, compared with 13% in the EE sector.
- Across both sectors it is estimated that there are 62 businesses which have started in the last three years, employing approximately 400 FTEs, with the majority of these jobs in the RE sector.
- The businesses sampled contribute an average of £331,000 GVA per firm to the regional economy.

Analysis of the location of employees, purchases and sales within the sample population demonstrates the wider impact on the regional economy of the sector. The survey found that:

- RE businesses make just under a third (32%) of their purchases, and a similar amount of their sales in the region
- Comparison with our 2005 study shows that RE sector sales to the rest of the UK have grown faster than sales in the South West
- Only 27% of businesses sampled in the RE sector export, and those that do export on average only export 8% of their output

Using the sample profile outlined above the results of the surveyed population have been scaled up to estimate that 4,000 jobs in the South West are supported by the RE sector either directly or indirectly. This supports £288m of GVA in the South West economy.

<b>Renewable Energy</b>	<b>2005 data</b>	<b>2008 data</b>
Gross direct employment (FTEs)	1,140	2,900
Direct GVA creation	£34m	£215m
Net employment effect (FTEs)		4,000
Net GVA effect		£288m

As well as providing aggregate data, businesses surveyed provided employment and GVA data by sub-sector. The main findings for the sample RE sector are:

- Wind was the largest sub-sector employing 32% of all employees in RE, with 23% of firms involved in the sub-sector.
- Micro-renewables was also a large sector employing 12% of employees and involving 16% of firms in the RE sector.

- The 'Other Renewable Energy' sub-sector<sup>3</sup> was the most productive with an average GVA per worker of £135,000, compared to an average of £51,000 across the RE sector
- Businesses in the RE sector tend to be focussed on consultancy (32% up from 22% in 2005) and project development (23%, no change from 2005).
- Just 4% of RE firms sampled were focussed on R&D, down from 11% in 2005.
- About two-thirds of all staff in the sampled businesses are engaged in either managerial or professional/ technical occupations.

In summary, the RE sector has seen considerable growth in employment, productivity and overall GVA contribution to the regional economy since 2005. The sampled population indicates that the sector is made up of predominantly small and relatively new businesses.

### **The Energy Efficiency (EE) Sector**

Research into the EE sector is more limited than for RE, with estimates for the size of the sector in the UK ranging between £1.6bn and £2.6bn. However, it is generally thought that the EE sector is larger than the RE sector in the UK, and is expected to remain so at least until the end of the decade.

Our sample included 56 businesses active in the EE sector in the South West. The results of the survey have been scaled up to estimate the size of the whole sector. This study demonstrates that the EE sector has a significant impact on the South West economy, as it is larger than the RE sector in terms of both employment and GVA contribution:

- EE directly employs 4,300 FTE jobs in the region, directly contributing £294m of GVA to the regional economy.
- Productivity (GVA per employee) in the EE sector is on average £68,000.

Based on the sample population, businesses in the EE sector are generally growing more slowly than the RE sector: employment in established firms has grown by 5% in the EE sector in the last three years, compared to 37% in the RE sector.

However, the sample demonstrated that the EE sector is composed of larger, more established businesses than the RE sector, with one firm dating back to 1720. In the sample population an average of 38 FTEs work in EE per firm, 32% of which employ less than 10 employees. Just 13% of the firms surveyed were start-ups, established since 2005. The businesses sampled contribute on average over £2.5m GVA per firm to the regional economy.

Analysis of the location of employees, purchases and sales within the sample population demonstrates the wider impact on the regional economy of the sector. The survey found that:

- EE businesses make 42% of their purchases, and approximately 30% of their sales in the region

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<sup>3</sup> 'Other Renewable Energy' includes a range of businesses involved in hydrogen, concentrated solar, ocean thermal, geothermal, landfill/sewage gas, bio-fuels, biomass burners, and heat pumps. This category also acts as a catchall category for consultants, architects and engineers involved in the Renewable Energy sector generally, where it was not possible to categorise jobs into individual sub-sectors.

- EE businesses are more active in the export market than those in RE with 42% of businesses sampled in the EE sector exporting, and those that do export, export on average 31% of their output (compared with 8% in RE).

Using the sample profile outlined above the results of the surveyed population have been scaled up to estimate that 5,600 jobs in the South West are supported by the EE sector either directly or indirectly. This supports £379m of GVA in the South West economy.

Energy Efficiency	2008 data
Gross direct employment (FTEs)	4,300
Direct GVA creation	£294m
Net employment effect (FTEs)	5,600
Net GVA effect	£379m

Key sub-sector findings for the sample EE sector are:

- 'Other EE products and services'<sup>4</sup> was the largest sub-sector with 22% of EE businesses involved in this sector in some way, and accounts for 79% of employees in EE
- The 'Buildings' sub-sector was the most productive with an average GVA per worker of £182,000, compared to an average of £68,000 across the RE sector
- Businesses in the EE sector tend to be far more involved in manufacturing and assembly (58%) than those in RE.
- A mere 1% of EE firms sampled were focused on R&D.
- EE businesses have a far higher percentage of workers in 'Skilled Trades and Machine Operations' (52%) than in RE.

In summary, the EE sector has a significant impact on the South West economy, with larger overall employment and GVA contribution than the RE sector, based on fewer, but larger and more established firms. However, sampled businesses indicated a slower growth than in the RE sector.

### Growth Expectations and Support Needs

Firms in the RE and EE sectors are generally very positive about future growth. This was reflected in perceptions and aspirations of growth in the sampled businesses.

- 86% of businesses in both sectors stated that the market size for their main product or service was rising strongly or slowly, with little difference between RE and EE firms.
- 90% of businesses in both sectors expected their firm to grow either very strongly or gradually over the next few years. EE businesses were more likely to report very strong growth aspirations.
- 75% of businesses expected to increase employment over the next few years, with RE businesses more positive about future growth in employment than those in the EE sector.
- Only 1% of businesses, all in the EE sector, expect employment levels to decrease over the next three years.

<sup>4</sup> The 'Other Energy Efficiency' sub-sector includes a range of advisory firms working in Energy Efficiency generally such as engineers and consultants, where it was not possible to allocate employment to specific sub-sectors

Firms across both sectors identified a number of potential drivers for business growth over the next three years.

- Over 60% of businesses said they will recruit and train new managers or staff; expand existing UK markets or develop new UK markets
- Around 50% of businesses said that they will collaborate with other businesses/organisations; undertake research and development; and introduce new products/services; and improve production/service efficiency

This information can be broken down further by sector and size.

- Firms in EE tend to be more focused on developing and introducing new products and services
- Firms in RE are more likely to be working to expand UK markets and seeking investment for a major new product.
- Established firms in both sectors are more likely to carry out R&D in next three years, than start-ups.
- Larger firms in both sectors are more likely to expand into overseas markets, train and recruit staff, or expand / develop UK markets than smaller businesses.
- 14% of all micro/small businesses surveyed expected to undertake none of the activities identified.

Having identified the likely drivers for business growth, businesses identified whether they will need external support to achieve these outcomes. This provides an indication of the likely need for business support and advice and the key findings are as follows:

- Businesses are most likely to seek external support on the following issues: investment for new products/services or capital, a takeover of another firm, R&D for new products, and expanding premises
- Businesses seeking external support are most likely to use an accountant/bank manager, specialist consultant, or other business support provider, including those in the public sector

Finally, businesses were asked whether they had received support from Regen SW, and to give their opinion of the quality of support received. Across both sectors 92% of businesses that identified that they had received support from Regen SW rated the service as either good or very good.



# 1. Introduction

Regen SW commissioned DTZ to undertake a study to calculate the contribution of the Renewable Energy (RE) sector and Energy Efficiency (EE) sector to the South West economy in March 2008. This work follows on from a previous study to assess the contribution of the Renewable Energy sector to the South West economy in 2005.

The key objectives of the study are to:

- Identify the economic contribution of the RE sector to the South West economy in terms of jobs and GVA<sup>5</sup>
  - Review the methodology originally developed by DTZ and the data sources for RE so the work is comparable and consistent with the previous study
- Identify the economic contribution of the EE sector to the South West economy in terms of jobs and GVA
  - Extend the methodology and data sources for EE so that the work is consistent with the RE sector
- Identify the business attitudes to future growth and support services that organisations working in RE and EE need
- Produce an authoritative report that can be used in the evidence base for the Regional Economic Strategy.

## 1.1 Methodology

DTZ carried out the 2005 study on the Renewable Energy sector on behalf of Regen SW. The original methodology has been reviewed, and this study has been carried out on a compatible basis to ensure that the results are comparable. In drawing up the questionnaire for the survey element of this study, the majority of original questions have been retained in their original format to ensure comparability.

In carrying out this study, DTZ have undertaken a survey of 150<sup>6</sup> firms thought to be active in the RE and/or EE sectors. Regen SW hold a database of businesses thought to be active in these sectors, which was refined and extended by DTZ by contacting relevant trade and industry organisations. Out of the initial database of 372 firms, 56 businesses were identified as not active in the sector or duplicate contacts. This leaves an effective population of 316 firms split across those active in the Renewable Energy and/or Energy Efficiency sectors.

DTZ conducted a 15-minute telephone interview with 150 firms split across the Renewable Energy and/or Energy Efficiency sectors (some firms are active in both sectors). The purpose of the telephone survey was to assess:

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<sup>5</sup> GVA or Gross Value Added is a measure of economic output. In this case we have defined it as turnover minus the cost of bought in goods and services.

<sup>6</sup> 152 businesses were actually interviewed



- The areas of activity and technologies in which businesses in the South West are active
- The level of employment in the Renewable Energy and Energy Efficiency sectors in the South West
- The economic contribution of the Renewable Energy and Energy Efficiency sectors to the economy
- Attitudes and barriers to business growth
- The business support requirements of firms in both sectors in the South West.

## 1.2 Report Outline

The remainder of this report is organised as follows:

- **Section two** provides a background to the study, examining the policy focus on the Renewable Energy and Energy Efficiency sectors. Definitions of the sectors are provided
- **Section three** provides a summary of survey data relating to business demographics, including employment, turnover, and gross value added (GVA) of the businesses surveyed
- In **Section four**, the results from the survey are extrapolated to estimate the overall contribution of the Renewable Energy and Energy Efficiency sectors to the economy of the South West region
- **Section five** contains further data from the survey on business growth and use of external support

## 2. Background and Definitions

This section provides an overview and definitions of the Renewable Energy and Energy Efficiency sectors in the South West.

Environmental Technologies were identified in the Regional Economic Strategy (RES) as a priority sector for the South West. Overall this sector offers significant growth potential, with much of the developments being driven by EU and UK environmental legislation. The environmental technologies sector is estimated to be worth nearly £1.6bn in the South West, employing 30,000 people in 1,300 businesses.<sup>7</sup>

### 2.1 Renewable Energy (RE)

Renewable Energy (RE) is a sub-sector of the environmental technologies sector and is expected to play a significant role in developing the wider sector's future developments. In a previous study for Regen SW, we estimated that there were 1,140 FTE's employed directly in the Renewable Energy sector in 2005, generating a GVA of £34m per annum. This sector is expected to grow strongly, largely as a result of government policy interventions to reduce carbon dioxide emissions by 60% by 2050 and for renewable energy to supply 15% of UK energy by 2020.

The South West region is well placed to take advantage of this growth, both in terms of the expertise already present in the region, and the natural assets of the region. The region has a track record of 'firsts' in renewable energy, from the UK's first commercial wind farm, to the first UK scheme to harness electricity from fermented farm and food waste. The 2007 survey of RE projects undertaken by Regen SW identified 215 grid-connected renewable electricity projects in the South West (137MW of installed capacity) and 419 renewable heat projects (28MW). The South West is at the forefront of new renewable energy markets such as wave energy, with the recent granting of planning permission for the proposed Wave Hub to be located off Cornwall; the world's first demonstration site for wave farms.

For the purposes of this study, we have defined the Renewable Energy sector as including commercial organisations involved in the design, manufacture and supply of devices that derive energy from renewable sources and related services. It includes the following technologies:

- Wind
- Biomass
- Marine Energy
- Hydro
- Micro-renewables (on-site or buildings integrated renewables)
- 'Other Renewable Energy' includes a range of businesses involved in hydrogen, concentrated solar, ocean thermal, geothermal, landfill/sewage gas, bio-fuels, biomass burners, and heat pumps. This category also acts as a catchall category for consultants, architects and engineers involved in the Renewable Energy sector generally, where it was not possible to categorise jobs into individual sub-sectors.

