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# The Economic Contribution of the Renewable Energy and Energy Efficiency Sectors in the South West of England – An Update

Regen SW

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## Executive Summary

Regen SW commissioned DTZ to undertake a study to identify and quantify the impact of the recession on the economic contribution of the Renewable Energy (RE) and Energy Efficiency (EE) sectors to the South West economy, updating a previous study undertaken in 2008. DTZ re-contacted 100 of the 152 companies originally surveyed in 2008, identifying the following key trends for this group of companies:

- Total employment in these companies (all sectors) has risen by two percent since 2008, with average employment per company increasing from 73 to 75 employees.
- Total employment in the RE and EE sectors has increased from 1,510 (2008) to 2,110 (2009) – an increase of 40%. Employment in EE has increased by 47% since 2008, whilst employment in RE has increased by 32%.
- Total turnover in RE and EE has increase from £107m to £200m – an increase of 86% over the past year.
- Turnover per head has increased from £71,000 in 2008 to £95,000 in 2009 – an increase of 34%.

		Number of companies surveyed	Total Employment	Total Turnover	Average employment per company	Average turnover per employee	Average turnover per company
2008	Total	100	1,510	£ 107.6 m	15	£ 71,000	£1,076,000
	RE	81	790	£ 50.0 m	10	£ 64,000	£618,000
	EE	35	730	£ 57.6 m	21	£ 79,000	£1,646,000
2009	Total	100	2,110	£ 200.2 m	21	£ 95,000	£2,003,000
	RE	86	1,040	£ 95.2 m	12	£ 92,000	£1,107,000
	EE	40	1,070	£ 105.1 m	27	£ 98,000	£2,626,000

- The number of companies active in each sub-sector of RE and EE has increased, indicating that companies have diversified within the RE and EE sectors.
- The Heating/Cooling, Biomass, Micro-renewables, and EE consultancy sub-sectors have increased particularly strongly in terms of the number of active businesses.
- The growth in the EE in Buildings and Heating & Cooling sub-sectors has been particularly marked; increasing in terms of the number of active companies, average employment per company, and average turnover per head.
- Compared to last year, there are 60 more managerial posts, 270 more professional/technical posts, 100 more admin/clerical posts, and 70 more skilled trades posts in these companies. This rapid growth may have implications in terms of the future availability of skilled staff in the region.
- Companies are generally positive about growth in the next year or two, with 68% indicating that they think their market will grow, 70% stating that they think their business will grow, and 92% stating that they are likely to increase employment.
- 88% of companies indicated that they are satisfied with the services that Regen SW provides and are likely to use the events and email and website communications provided by Regen SW in the future.

Of the remaining 52 companies not re-surveyed: 39 are still operating in the RE/EE sectors in the region, two are no longer in the sector, four have moved their business out of the South West region, and seven unfortunately have gone bankrupt.



# 1. Introduction

## Study Objectives

In May 2009, Regen SW commissioned DTZ to produce an update of a 2008 study on the economic contribution of the Renewable Energy (RE) and Energy Efficiency (EE) sectors to the South West economy. The key objectives of the study are to:

- Identify the economic contribution of the RE and EE sectors to the South West economy in terms of jobs and GVA, compared to the 2008 study, in particular identifying the impact of the recession over this period
- Identify the attitudes to businesses to future growth and market potential
- Understand the business support requirements of organisations working in the RE and EE sectors

## Methodology

This update study has been carried out on a compatible basis to the 2008 study on the RE and EE sectors to ensure that the results are comparable. The questionnaire for the survey element of this study used identical questions to the 2008 study to ensure comparability.

In the 2008 study DTZ undertook a survey of 152 firms in the RE and EE sectors. For the purposes of this 2009 update, DTZ contacted all 152 firms and conducted a 15-minute telephone interview with 100 of them. The purpose of the telephone survey was to assess:

- How the areas of activity and technologies in which businesses in the South West are involved have changed in the past year
- Whether the level of employment in the RE and EE sectors in the South West has changed during the past year
- Changes in the economic contribution of the RE and EE sectors to the South West economy
- Changes in attitudes about business growth and market potential
- The business support requirements of firms in both sectors in the South West

## Survey Response Rate

DTZ contacted all of the 152 companies that were surveyed as part of the 2008 study, and completed 100 interviews. Although the remaining 52 companies were not interviewed fully, it has been possible to establish that:

- 39 companies are still operating in the RE and EE sectors in the South West region
- 4 companies have moved out of the South West but are still operating elsewhere
- 2 companies have moved out of the RE/EE sectors but are still in the South West region
- 7 companies have gone out of business completely.