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<sup>7</sup> DTI (2005) Mapping the UK Environmental Goods and Services Sector

Both the Renewable Energy and Energy Efficiency sectors cover the following business activities:

- Project Development
- Research & Development
- Consultancy
- Manufacture & Assembly
- Supply
- Construction & Installation
- Operations & Maintenance

## 2.2 Energy Efficiency (EE)

Research into the EE sector in the UK is far more limited than for RE. A report for the DTI/DEFRA identifies a UK market for energy management goods and services of £2.6bn in 2006 – far higher than the corresponding figure of £290m for Renewable Energy.<sup>8</sup> Another report by Shell Springboard gives a much lower estimate for the UK energy efficiency market at £1.6bn in 2010, however this is still far greater than the Renewable Energy sector.<sup>9</sup>

Knowledge of the EE sector in the South West is limited. Regen SW recently undertook a survey of the sector identifying a total of 87 businesses. A key output from this study is to produce a more robust estimate of the size of the EE sector on a comparable basis to the analysis of the RE sector.

For the purposes of this study, we have defined the Energy Efficiency sector as including commercial organisations involved in the design, manufacture and supply of energy efficient products and energy efficiency services. This includes the following sub-sectors:

- Building design and management, including insulation and lighting
- Products and services in process management and monitoring
- Products and services in the manufacture and supply of motors, drives and pumps
- The supply of heating and cooling products, including heat exchangers, heat recovery, HVAC and refrigeration
- Consultancy services, in particular in energy management
- Power production and control, including boilers, CHP, generators, transformers and power factor correction
- The manufacture and supply of fluid management products (including air)
- The 'Other Energy Efficiency' sub-sector includes a range of advisory firms working in Energy Efficiency generally such as engineers and consultants, where it was not possible to allocate employment to specific sub-sectors

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<sup>8</sup> DTI/DEFRA (2006) Study of Emerging Markets in the Environmental Industries  
ringboard (2006) Business Opportunities for SMEs

## Section 2 Summary

The Environmental Technologies sector is recognized as an important sector for the South West, and offers significant growth potential. Renewable Energy and Energy Efficiency are significant sub-sectors within Environmental Technologies.

Whilst Energy Efficiency is a much larger sector at present nationally, and is predicted to remain so at least up to the end of this decade, the Renewable Energy sector is expected to grow strongly due to UK and EU legislation. The South West is well placed to take advantage of this growth given its natural and knowledge assets.

A 2005 study for Regen SW, estimated that in the South West there were 1,140 FTE's employed directly in the Renewable Energy sector, generating £34m of GVA per annum. This study aims to update these estimates of the Renewable Energy sector for 2008 and produce a comparable estimate of the size of the Energy Efficiency sector in the region.

## 3. Economic Contribution of Sampled Firms

This section provides an overview of survey responses from businesses in the Renewable Energy and Energy Efficiency sectors in the South West. The purpose of this section is to show the characteristics of businesses based in the South West and to identify the key technologies and activities that are important in the South West.

### 3.1 Business Demographics

#### Key Points

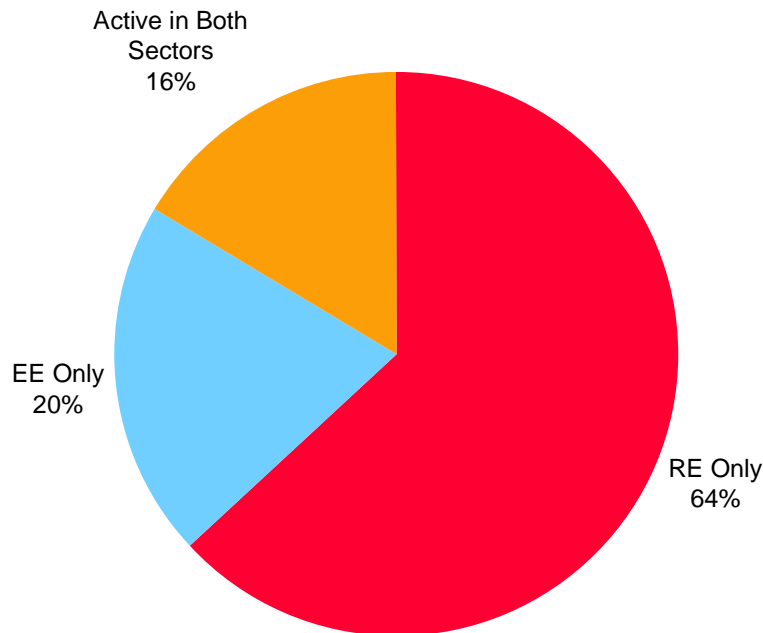
- 152 businesses contacted with a 48% response rate
- 64% of businesses are active in the RE sector only, 20% in EE only, and 16% are active in both sectors
- 50% of all businesses employ less than 10 FTE employees, however these micro-businesses account for just 2% of overall employment
- Businesses active in RE tended to be smaller (higher proportion of micro-businesses) and newer (50% of businesses were established since 2000) than businesses active in the EE sector

#### Survey Population and Sample

Regen SW identified a total of 372 businesses thought to be active in the Renewable Energy and/or Energy Efficiency sectors. In undertaking the survey work, 56 contacts were identified which are either no longer, not active in the RE/EE sectors, or duplicate contacts, bringing the effective survey population down to 316. Of this total, 152 businesses were contacted through the survey, representing an overall response rate of 48% of the effective population.

As shown by Figure 3.1, 64% of the businesses in the sample population are active in Renewable Energy only, 20% in Energy Efficiency only, and a further 16% are active in both sectors.

**Figure 3.1: Survey Sample by Sector**



### Overall Size of Businesses

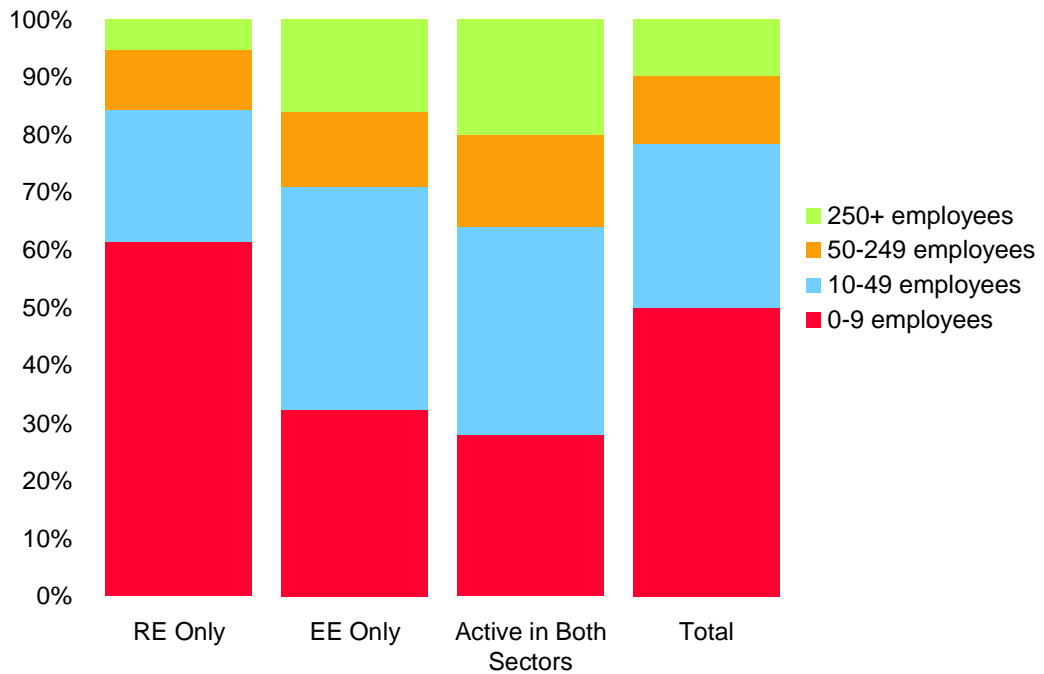
Businesses were asked to quantify their overall number of staff employed across all sectors (not just RE and EE), expressed as full time equivalents employees (FTEs). Figure 3.2 shows the distribution of businesses by total number of employees. Overall, 50% of firms are micro-businesses with fewer than 10 employees. A further 28% of businesses have between 10 and 49 FTEs (small businesses), and 12% of businesses have 50-249 employees (medium sized businesses). 10% of the sample are large businesses with more than 250 employees. Across all sectors the mean average number of employees is 79, however the median is just 9 employees, reflecting the fact that there are a small number of very large firms included in the sample.

It is interesting to note the difference in size breakdown by sector. The RE sector has a higher proportion of micro-businesses (61%) than the EE sector (32%) or the group of businesses active in both sectors (28%). Equally, the proportion of large businesses is highest in the group of businesses active in both sectors (20%). This is reflected in the average employment per firm, as summarised in Table 3.1.

**Table 3.1: Sample Average Overall Employment per Firm (in all sectors)**

Sector	Mean Employment per Firm	Median Employment per Firm
RE only	46	6
EE only	97	24
Active in both Sectors	185	25
Total	79	9

**Figure 3.2: Sample Businesses by Number of Employees**



**Figure 3.3: Breakdown of Sample Total Employment by Size of Firm**

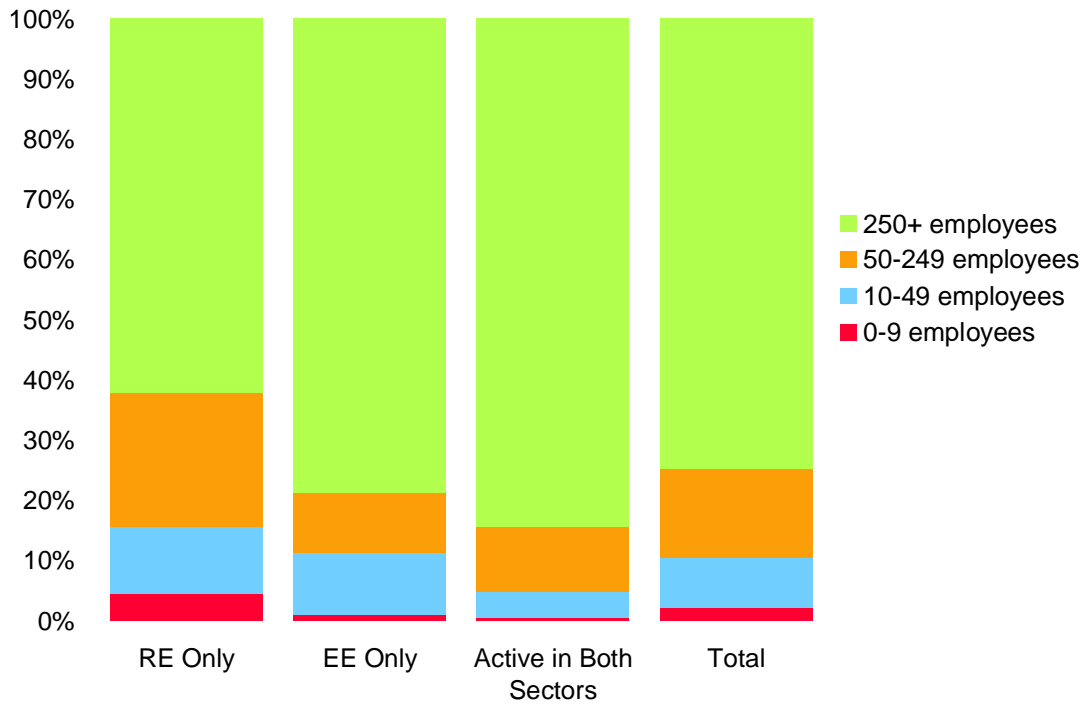
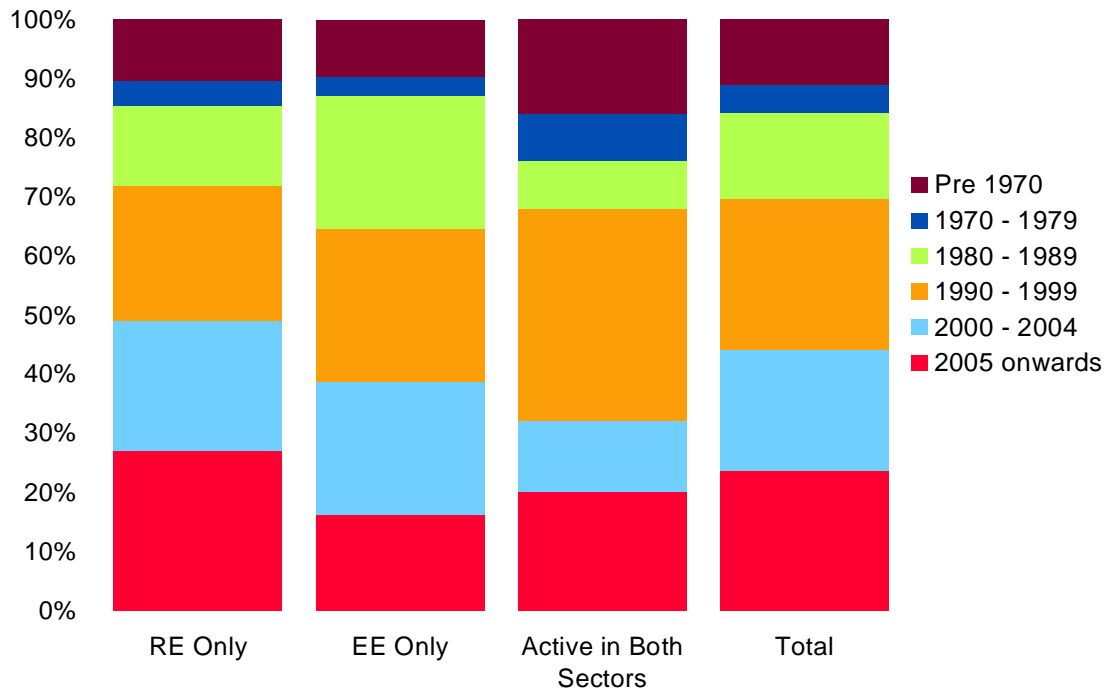


Figure 3.3 shows the breakdown of total employment in each sector by size of firm. Large businesses (250+ FTEs) account for 75% of total employment in the sample, with small and medium sized businesses (10-249 employees) accounting for 23% of employment. Whilst 50% of all firms in the sample are micro-businesses, they account for just 2% of total employment.

### Age of Businesses

Figure 3.4 provides a profile of when businesses in the sample were formed. 24% of all businesses were established since 2005, with a further 20% of businesses established between 2000 and 2004. 11% of all businesses were established prior to 1970, with the oldest formed in 1720. The proportion of businesses formed since 2000 is highest in the RE sector, with 50% of businesses formed since 2000. This suggests that the RE sector is a newer growth sector than the EE sector.

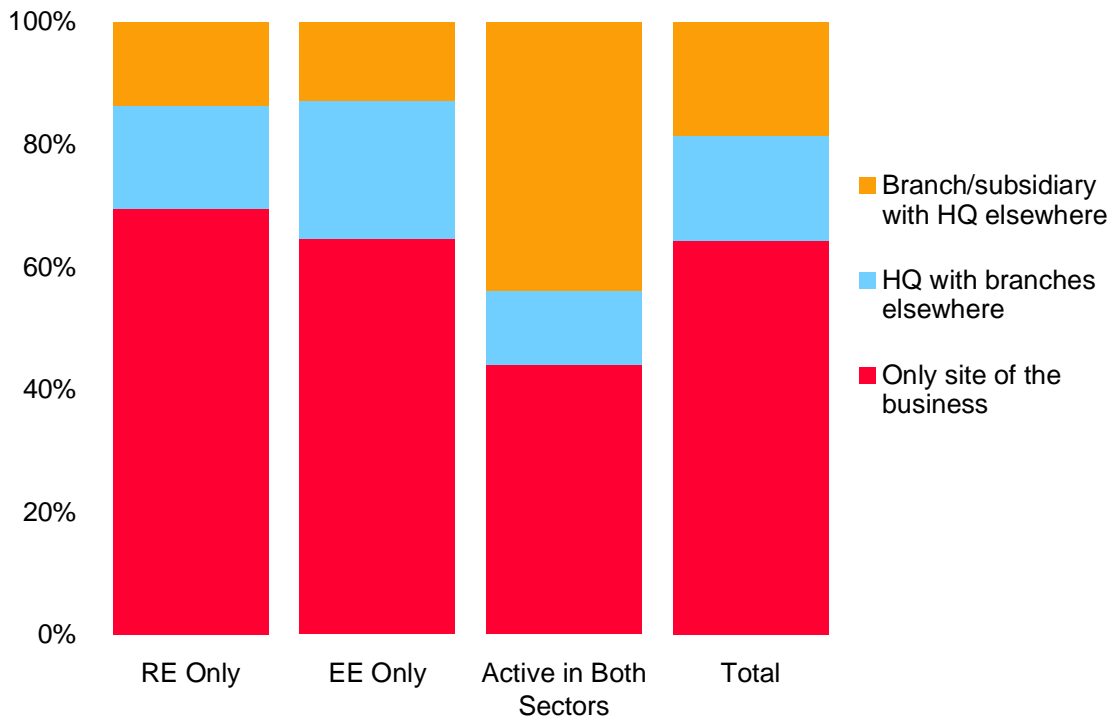
**Figure 3.4 Age Profile of Sample Businesses**



### Role of South West Site

Businesses sampled were asked to state the role of the site contacted in the South West, as shown by Figure 3.5. 64% of all businesses stated that the whole business operated from a single site, 17% stated that the site contacted was the headquarters (with other sites elsewhere). The remaining 18% of firms stated that a branch had been contacted, and that the headquarters was elsewhere – with most headquarters within the UK but outside the South West region. The businesses active in both sectors were more likely to be a branch with headquarters elsewhere.

**Figure 3.5: Role of Site in the South West**



### 3.2 Direct Economic Contribution of Sample Businesses

The survey was designed so that we could capture data on employment and gross value added (GVA). These results can be split by sector (RE and EE) and by sub category. The data will allow us to quantify the level of economic activity within the sample businesses, and scale this up to estimate the overall contribution of the sector (see Chapter 4).

Elements of this part of the survey allow analysis of the growth of the business as well as future expectations. To make a more accurate assessment of the impact on the South West economy of the RE and EE sectors, the survey included questions on supply chains. This gives an indication of the extent of further indirect benefits that are being captured by other businesses in the South West region through supplier spending and wages.

#### Direct Economic Contribution

Table 3.2 provides a summary of statistics on the direct economic contribution of the sample businesses to the RE and EE sectors, which can be summarised as follows:

- A total of 121 businesses are active in RE (including those active in both sectors), and 56 businesses are active in EE (including those in both sectors)
- Total employment identified in the sample for RE is 1,567 FTEs, giving an average of 13 FTEs working in RE per firm

- Total employment identified in the sample for EE is 1,555 FTEs. EE firms are much larger, with an average of 38 FTEs working in the sector per firm
- The average turnover per FTE is £91,000 for RE businesses, and £109,000 for EE businesses
- Due to the larger number of employees per firm in EE, the average turnover is higher in EE at over £4 million per firm
- The spending on suppliers is equivalent across the two sectors at £41,000 per FTE
- Productivity (GVA per employee) is higher in EE firms due to the higher levels of turnover

**Table 3.2: Summary Statistics for Renewable Energy and Energy Efficiency**

	<b>Renewable Energy</b>	<b>Energy Efficiency</b>
<b>Number of Businesses involved in sector</b> (including those involved in both)	121	56
<b>Employment in Sector</b>		
Total	1,567	1,555
Average per Firm	13	38
<b>Turnover relating to Sector</b>		
Average per Firm	£596,000	£4,132,000
Average per Employee	£91,000	£109,000
<b>Spending on Suppliers relating to Sector</b> (Goods/Services)		
Average per Firm	£266,000	£1,566,000
Average per Employee	£41,000	£41,000
<b>Gross Value Added in Sector</b>		
Average per Firm	£331,000	£2,566,000
Average per Employee (productivity)	£51,000	£68,000

Our 2005 study into the RE sector gave a much lower GVA per employee figure of £30,000, indicating that the RE sector has become much more productive since 2005.

### 3.3 Wider Impact on the South West Economy

In assessing the full impact of RE and EE businesses on the economy of the South West, it is important to assess the extent to which spending on suppliers and wages are retained within the region. Any supplier and wage spending retained in the local economy will lead to additional economic benefit to the area (multiplier effects). This is explored further in Chapter 4 of this report. In addition, it is interesting to analyse the extent to which the output from businesses relates to the region, or conversely to exports.

#### Key Points

Within the sample population:

- Businesses in EE make a much larger proportion of their purchases from within the South West (42%) than businesses in RE (32%).

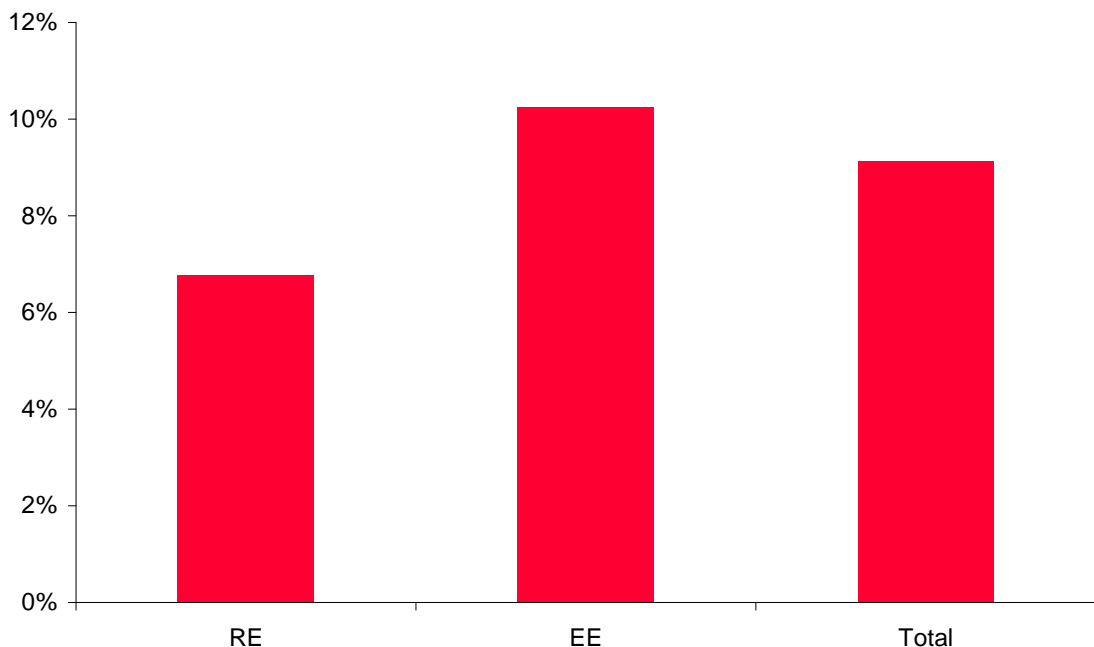
- 29% of total sales are to customers within the South West with RE businesses selling slightly more in the region than EE firms.
- Only 27% of businesses in the RE sector export some or all of their produce, compared to 42% of businesses in the EE sector.
- Businesses in RE export a much lower proportion of their output than businesses in EE (8% compared to 31%).

### Location of Employees (Employment Leakage)

In considering the impact of RE and EE businesses on the economy of the South West, it is important to consider the extent to which jobs are filled by people who live in the South West region. Spending on wages can lead to additional benefits to the local economy through household spending.

Businesses were questioned on the proportion of their workers who live outside of the South West region. Figure 3.6 shows that 9% of all workers in the sample businesses live outside of the South West. Therefore 9% of the benefits of employment from the RE and EE sectors do not occur within the SW and leak into other regions. This is high relative to other sectors, since the average leakage of jobs based in the South West region to workers resident elsewhere is 3.4%.<sup>10</sup> Businesses in the EE sector are more likely to employ workers outside of the region than other businesses, with 10% of workers living outside of the South West.

**Figure 3.6: Employment Leakage**

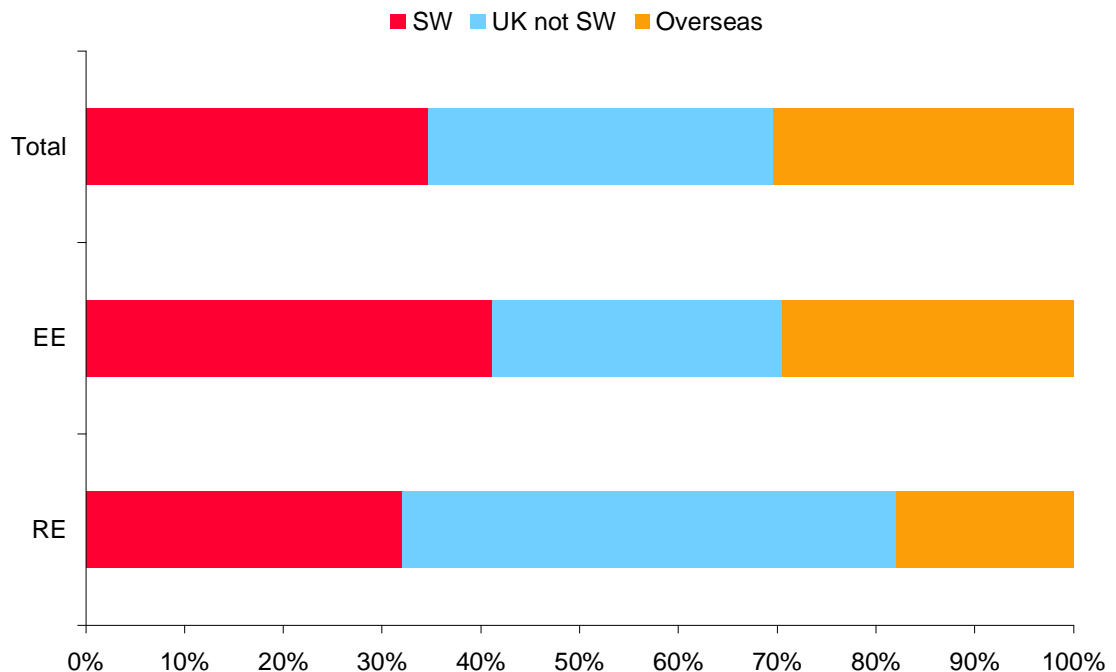


<sup>10</sup> Census 2001 Travel to Work statistics

### Location of Suppliers

In addition to wage spending, it is also important to consider the extent to which supplier spending is retained within the region. Figure 3.7 shows the split of supplier spending between suppliers located in the South West, the rest of the UK, and overseas. In total, 35% of business purchases are made in the SW, 35% are from the rest of the UK, and 30% from overseas. Businesses in EE make a much larger proportion of their purchases from within the South West (42%) than businesses in RE (32%). This is likely to be due to the fact that the EE sector is more established in the South West region, so businesses can more easily source goods and services within the region.