The survey findings shown in the remainder of the report relate to the results from the 100 achieved interviews.

## 2. Study Findings

### *Total Employment*

In 2008, the 100 companies surveyed employed 7,300 people across all business areas (i.e. not just RE and EE). According to our survey this year, these 100 companies now employ 7,460 people - an increase of two percent. Consequently, average employment per company has increased from 73 employees per company to 75 employees per company.

**Figure 2.1: Total Employment (all sectors)**

		Number of companies surveyed	Total Employment (all sectors)	Average employment per company (all sectors)
2008	Total	100	7,300	73
2009	Total	100	7,460	75

### *Economic Activity within RE and EE sectors*

In 2008, the 100 companies employed just over 1,500 people in the RE and EE sectors combined (21% of total employment in these companies). 81 of the 100 companies were active in the RE sector, and 35 companies were active in the EE sector (some companies were active in both). Employment within the RE sector totalled 790 while the EE sector employed 730 people.

The 2009 survey shows that total employment in RE and EE in these companies has increased to 2,110 – an increase of 40 percent over the year, and now representing 28 percent of total employment in these companies. 86 companies are now active in the RE sector, employing almost 1,040 people (an increase of 32 percent). 40 companies are now active in the EE sector, employing 1,070 people (an increase of 47 percent).

It is interesting to note that the number of companies involved in both RE and EE has increased from 16 to 26, as firms already within these sectors are diversifying. Overall the average employment per company in these 100 companies has risen from 15 to 21 people. Firms in the EE sector tend to be larger – the average number of people involved in this sector per company has increased from 21 to 27.

**Figure 2.2: Summary of activity within RE and EE sectors**

		Number of companies surveyed	Total Employment	Total Turnover	Average employment per company	Average turnover per employee	Average turnover per company
2008	Total	100	1,510	£ 107.6 m	15	£ 71,000	£1,076,000
	RE	81	790	£ 50.0 m	10	£ 64,000	£618,000
	EE	35	730	£ 57.6 m	21	£ 79,000	£1,646,000
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	EE	40	1,070	£ 105.1 m	27	£ 98,000	£2,626,000

Figure 2.2 also identifies trends in terms of turnover by sector. The total turnover in the RE and EE sectors combined for these companies has increased from £108 million in 2008 to £200 million in 2009 – an increase of 86 percent over the year. This increase in turnover is

driven both by increases in employment and increases in turnover per head (which has gone from £71,000 in 2008 to £95,000 in 2009 across RE and EE combined). Turnover per head and turnover per company are generally higher in the EE sector than the RE sector.

#### *Economic Activity by Sub-sector*

As can be seen from Figure 2.3, the number of companies active in each sub-sector has increased for almost all of the sub-sectors (from 2008 to 2009). The Heating/Cooling, Biomass, Micro-renewables, and EE consultancy sub-sectors have increased particularly strongly in terms of the number of active businesses. Average employment per company has increased massively for most of the EE sub-sectors.

Strong sub-sectors in terms of turnover per head include: Micro-renewables; Other RE; EE in Buildings; Motors & Pumps etc; Power; and Heating/Cooling. The improvement in the EE in Buildings sub-sector has been particularly marked; increasing in terms of the number of active companies, average employment per company, and average turnover per head. The same pattern is true of the Heating & Cooling sub-sector.