**Figure 3.7: Location of Bought In Goods and Services**

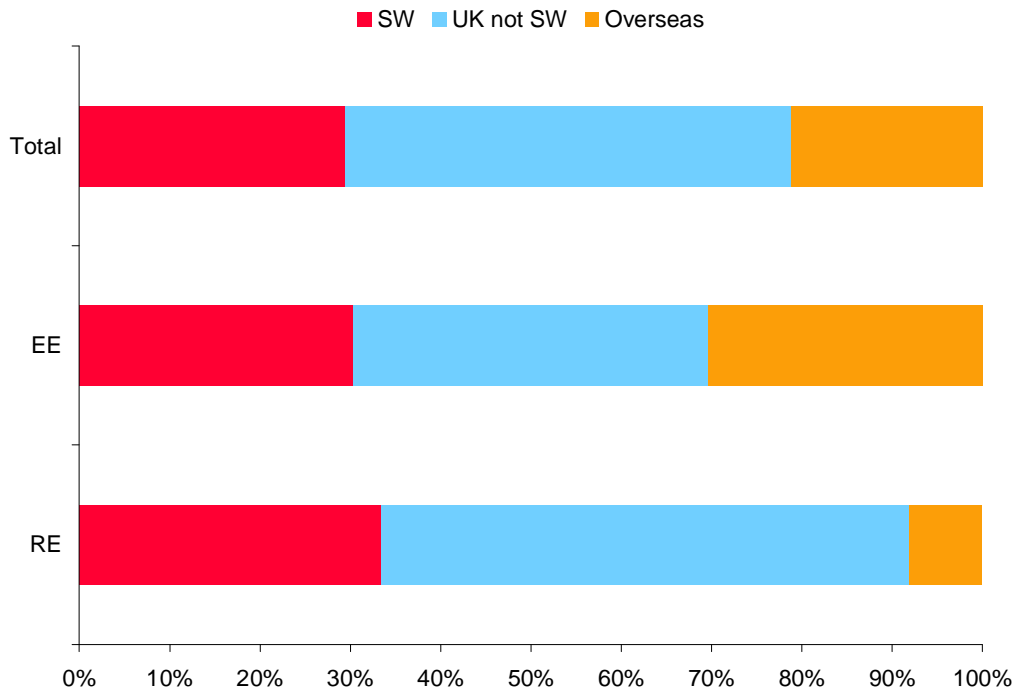


### Location of Customers

As well as supplier and income linkages, it is interesting to analyse the geographical pattern of sales from businesses in RE and EE. This provides an assessment of the linkage between the production of goods and services in RE and EE, and their consumption. The pattern of sales has been assessed in two different ways: the percentage of sales that are focused within the SW, and the proportion of businesses who export their goods and services.

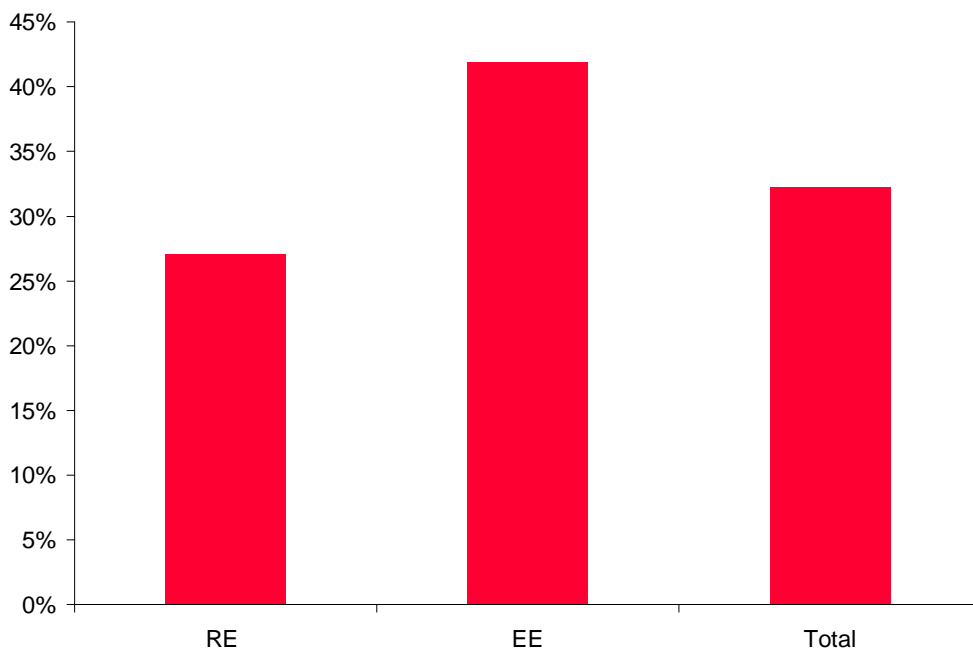
Figure 3.8 shows the breakdown of total sales in terms of location. 29% of total sales are within the SW, 49% in the rest of the UK and 21% are exports to overseas. Businesses in RE export a much lower proportion of their output than businesses in EE (8% compared to 31%). This is likely to be driven by the fact that the EE sector is generally more mature than the RE sector, and that firms in the EE sector are generally larger than those in the RE sector. Interestingly, our 2005 study of the RE sector showed that nearly 50% of sales were retained within the South West, with exports of less than 10% of total sales. This indicates that sales to the rest of the UK have grown faster than sales within the South West.

**Figure 3.8: Location of Sales**



The percentage of businesses from each sector that export is shown in Figure 3.9. 32% of all businesses export a proportion of the output generated in the South West. Businesses in the RE sector are less likely to export, with only 27% of businesses exporting some or all of their produce, compared to 42% of businesses in the EE sector.

**Figure 3.9: Percentage of Businesses that Export**



### 3.4 Sub-Sector Analysis

As well as providing aggregate data for the Renewable Energy and Energy Efficiency sectors, businesses were asked to provide employment and GVA data by technology (e.g. wind, hydro-electric, energy efficiency in buildings etc.) and function (e.g. project development, consultancy etc).

#### Key points

- Within Renewable Energy, wind and micro-renewables are the largest sectors in terms of employment
- Productivity per worker is highest in 'Other Renewable Energy', and lowest in wind
- Within Energy Efficiency, the highest number of businesses are in 'Other Energy Efficiency products/services', and consultancy
- Productivity is highest in the 'Power' (very small sample) and 'Buildings' sectors
- In terms of the split between functions, 30% of employment is in manufacturing/assembly, 23% in consultancy, and 20% in operation/maintenance
- Businesses in RE tended to be more focused on consultancy (32% of all employees), whilst businesses in EE are more focused on manufacturing/assembly (58%)
- The highest productivity jobs are in consultancy, with an average GVA per worker of £123,000

#### Renewable Energy Sector

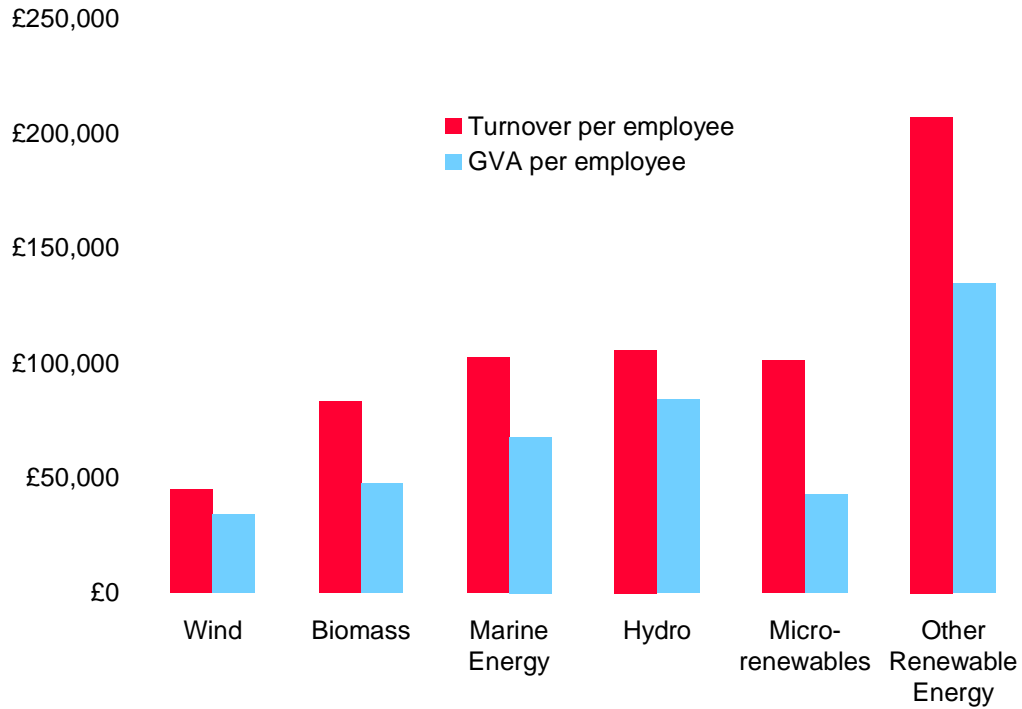
Businesses active in the Renewable Energy sector quantified their employment and GVA by technology as shown in Table 3.3. The number of businesses who operate in each sub sector is shown with wind being the largest with 46 businesses in the sample. Wind is also the largest sector in terms of number of employees with 416 employees in the sample, followed by the micro-renewables sub-sector, which employs 338 workers in the sample. Interestingly, in our 2005 study, the most significant sectors were biomass (26% of firms) and wind (23%), indicating that wind has grown in importance relative to biomass since 2005.

**Table 3.3: Renewable Energy Sample Sub-Sector Analysis**

	Number of Businesses	Number of Employees	Employees per Business	Turnover per Employee	GVA per Employee
Wind	46	416	11	£45,000	£34,000
Biomass	31	150	5	£83,000	£47,000
Marine Energy	19	161	11*	£102,000*	£68,000*
Hydro	17	28	2	£106,000	£84,000
Micro-renewables	43	338	8	£101,000	£43,000
Other Renewable Energy	44	192	5	£207,000	£135,000
Total for Renewable Energy	121	1,567	13	£91,000	£51,000
* - indicates that the figure is based upon a small sample size Note that figures may not sum to the total due to some firms operating in more than one sub-sector					

It is interesting to note the differences in the GVA per worker and turnover per worker by sub-sector. The sub-sector with the highest GVA per employee is 'Other Renewable Energy' (£135,000), which may be inflated by the presence of some consultants/engineers working in the RE sector generally. Figure 3.10 shows that despite being the largest sector in terms of number of employees and number of businesses, the wind sub-sector has low levels of GVA per employee. This is interesting since it appears that more mature technologies such as wind have lower levels of productivity than emerging sectors. This may be explained by the fact that wind technology is now relatively mainstream and mature, hence the majority of employees will now be in lower-value functions such as manufacture and installation as opposed to higher-value functions such as consultancy and product development. Note that the figures for Marine Energy are based on a small sample of businesses.

**Figure 3.10: Turnover and GVA per Employee by Sub-Sector**



### Energy Efficiency Sector

Table 3.4 and Figure 3.11 present data on employment and GVA in Energy Efficiency by sub-sector. The largest sector in terms of number of businesses is 'Other Energy Efficiency products or services' with 26 businesses. The fact that so many businesses opted for this catch-all sector may reflect the fact that it is hard to categorise Energy Efficiency activity into sub-sectors. The 'Other Energy Efficiency products or services' sub-sector also employs by far the highest number of employees with 1,416 employees. The number of employees was boosted by a small number of businesses that employed a large number of workers in this sub-sector.

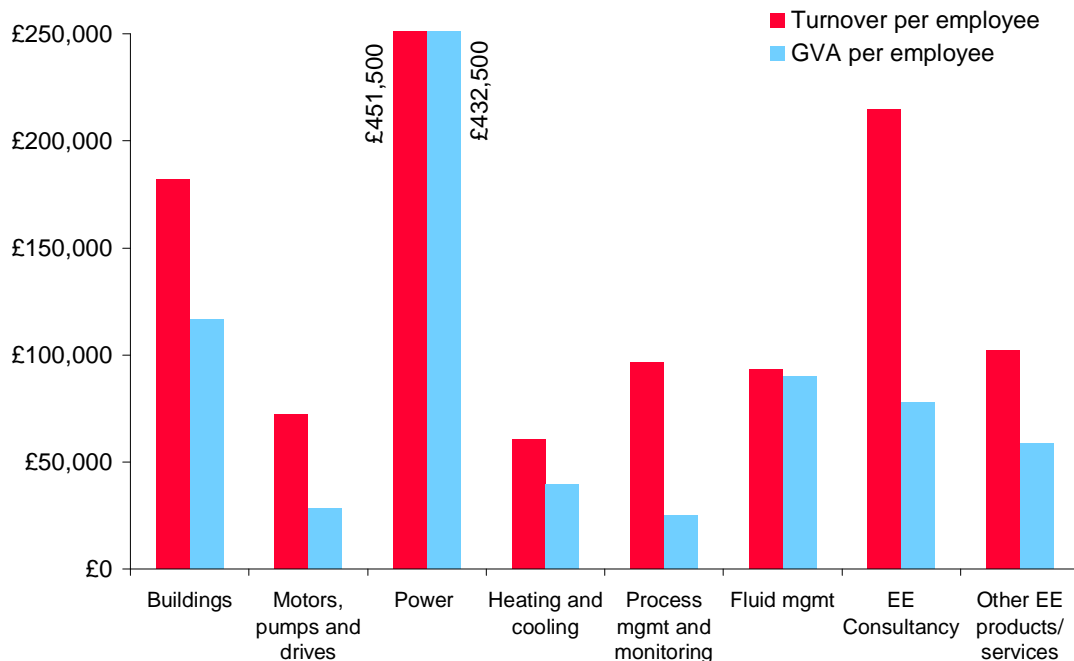
The 'Power' sub-sector has extremely high figures for productivity, but the small sample makes these results statistically insignificant. The 'Buildings' sector also has high levels of productivity per employee, in contrast to the 'Motors, Pumps and Drives' and 'Process Management and Monitoring' sectors which have low levels of productivity.

**Table 3.4 Energy Efficiency Sample Sub-Sector Analysis**

	Number of Businesses Sampled	Number of Employees	Employees per Business	Turnover per Employee	GVA per Employee
Buildings	20	111	7	£182,000	£117,000
Motors, pumps and drives	13	48	5*	£72,000*	£29,000*
Power	11	62	8*	£452,000*	£433,000*
Heating and cooling	12	30	3*	£60,000*	£39,000*
Process management and monitoring	8	6	1*	£97,000*	£25,000*
Fluid management	7	12	3*	£93,000*	£90,000*
Energy Efficiency consultancy	24	99	4	£215,000	£78,000
Other EE products or services	26	1,416	67	£102,000	£59,000
Total for Energy Efficiency	56	1,555	38	£109,000	£68,000

\* - indicates that the figure is based upon a small sample size  
 Note that figures may not sum to the total due to some firms operating in more than one sub-sector

**Figure 3.11: Turnover per Employee by Sub-Sector**



### Analysis by Function

Businesses provided data on employment and GVA broken down by function across all activity in RE and EE. As shown by Table 3.5 and Figure 3.12, Manufacturing/assembly accounts for 30% of all employment in RE and EE. Other significant areas are Consultancy

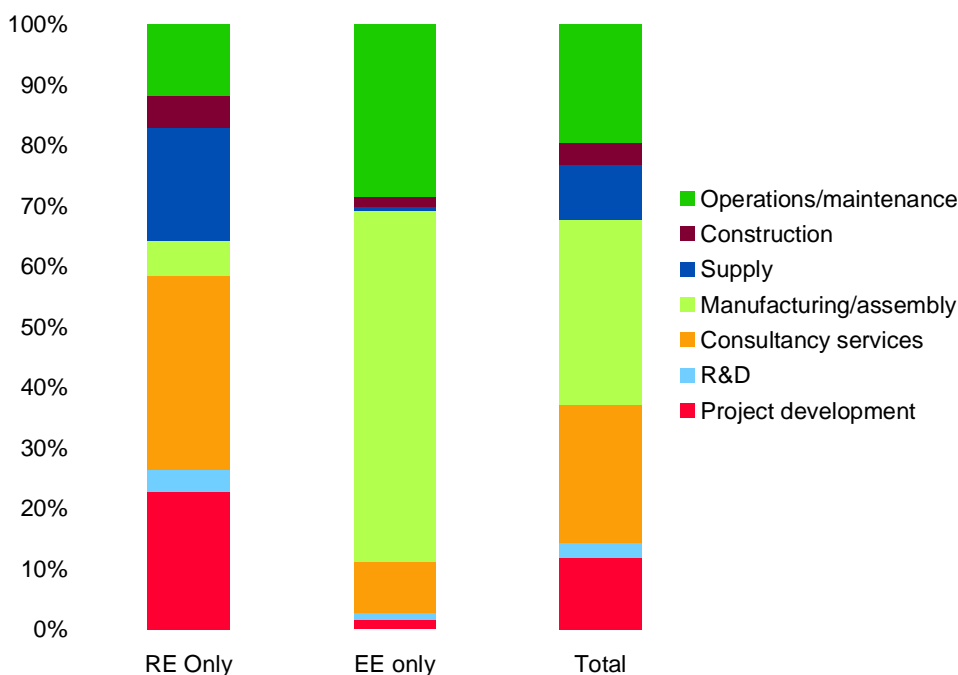
services (23%) and Operation/maintenance (20%). Only 2% of all identified employees work in Research & Development.

In terms of sector trends, businesses in the RE sector tend to be more focused on consultancy (32%) and project development (23%), whilst businesses in the EE sector tend to be more involved in manufacturing/assembly (58%). Interestingly, in our 2005 study of the RE sector, a higher proportion of firms indicated that they were involved in project development (23%) than consultancy (22%). This demonstrates that consultancy has since grown in importance relative to other functions. Conversely, R&D decreased from 11% in 2005 to 4%, manufacturing/assembly from 9% to 6%, and construction from 8% to 5%.

**Table 3.5: Sample Employment by Sector and Function**

Function	Renewable Energy	Energy Efficiency	Total
Project development	23%	2%	12%
R&D	4%	1%	2%
Consultancy services	32%	8%	23%
Manufacturing/assembly	6%	58%	30%
Supply	19%	1%	9%
Construction	5%	2%	4%
Operations/maintenance	12%	29%	20%

**Figure 3.12: Sample Employment by Sector and Function**



It has also been possible to calculate summary statistics for employment, turnover and GVA by function in the sample population. The figures show that Consultancy services have the highest turnover and GVA per employee at £171,000 and £123,000 respectively. Research

and Development functions have low levels of value added, which may reflect the fact that once products are developed they are commercialised in other business areas.

**Table 3.6: Summary Statistics by Function**

Function	Total Employment	Turnover per Employee	GVA per Employee
Project development	383	£67,000	£47,000
R&D	80	£47,000	£26,000
Consultancy services	745	£171,000	£123,000
Manufacturing/assembly	992	£107,000	£59,000
Supply	297	£116,000	£50,000
Construction	119	£68,000*	£29,000*
Operations/maintenance	637	£115,000	£94,000

\* - indicates that figure is based on small sample size

### 3.5 Firm-level Growth

In addition to supplying current employment data, businesses also provided information on their level of employment three years ago. This has allowed an assessment of the extent to which sector growth is driven by the growth of individual businesses, or new business starts.

#### Changes of Employment in Firms

Table 3.7 contains data on employment growth in businesses that have been in existence for more than three years. Overall employment growth in existing businesses over the period was 15%. In absolute terms, the largest growth in employment has come from businesses active in the Renewable Energy sector, with an increase of 259 jobs, or a 31% increase over employment levels three years ago. It should be noted that the employment growth based upon firm level changes might not match with other estimates of employment change, since it only includes businesses that gave full responses in terms of current and past employment. Sampled businesses in the EE sector experienced much lower levels of growth over the period (5%), which are compatible with the fact that this sector is more established (as shown in Section 3.1 of this report).

**Table 3.7. Firm Level Changes in Employment**

	Increase in Employment from 3 years ago	% Change
RE Only	259	31%
EE Only	86	5%
Total	467	15%

#### Start-up Businesses

Some businesses sampled did not exist three years ago and the associated employment is not included in Table 3.7 above. Employment in these businesses has come about through

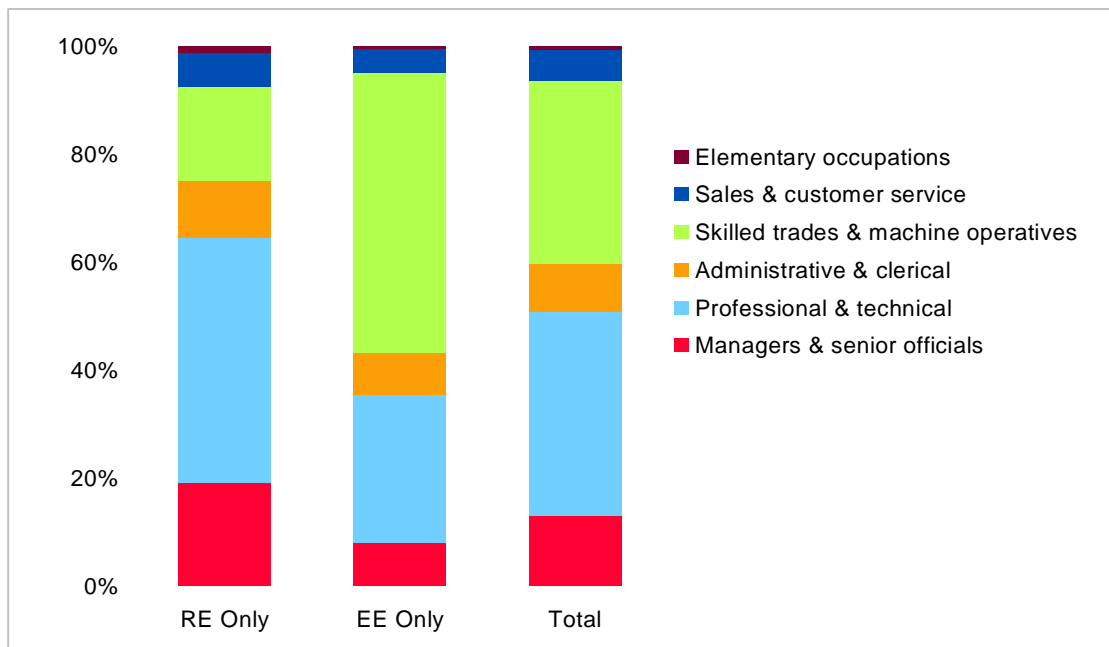
new business starts. Overall 30 of the 152 businesses sampled were new start-ups, equating to 20% of the sample. The average employment was 6 FTEs per start-up firm. The rate of business start-ups was higher in the RE sector (22% of firms) than in the EE sector (13%).

If this rate of new business start-ups is applied to the population of RE and EE businesses, it is estimated that there are around 62 businesses that have started in the last three years, and that these firms are likely to employ in the order of 400 FTEs across both sectors, with the majority of these jobs in the RE sector.

### 3.6 Occupational Structure

It is interesting to analyse the pattern of employment across different occupational groups.<sup>11</sup> Through the survey, businesses provided a breakdown of employment by occupational area. As shown by Figure 3.13, the biggest occupational area in terms of number of employees is 'Professional and Technical' which accounts for 38% of all staff. There are a few important variations by sector, for example EE businesses have a far higher percentage of workers in 'Skilled Trades and Machine Operations' (52%) than other sectors. This is likely to be related to the fact that a high proportion of employment in the EE sector is in manufacturing/assembly. Businesses who operate in both sectors are likely to employ more staff in higher-level occupations such as 'Managers and Senior Officials' and 'Professional and Technical Occupations'.

**Figure 3.13: Occupational Structure of Businesses by Sector**



<sup>11</sup> The occupational groups used are based on standard occupational classifications. For more information see [www.statistics.gov.uk](http://www.statistics.gov.uk).

## Section 3 Summary

Three-hundred-and-sixteen businesses have been identified as active in the Renewable Energy and/or Energy Efficiency sectors in the South West, of which 152 have been surveyed. The results of this survey can be summarised as follows.

### ***Sample Business Demographics***

- 64% are active in RE only, 20% in EE only, and a further 16% are active in both sectors
- Over 80% of both RE and EE businesses solely based, or headquartered in the region
- Micro-businesses make up 61% of those working in RE only, compared to 32% in EE only
- Businesses active in RE tend to be newer than those in the EE sector, with the rate of business start-ups higher in the RE sector (22% of firms) than in the EE sector (13%)

This suggests that the RE sector is a newer growth sector than the EE sector.