**Figure 2.3: Activity by Sub-sector**

Sub-Sector		2008			2009		
		Number of Companies	Average Employment per company	Average Turnover per employee	Number of Companies	Average Employment per company	Average Turnover per employee
Renewable Energy	Wind	30	6	£43,000	35	6	£75,000
	Biomass	21	6	£74,000	34	6	£73,000
	Marine Energy	13	4	£73,000	16	3	£69,000
	Hydro	15	2	£107,000	15	3	£52,000
	Micro-renewable	31	9	£85,000	39	6	£106,000
	Other RE <sup>1</sup>	29	6	£209,000	26	14	£142,000
	<b>Overall RE</b>	<b>81</b>	<b>10</b>	<b>£64,000</b>	<b>86</b>	<b>12</b>	<b>£92,000</b>
Energy Efficiency	EE in Buildings	12	4	£40,000	15	32	£101,000
	Motors/Pumps	11*	3*	£56,000*	9*	14*	£118,000*
	Power	8*	10*	£467,000*	11	13	£190,000
	Heating/Cooling	8*	4*	£77,000*	13	11	£207,000
	Process Management & Monitoring	8*	1*	£97,000*	11	6	£36,000
	Fluid Management	7*	3*	£93,000*	9*	11	£90,000*
	EE Consultancy	17	6	£200,000	24	5	£70,000
	Other EE <sup>2</sup>	15	13	£55,000	2*	1	£35,000*
	<b>Overall EE</b>	<b>35</b>	<b>21</b>	<b>£79,000</b>	<b>40</b>	<b>27</b>	<b>£98,000</b>

\* Indicates that the figure is based on a sample of fewer than 10 companies

#### *Employment by Occupation*

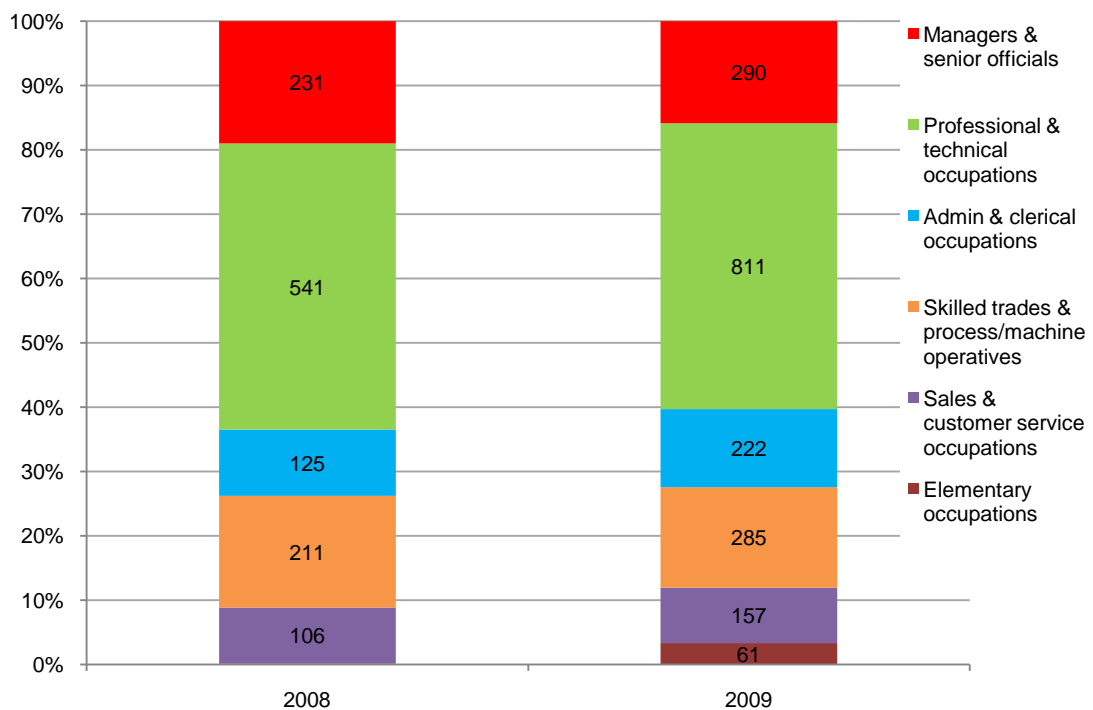
<sup>1</sup> Other RE sub-sector includes, but is not limited to, Solar, Energy Retail, Exhibition Products, Research, GS Thermal, Bio-fuels, Legal Services, Land-fill Gas, and Water Recycling

<sup>2</sup> Other EE sub-sector includes, but is not limited to, Sales and Finance

Figure 2.4 presents the breakdown of employment by occupational type in 2008 and 2009. Although the number of jobs in each category has grown, the mix of occupational types has changed relatively little since 2008. The proportion of managerial jobs has decreased from 19% to 16%, whilst the proportion of Admin & Clerical and Elementary Occupations, has increased respective to total employment.

Considering the data in absolute terms, it is interesting to note that compared to last year, there are 60 more managerial posts, 270 professional/technical posts, 100 more admin/clerical posts, and 70 more posts in skilled trades. Growth of this magnitude has implications in terms of the continuing availability of skilled staff in the region.

**Figure 2.4: Absolute number of employed by occupational group in 2008 and 2009**



#### *Company-level growth*

In addition to providing aggregate data for the RE and EE sectors, a key consideration in this study was growth at company level.

The majority of the companies active in the RE sector have increased their employment (57% of the companies) and turnover (59% of the companies), but turnover per employee has decreased for 49 percent of the companies. Likewise, most of the companies active in the EE sector have increased their employment (65% of the companies) and turnover (52% of the companies), yet the majority have had a decrease in turnover per employee (66% of the companies). This may be explained to an extent by the immaturity of the sector, and substantial growth levels: perhaps relatively recent increases in employment have not yet fed through in terms of equivalent increases in turnover per head.

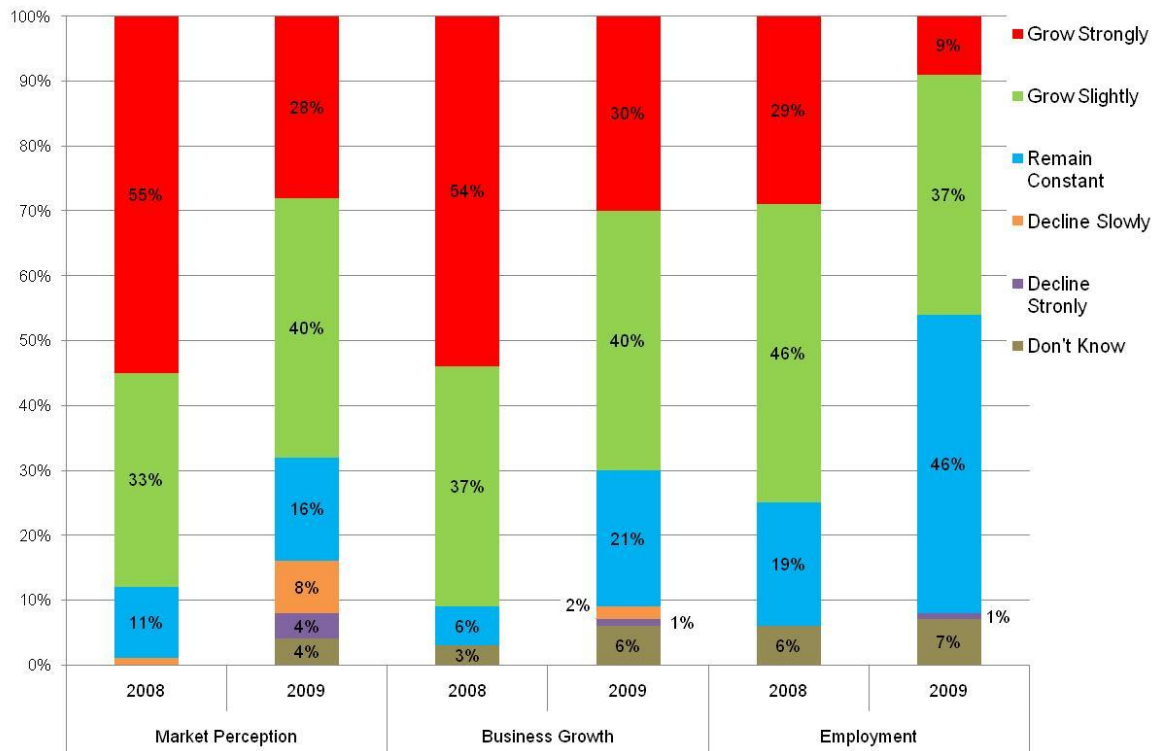
**Figure: 2.5: Changes in Employment, Turnover, and Turnover per employee since 2008**

		Increase	Same	Decrease
Renewable Energy	Employment	22%	57%	21%
	Turnover	14%	59%	27%
	Turnover per employee	5%	45%	49%
Energy Efficiency	Employment	8%	65%	28%
	Turnover	15%	52%	33%
	Turnover per employee	0%	34%	66%

*Future Trends*

Companies in the RE and EE sectors were asked to comment on future trends in the size of their market, in the size of their business, and in their employment. Overall, the signs are still relatively good, with 68 percent of respondents thinking that their market will grow in the next year. However this is less than the corresponding figure for 2008 - 88 percent. At the same time, 12 percent think that the market will decline as opposed to just one percent last year.