### ***Direct Economic Contribution of Sample Businesses***

- A total of 1,567 FTEs employed in RE, an average of 13 FTEs working in RE per firm
- A total of 1,555 FTEs employed in EE, an average of 38 FTEs working in EE per firm
- An average GVA added in EE of over £2.5 million per firm, against £331,000 for RE
- An average productivity of £68,000 per FTE in EE compared with £51,000 in RE

Since our original 2005 study, the RE sector has become much more productive.

### ***Wider Impact on the South West Economy of Sampled Businesses***

- Businesses in EE make 42% of their purchases from within the South West compared to 32% for RE
- 29% of total sales are within the South West; RE businesses sell slightly more in the region than EE firms
- Only 27% of businesses in the RE sector export, compared to 42% of businesses in the EE sector
- Businesses in RE export only 8% of their output, compared to 31% for EE businesses

Comparison with our 2005 study shows that RE sector sales, to the rest of the UK, have grown faster than sales within the South West.

### ***Sub-Sector Analysis of Sample Businesses***

- Wind (32% of employees in RE) and 'Other Energy Efficiency' (79% of employment in EE) are the key sub-sectors
- 'Other Renewable Energy' (£135,000) and 'Buildings' (£182,000) are the sub-sectors with the highest productivity levels
- Businesses in the RE sector tend to be focused on consultancy (32%) and project development (23%)
- Businesses in the EE sector tend to be more involved in manufacturing/assembly (58%),
- Just 4% of RE firms (down from 11% in 2005) and 1% of EE firms are focused on R&D.



***Sample Occupational Structure***

- 'Professional and Technical' occupations accounts for 38% of staff across both sectors.
- EE businesses have a far higher percentage of workers in 'Skilled Trades and Machine Operations' (52%) than in RE.

## 4. Estimates for Economic Contribution of RE and EE Sectors

### Introduction

The purpose of this section is to provide an estimate of the total contribution of the Renewable Energy and Energy Efficiency sectors to the South West economy. In order to achieve this, the results of the survey have been scaled up to reflect the total population of businesses thought to be active in the RE and EE sectors. In order to provide a robust assessment of the sector, the model reflects differences in the size distribution of businesses in the survey sample and population of businesses. Great care has been taken to ensure that the estimates are robust and do not overstate the contribution of the sector.

As well as calculating the direct contribution of the RE and EE sectors to the South West economy, in terms of jobs and GVA creation, an assessment has been made of indirect effects on the economy, through supply chain purchases and spending on wages. This draws on data on supplier and employment leakage outlined in Section 3.4 of this report.

### 4.1 Survey Sample

A total of 152 businesses completed the survey out of an effective population of 316 businesses. The overall response rate was 48%, with the mixture of businesses active in RE and EE representative of the effective survey population.

In scaling up the responses from businesses to the overall population, it is important to account for any bias in the size of businesses responding versus the survey population. In order to adjust for this, prior to the survey Regen SW identified businesses thought to have more than 50 employees overall (medium/large businesses). This allows the model to take account for over-sampling in any particular grouping.

Table 4.1 provides an overview of survey responses by sector and business size. As shown, the main group that has been over-sampled in the survey are the medium/large businesses active in the Renewable Energy sector - 56% of businesses thought to be in this group have been included in the survey, compared to between 49% and 51% in all other groups.

**Table 4.1: Survey Responses by Sector and Size**

	Businesses active in RE (including those in Both sectors)			Businesses active in EE (including those in Both sectors)		
	Medium/ Large	Micro/ Small	Total	Medium/ Large	Micro/ Small	Total
<b>Effective Population</b>	41	197	238	37	75	112
Businesses sampled	23	98	121	18	38	56
Not contacted	18	99	117	19	37	56
Response Rate	56%	50%	51%	49%	51%	50%

Table 4.1 above outlines the overall response rate across different groups within the survey sample. Using data from the survey, it is possible to derive average figures for employment, turnover and GVA from each of these groups. Table 4.2 provides an overview of these key statistics. For example, medium/large businesses active in RE have an average of 41 employees working in the sector, with a GVA per employee of £100,000. Smaller businesses in RE have lower levels of productivity. Similarly, smaller businesses active in EE tend to have lower levels of productivity, however the difference between medium/large and smaller businesses in this sector is less marked than in RE.

**Table 4.2: Key Statistics by Sector and Business Size**

	Businesses active in RE (including those in Both sectors)			Businesses active in EE (including those in Both sectors)		
	Medium/ Large	Micro/ Small	Total	Medium/ Large	Micro/ Small	Total
Average employment in sector per firm	41	6	13	96	10	38
Average turnover in sector per employee	118,000	84,000	91,000	107,000	114,000	109,000
Average GVA in sector per employee	100,000	36,000	51,000	69,000	63,000	68,000

## 4.2 Gross Direct Impact of the RE and EE Sectors

The statistics outlined in Tables 4.1 and 4.2 have been used to scale up to the known population of businesses active in each sector. It has been assumed that remaining unsurveyed businesses have the same size distribution as those already contacted, but adjustments have been made to account for the over-sampling of medium/large businesses in the survey sample. This approach gives the best and most robust estimate on the basis of all the information available.

Table 4.3 provides summary statistics for the direct contribution of the RE and EE sectors. As shown, the RE sector is estimated to directly employ 2,900 FTEs in the region, with a GVA of £215m per annum. The EE sector is much larger, directly employing 4,300 FTEs with a GVA of £294m. The combined impact of the RE and EE sectors is to support in excess of 7,200 jobs with a GVA of over £500m.

To put this into perspective, our 2005 study on the RE sector identified 1,140 FTE jobs, contributing £34m of GVA to the economy of the South West. In other words, since 2005, employment in the RE sector has grown by 158%, or 37% per annum. This growth has occurred through a combination of larger firm size and new business starts, as outlined in Section 3.5.

**Table 4.3: Direct Contribution of Renewable Energy and Energy Efficiency in the South West**

	Renewable Energy	Energy Efficiency	Total
Employment (FTEs)	2,945	4,321	7,266
Turnover (£m)	£305m	£469m	£774m
GVA (£m)	£215m	£294m	£509m

### 4.3 Net Impacts on the South West Economy

The above figures relate to the gross direct impact of the RE and EE sectors on the South West economy. However, there are a number of factors that should be taken into account in calculating the net additional impact of the sector, namely:

- Leakage – this is the extent to which outputs created leak outside the target area (in this case the South West of England region). We have been able to calculate the level of employment leakage, as set out in Section 3.3.
- Multiplier Effect – this is the additional impact on the economy associated with supplier and wage spending within the target area.

As set out in Section 3.3, the leakage of employment outside the South West in the sample businesses is 6.8% for the Renewable Energy sector, and 10.3% for Energy Efficiency. In terms of multiplier effects, we have assumed a multiplier ratio of 1.44, based on English Partnerships 'Additionality Guide'.<sup>12</sup>

Table 4.4 provides a summary of the impact of the RE and EE sectors on the South West economy after accounting for leakage and multiplier effects. The Renewable Energy sector is estimated to support around 4,000 jobs in the South West either directly or indirectly, with a GVA contribution of £288m. The Energy Efficiency sector supports 5,600 jobs with a GVA of £379m

**Table 4.4: Total Impact of RE and EE Sectors on the South West Economy**

	Renewable Energy	Energy Efficiency	Total
Employment (FTEs)	3,953	5,581	9,534
Turnover (£m)	£409m	£606m	£1,015m
GVA (£m)	£288m	£379m	£668m

<sup>12</sup> The Additionality Guide provides a typical multiplier ratio of 1.44 for B1 Office and B2/B8 industrial/warehousing based employment, based on Rhodes et al (1994) and Enterprise Zone Research (HMSO, 1995)

## Section 4 Summary

This chapter provides an estimate for the contribution of the RE and EE sectors to the South West economy. Results from the survey have been scaled up to provide a robust estimate for the size of the entire sector, taking account of differences in the size distribution of businesses in the survey sample and population of businesses.

As well as calculating the direct contribution of the RE and EE sectors to the South West economy, in terms of jobs and GVA creation, an assessment has been made of the net effect, including indirect effects on the economy, through supply chain purchases and spending on wages.

Estimate of Economic Contribution (2008)		Renewable Energy	Energy Efficiency	Total
Gross direct effect	Employment (FTEs)	2,900	4,300	7,300
	GVA	£215m	£294m	£509m
Net effect after leakage and multiplier effects	Employment (FTEs)	4,000	5,600	9,500
	GVA	£288m	£379m	£668m

Compared to the figures in the 2005 study, employment in the RE sector has grown by 158%, or 37% per annum.

The combined impact of the RE and EE sectors is to support in excess of 7,200 jobs directly with a GVA of over £500m.

## 5. Attitudes to Business Growth and Business Support

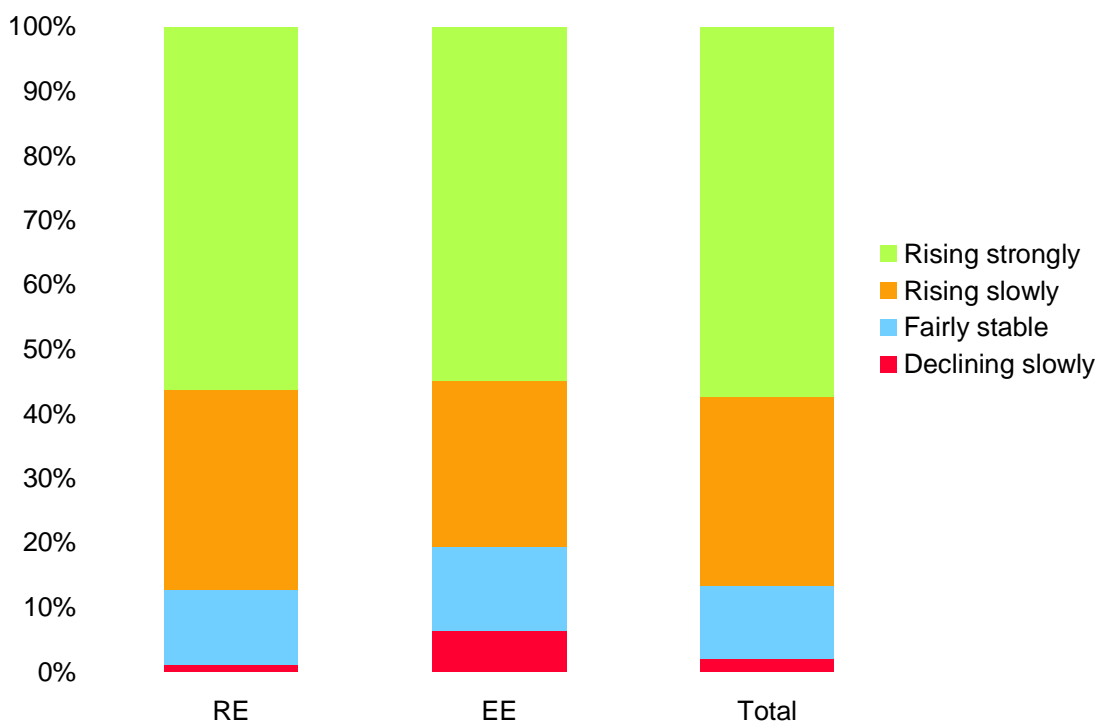
The purpose of this chapter is to pick up on the themes of business growth and business support. Surveyed businesses were asked a number of questions relating to their growth aspiration and perceptions of growth in the sector. In addition, businesses were questioned on the drivers of future business growth, and business requirements for external support to overcome barriers. Lastly, firms were asked for their opinion of any support they had received from Regen SW.

### 5.1 Attitudes to Growth

Businesses were asked to give an assessment of the likely future growth of the market for their main products and services, the growth of their sector and the growth of their business. These questions were posed to gather an understanding of businesses' attitudes to growth within their firm and in the wider sector.

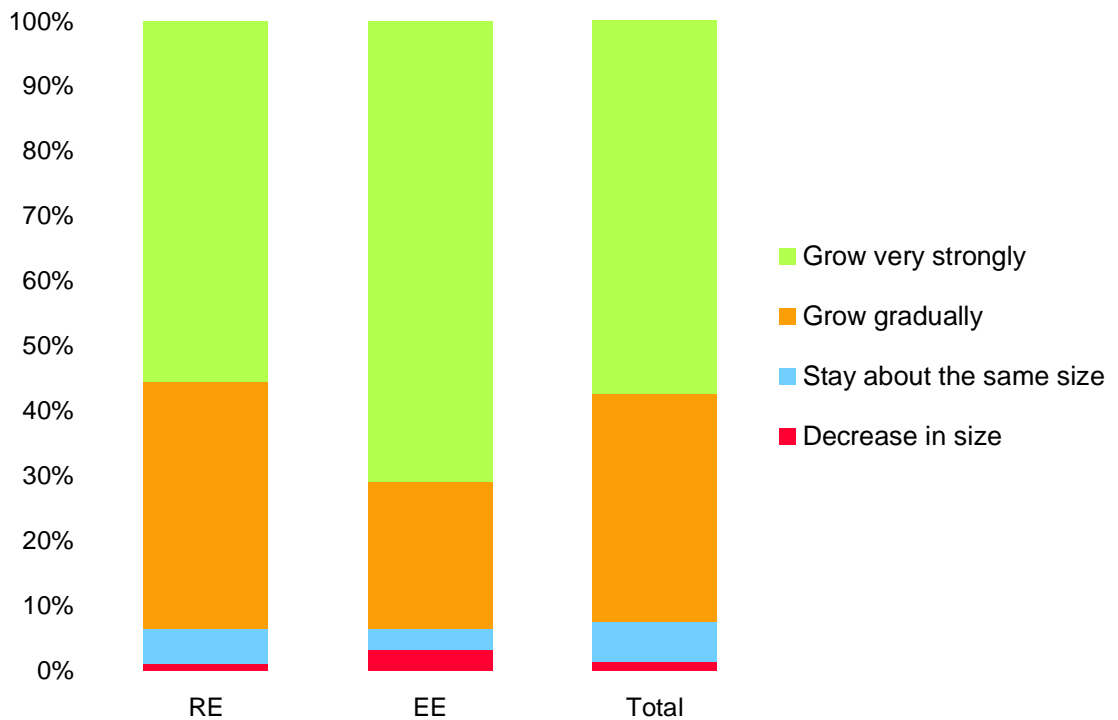
Overall the majority of businesses stated that the market size for their main product or service was rising strongly (57%) or rising slowly (29%), with little difference between RE and EE firms.

**Figure 5.1: Perceptions of Overall Market Growth**



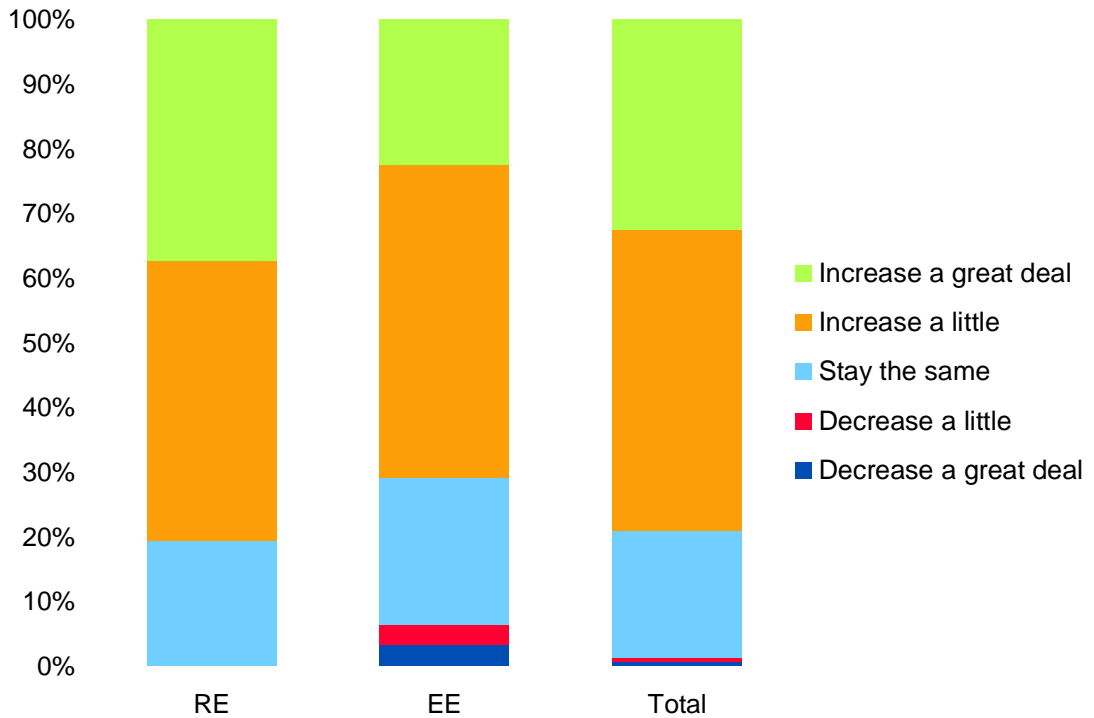
Businesses were also asked to consider how they see their business developing over the next few years. 56% of businesses reported that they expected their firm to grow very strongly and 34% expected their business to grow gradually. Businesses in the EE sector were more likely to report very strong growth aspirations.

**Figure 5.2: Perceptions of Business Growth**



The business population is also very positive about the prospects for employment growth within their business. For example, 31% of businesses expect that the number of employees will increase by a great deal and another 44% of businesses think that they will increase by a little. Only 1% of businesses expect that their number of employees will decrease over the next three years.

**Figure 5.3: Anticipated Employment Growth**

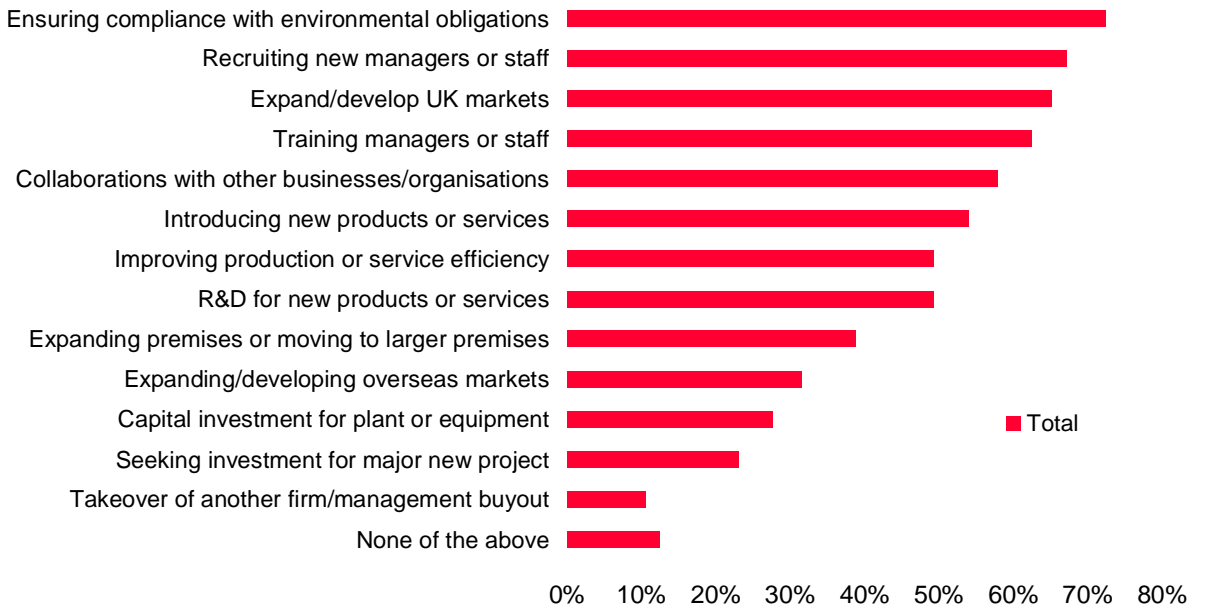


## 5.2 Drivers of Business Growth

Another key topic for the survey was the potential drivers of business growth in the future. Businesses were asked whether they anticipate engaging in activities such as training, product development, and expanding markets over the next three years. The results can be summarised as follows:

- Over 60% of businesses said that over the next three years they will: recruit and train new managers or staff, expand existing UK markets or develop new UK markets, and do work to ensure compliance with environmental legislation
- Around half of businesses said that over the next three years they will: collaborate with other businesses/organisations, undertake Research & Development and introduce new products/services, and improve production/service efficiency
- Relatively few firms said that over the next three years they will: takeover another firm, invest in capital plant or equipment, or need to obtain external investment for a new project

**Figure 5.4: Drivers of Business Growth**



We have analysed these drivers by sector, age of firm and size of firm, with the results shown in Figures 5.5, 5.6 and 5.7. The key differences in drivers of business growth by sector are as follows:

- Businesses in EE are more likely to be introducing new products and services, improving service efficiency and carrying out R&D activities
- Businesses in RE are more likely to be working on expanding UK markets, training staff, and seeking investment for a major new project

**Figure 5.5: Drivers of Business Growth by Sector**

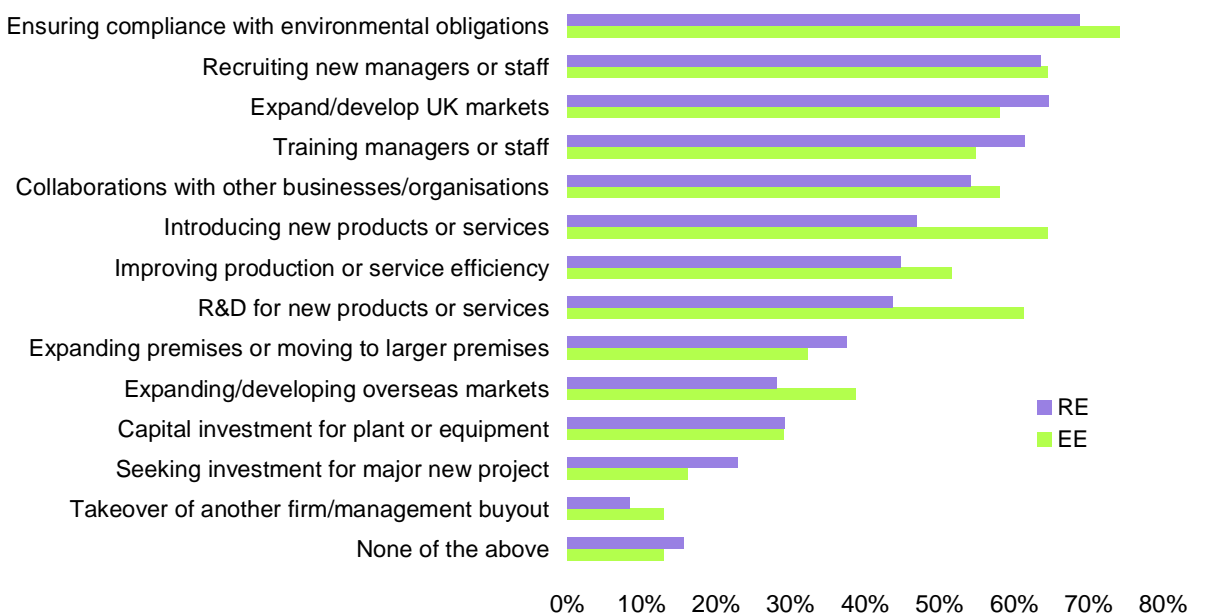


Figure 5.6 shows the differences in business drivers by the age of firms, with start-ups since 2005 separated out. The differences between the two groups of businesses are marginal on most activities apart from R&D, where a far higher proportion of established firms stated that they would be carrying out R&D in the next three years, presumably because they have far greater resources to do so.