**Figure 2.6: Changes in perception of the Market, Business, and Employment**



Likewise, the respondents are more sceptical in terms of the future growth of their business than in 2008. 70 percent of the companies still think that business will grow in the near future. However in 2008, 91 percent stated that they thought their business would grow in the future (which has been proven by the actual data for 2009 presented above).

In terms of employment, 92 percent of the respondents stated that they are likely to increase their employment or keep it as it is (compared to 94 percent last year). Encouragingly, only one of the respondents thought that they will decrease their employment this year.

Companies were also asked to indicate how changes in employment would affect different occupational groups. The majority of the companies agree that the employment will remain more or less then same for most occupational groups, with only a few saying that they might decrease their employment. Over 40 percent of companies indicated that they are likely to increase the number of professional/technical staff they employ.

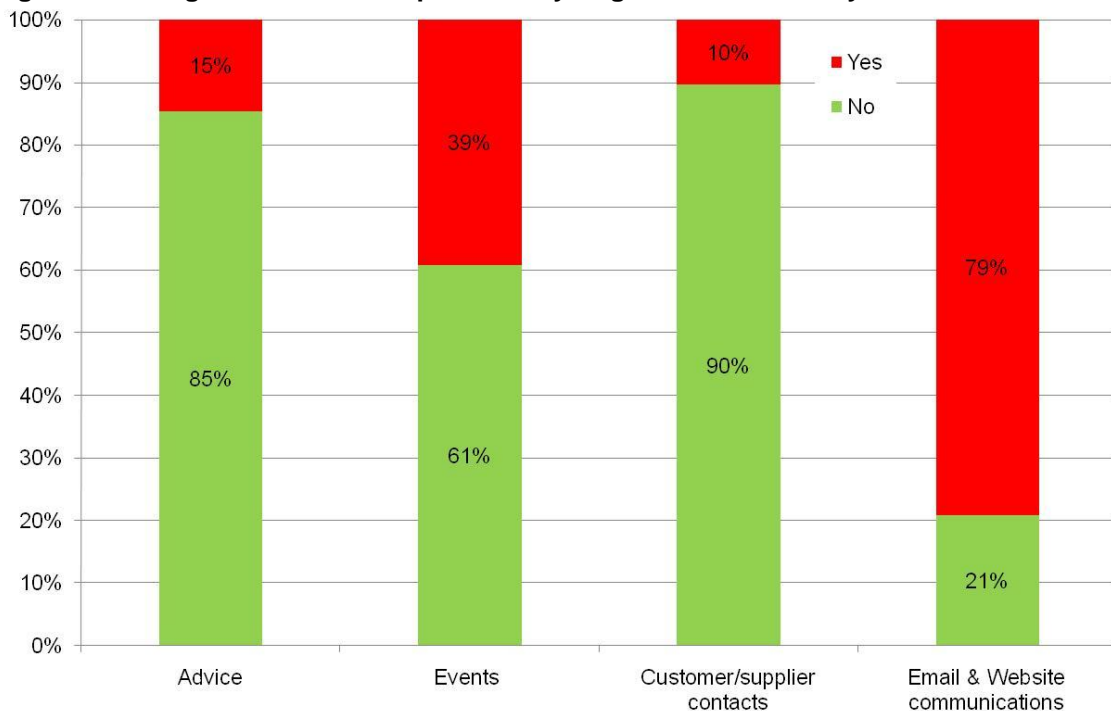
**Figure 2.7: Future trend for employment, by occupational group**

	Increase	Same	Decrease	Don't Know
Managers & Senior Officials	11%	81%	1%	8%
Professional & Technical	41%	42%	2%	15%
Admin & Clerical	13%	63%	1%	23%
Skilled Trades & Process/Machine	11%	56%	1%	32%
Sales & Customer Service	9%	53%	1%	38%
Elementary	2%	59%	1%	38%

*Use of Business Support*

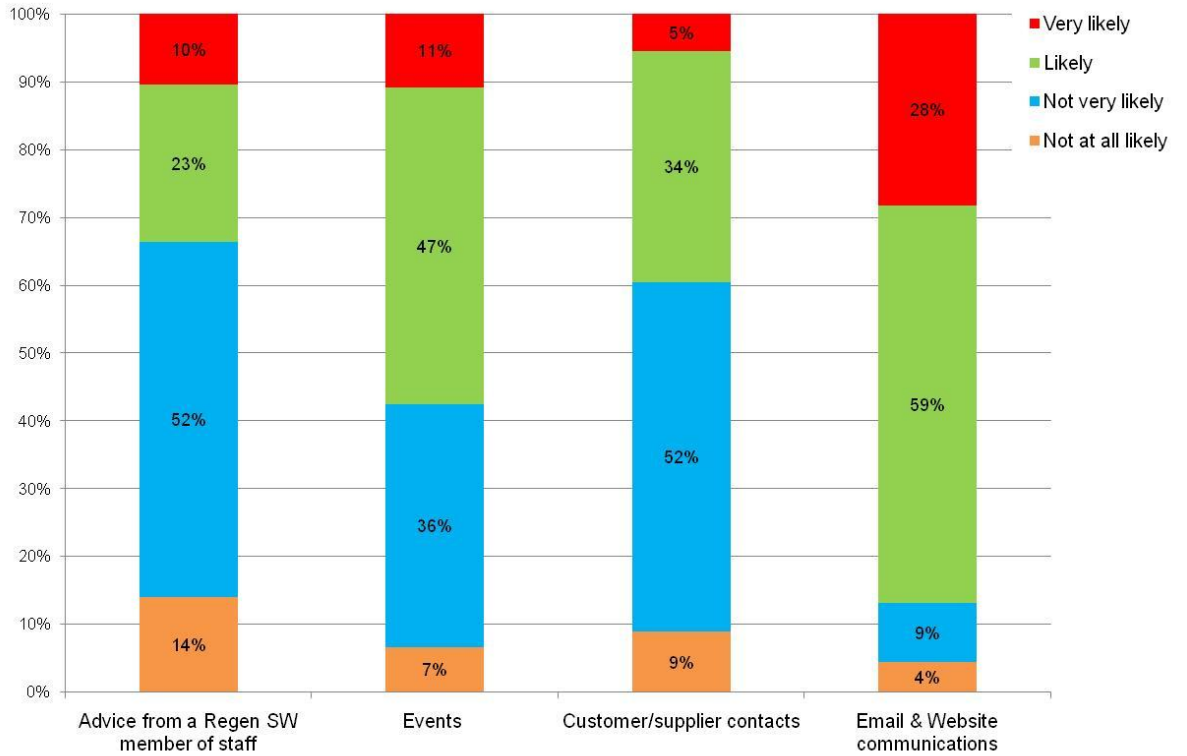
Respondents were asked whether they have used any of the range of business support services provided by RegenSW in the last year. Only a few companies have made use of advice and customer/supplier contracts available from Regen SW (15% and 10% respectively). On the other hand, 79 percent of the companies have benefitted from the Email & Website Communications provided by Regen SW. 30% of respondents had attended events sponsored/organised by Regen SW.

**Figure 2.8: Usage of the services provided by Regen SW in the last year**



Respondents were more positive in assessing whether they will use Regen SW’s services in the future. 58 percent of respondents stated that they are likely to attend events sponsored or organised by Regen SW; 33% are likely to seek advice from Regen SW staff; and 39% are likely to use the customer / supplier contacts held by Regen SW.

**Figure 2.9: Likelihood of using the services provided by Regen SW in the near future**



Of those companies that have used the services provided by Regen SW, 88 percent think that they provide a very good or good quality service, with only 12 percent stating that the level of service provided is poor.

**Figure 2.10: Rating of services provided by Regen SW**