**Figure 5.6: Drivers of Business Growth by Age of Firm**

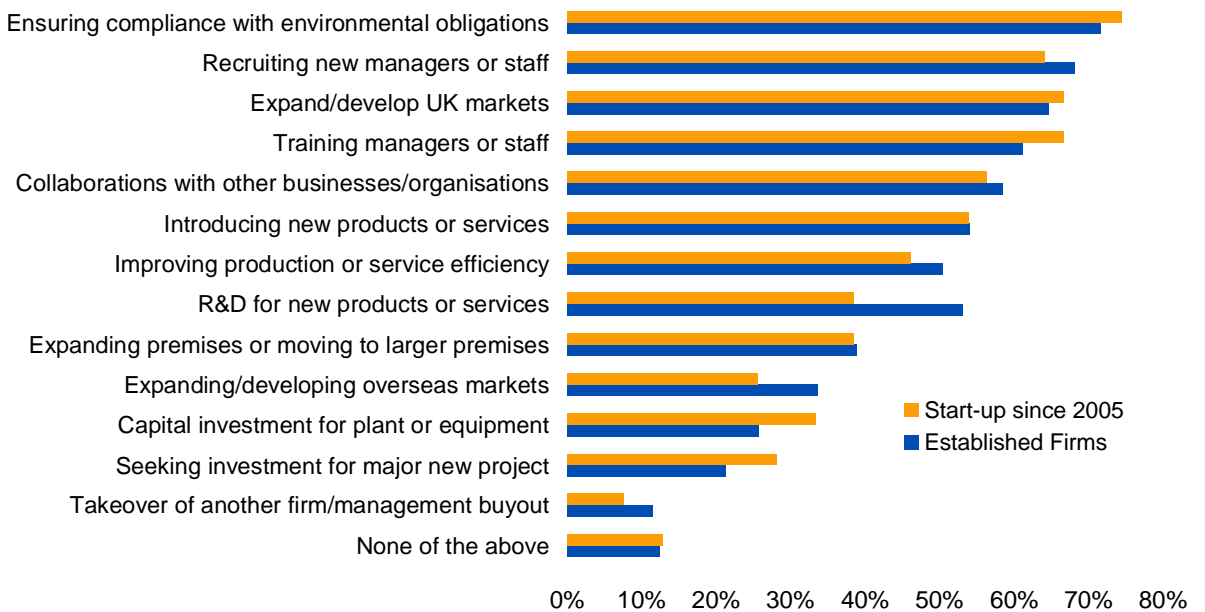
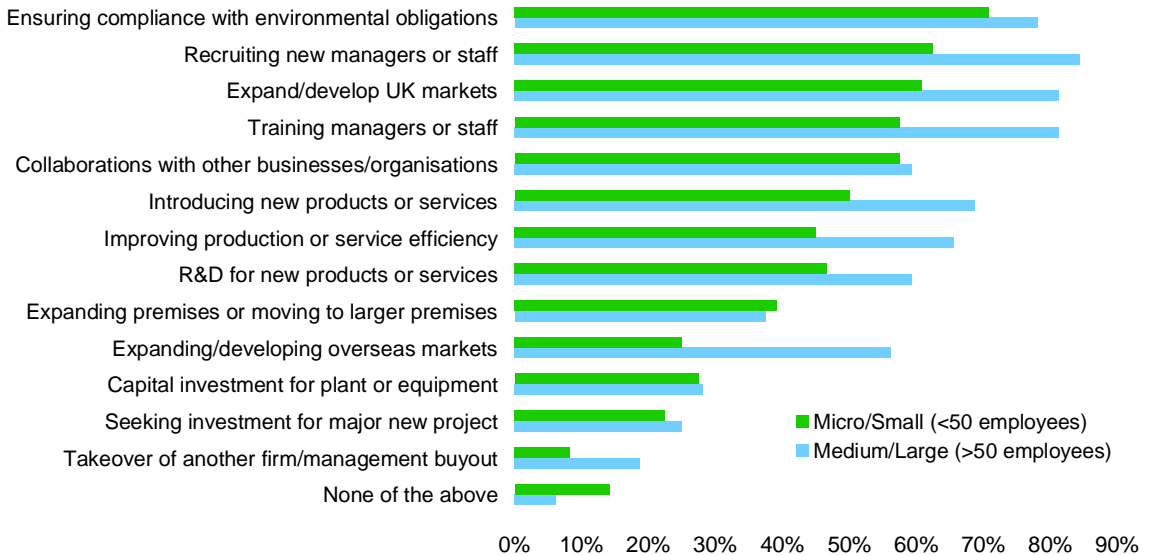


Figure 5.7 shows the differences in business drivers according to whether the overall firm has more or less than 50 staff. Generally the larger businesses are far more likely to be engaging in the listed activities. The difference between medium/large and smaller businesses is particularly sizeable for the following activities:

- Expanding overseas markets (56% of medium/large businesses compared to 25% of micro/small businesses)
- Training managers or staff (81% compared to 58%)
- Recruiting new managers or staff (84% compared to 63%)
- Improving product or service efficiency (66% compared to 45%)
- Expand/develop UK markets (81% compared to 61%)

It is also interesting to note that 14% of micro/small businesses stated that they will engage in none of the listed activities compared to only 6% of medium/large businesses. This may reflect the presence of some smaller 'lifestyle' businesses that have lower aspirations for growth and development.

**Figure 5.7: Drivers of Business Growth by Size of Firm**



### 5.3 Use of External Support

After identifying the likely drivers of business growth (as in Figure 5.4 above) businesses stated whether they will need external support to achieve the desired outcome. This is an excellent indicator of the need for business support and advice, and will allow public and private sector providers working with businesses in the RE and EE sectors to tailor support to meet demand. The key findings can be summarised as follows, and are shown in Figure 5.8 below.

Businesses are likely to resolve the following issues in-house:

- Service efficiency
- Expanding UK/overseas markets
- Introducing new products/services
- Compliance with environmental legislation
- Recruitment

Businesses seeking external support are most likely to seek support from an accountant/bank manager, specialist consultant, or other business support provider (including public sector). Businesses are unlikely to seek support from a friend/relative, a customer, or supplier. Businesses are most likely to seek external support on the following issues.

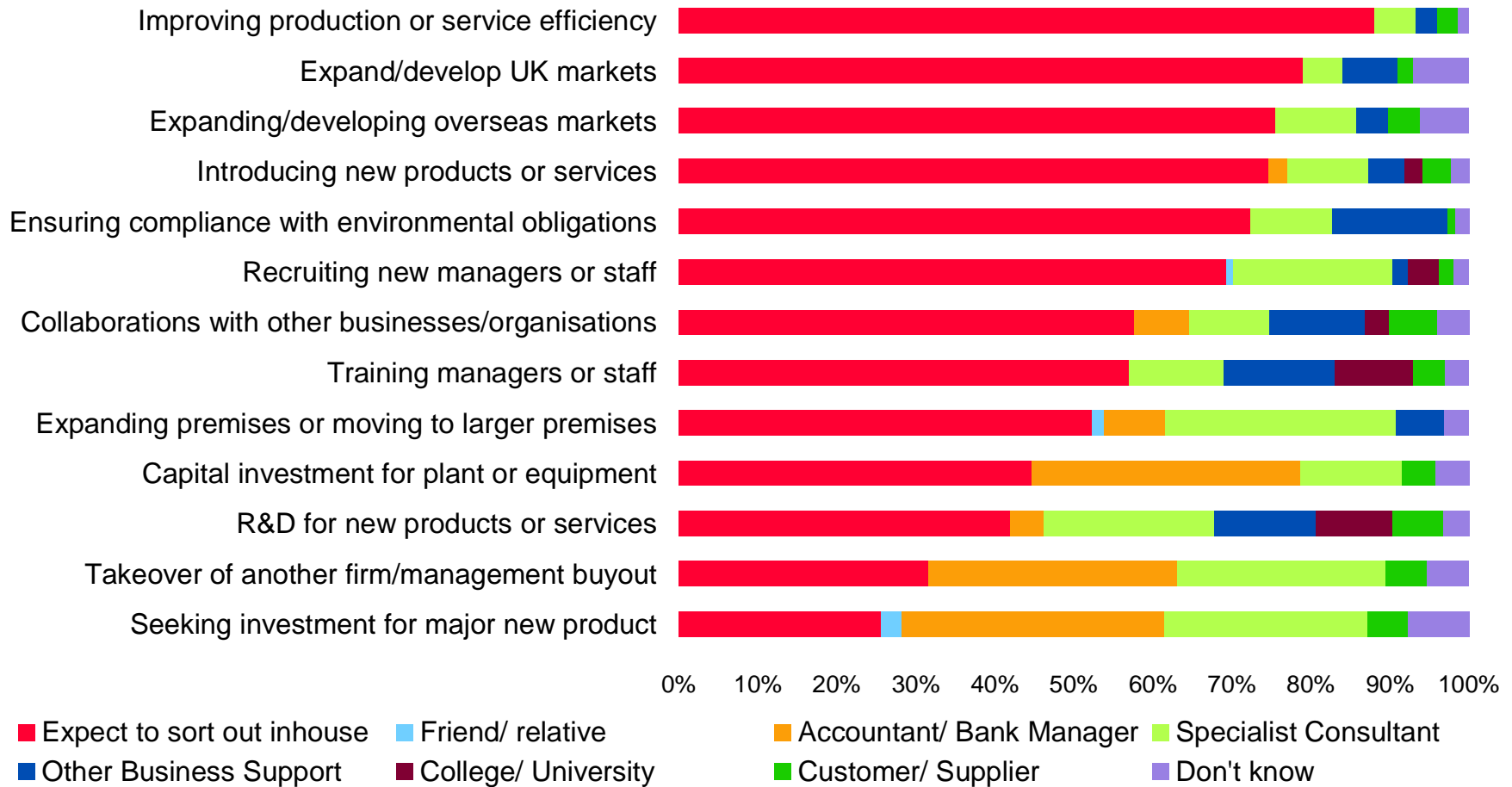
- Investment for new products/services or capital
- A takeover of another firm
- R&D for new products
- Expanding premises

The following Table provides an overview of the issues that are likely to be raised with different types of advisors:

**Table 5.1: Types of External Support Sought**

<b>Type of Advisor</b>	<b>Most Common Issues</b>
Accountant/bank manager	Investment for capital or new products, takeovers / management buyouts
Specialist consultant	Recruitment, expanding/moving premises, takeovers, R&D, investment for products/services
Other business support providers (inc public sector)	Compliance with environmental legislation, collaborations with other businesses/organisations, training staff, and R&D
College/university	Training and R&D

**Figure 5.8: Business Drivers and Likelihood of Using External Support**



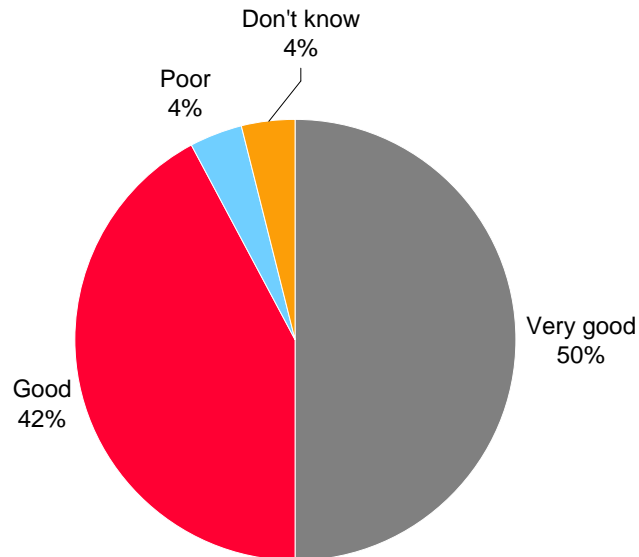
## 5.4 Opinion of Regen SW Support

As part of the survey, businesses were asked whether they had received support from Regen SW, and to give their opinion of the quality of support received. This included businesses making recommendations on how support could be better delivered. This will allow Regen SW to reflect on the support they provide and make improvements where necessary.

Of the 152 businesses sampled, 26 identified that they had received support from Regen SW, the majority of which are in the RE sector. 20% of the sampled businesses in the RE sector had received support from Regen SW. Only one business exclusively in the EE sector had received support from Regen SW, reflecting the fact that support is currently targeted only at the RE sector.

All businesses who identified that they had received support from Regen SW were asked to rate the quality of the support received, and the results were very positive. 92% of businesses rated the service as either good or very good. Only 4% of businesses reported that the support users received from Regen SW was poor (i.e. one of the 26 businesses receiving support).

**Figure 5.9: How do Businesses Rate the Quality of Support Offered by Regen SW?**



## Section 5 Summary

This chapter provides data relating to attitudes of the sample population to growth aspiration and perceptions of growth in the sector, as well drivers of future business growth and the use of external support, including their opinion of support received from Regen SW.

### ***Perceptions and Aspirations of Growth***

Firms in the RE and EE sectors are generally very positive about future growth.

- 86% of businesses in both sectors stated that the market size for their main product or service was rising strongly or slowly, with little difference between RE and EE firms.
- 90% of businesses in both sectors expected their firm to grow either very strongly or gradually over the next few years. EE businesses were more likely to report very strong growth aspirations.
- 75% of businesses expected to increase employment over the next few years, with RE businesses expecting slightly greater levels of increase than those in the EE sector.
- Only 1% of businesses, all in the EE sector, expect employment levels to decrease over the next three years.

### ***Drivers of Business Growth***

The majority of businesses identified a range of activities that they will engage in over the next three years in order to grow their business.

- Over 60% of businesses said that they will: recruit and train new managers or staff, expand existing UK markets or develop new UK markets
- Firms in EE tend to be more focused on developing and introducing new products and services
- Firms in RE are more likely to be working to expand UK markets and seeking investment for a major new product
- Established firms in both sectors are more likely to carry out R&D in the next three years, than start-ups
- Larger businesses in both sectors are more likely to expand overseas markets, train and recruit staff, or expand/develop UK markets than smaller businesses
- 14% of micro/small businesses will engage in none of these activities.

### ***Use of External Support***

Businesses are most likely to seek support for their growth aspirations from an accountant/bank manager, specialist consultant, or other business support provider (including the public sector). They are most likely to seek external support on investment for new products/services or capital, a takeover of another firm, R&D for new products or expanding premises.

Regen SW was identified as having provided support to 20% of the sampled businesses in the RE sector, with 92% of all firms supported rating the services received as good or very good.