

# 1 Contents

<b>1</b>	<b>Contents .....</b>	<b>1</b>
<b>2</b>	<b>Introduction.....</b>	<b>3</b>
2.1	Our aim for the SSA .....	3
2.2	Stage 3 background and purpose .....	3
2.3	Already grounded in opinion and consultation... ..	3
2.4	Moving forward... ..	4
2.5	Structure of the report .....	5
<b>3</b>	<b>Executive Summary.....</b>	<b>6</b>
3.1	SummitSkills and the building services engineering sector.....	6
3.2	Sector Skills Agreement purpose .....	6
3.3	Sector Needs Analysis (SNA) summary.....	7
3.4	Assessment of Current Provision summary .....	8
3.5	Emerging skills priorities.....	8
3.6	Next steps .....	9
<b>4</b>	<b>Overarching vision for the sector .....</b>	<b>10</b>
<b>5</b>	<b>Summary of demand evidence base: Wales .....</b>	<b>11</b>
5.1	Overview of the issues affecting the sector .....	11
5.1.1	New Entrants.....	11
5.1.2	Business and Workforce Development.....	11
5.1.3	External Influences.....	12
5.2	Geographic context .....	13
5.3	Consultation on SNA .....	14
5.3.1	Other issues arising from consultation.....	14
5.4	Conclusions from stage one.....	15
<b>6</b>	<b>Summary of the supply picture: Wales Stage 2.....</b>	<b>16</b>
6.1	Overview of the issues affecting the sector .....	16
6.1.1	Sector Involvement in Training .....	16
6.1.2	The Provision Itself.....	17
6.1.3	Profile of learners.....	17
6.2	UK comparison.....	18
6.3	Consultation on ACP .....	19
6.4	Conclusions from stage two .....	20
<b>7</b>	<b>Gap Analysis: comparing Stages 1 and 2.....</b>	<b>22</b>
7.1	Headline issues and skills gaps .....	22
7.2	Mapping demand to current supply and identifying gaps .....	24
<b>8</b>	<b>Identified skills priorities and sector programmes: our draft collaborative solutions.....</b>	<b>27</b>
<b>8.1</b>	<b>Skills Priority 1: Professional Image and Competence .....</b>	<b>27</b>
8.1.1	Aspirational sector image .....	27
8.1.2	Fresh approaches to diversity .....	28
8.1.3	Ensuring everyone in the sector is competent.....	28
8.1.4	Public recognition of competence .....	28

8.1.5	One well-policed competency card.....	28
<b>8.2</b>	<b>Skills Priority 2: Communication and Information</b> .....	<b>30</b>
8.2.1	SummitSkills knowledge centre.....	30
8.2.2	Provision clarity .....	30
8.2.3	Apprenticeship cost/benefit analysis .....	30
8.2.4	Proof that training pays .....	31
<b>8.3</b>	<b>Skills Priority 3: Training Provision</b> .....	<b>33</b>
8.3.1	Relevant training reflecting NOS at all levels .....	33
8.3.2	Accredited training mapped to NOS.....	33
8.3.3	Sustainable entry routes.....	33
8.3.4	Wider and sustainable HE provision.....	33
8.3.5	Quality assured training provision including quality marks .....	34
8.3.6	Renewables and environmental technologies.....	34
<b>8.4</b>	<b>Skills Priority 4: Funding</b> .....	<b>36</b>
8.4.1	Increased flexibility of funding .....	36
8.4.2	Redeployment of NEVS funding.....	36
<b>8.5</b>	<b>Skills Priority 5: Management and Leadership</b> .....	<b>38</b>
8.5.1	Progression and development of first line and middle managers.....	38
8.5.2	Developing enterprise skills for SMEs and micros .....	38
<b>8.6</b>	<b>Underpinning programmes: enabling activity</b> .....	<b>40</b>
8.6.1	Partnerships .....	40
8.6.2	Government influence .....	40
<b>9</b>	<b>Proposed actions and solutions for Wales</b> .....	<b>41</b>
9.1	Nation overview: Wales.....	41
9.2	Welsh stakeholders and partners.....	41
9.3	Wales proposed activity against skills priorities and sector programmes	42
9.4	Next steps .....	42
<b>10</b>	<b>References</b> .....	<b>54</b>

## 2 Introduction

### 2.1 Our aim for the SSA

Underpinning this report is the core ethos that SummitSkills has been working to throughout the whole Sector Skills Agreement. It has been our aim:

*Through authoritative research and extensive consultation,  
to identify skills related issues facing the sector and  
produce workable solutions to address them.*

We want the ultimate outcome of the Sector Skills Agreement to be a practical working and evolving document that enables employers to develop the skills they need for their business to succeed.

### 2.2 Stage 3 background and purpose

This stage three report is the third in the series for the Sector Skills Agreement. It follows the Sector Needs Analysis (SNA) at stage one, where an evidence base was created on the current and future skills needs for the sector, and the Assessment of Current Provision (ACP) at stage two, where the sector's training provision was evaluated. SummitSkills has combined its own research and recommendations with feedback gathered from employers and partners at stages one and two to produce this stage three report, which now suggests solutions and actions to address the issues the sector is facing.

We present these reports as early 'action plans', which highlight what is needed and who should be involved. This document will help funding partners and employers identify exactly what they need to do and consider in advance of their firm commitment at stages four and five.

### 2.3 Already grounded in opinion and consultation...

The strength of SummitSkills' work is our 'bottom-up' approach and consultation activity to date. The in-depth employer interviews ensured from the offset that the research was grounded firmly at the grass roots of the sector. These interviews, planned against a strict matrix to take into account all business sizes and industry types, ensured that the data gathered was a true representative sample of businesses in the sector<sup>1</sup>. This valuable qualitative data when teamed with national statistics presented a complete picture of building services engineering skills requirements to allow SummitSkills to have full confidence in its conclusions and recommendations.

To further underline the bottom up approach, rather than present just an all-England SNA and ACP, SummitSkills took the step to produce a report for each of the nine English regions, Northern Ireland, Wales and two for Scotland covering the Scottish Enterprise and Highlands & Islands Enterprise areas. Immediately from these documents, our national and regional stakeholders could identify with the issues and priorities at their local level and start to develop workable solutions to address them.

---

<sup>1</sup> Please see the Sector Needs Analysis document for a full description of the research methodology

Once the Sector Needs Analysis for each region or country was produced, we wanted to ensure that employers, funders, providers, unions and other stakeholders were able to hear about the research findings, understand the issues the sector is facing and have the opportunity to explore solutions to address the issues. To do this we held 13 events across the UK and invited the various parties that play a role in the Sector Skills Agreement. At each event delegates worked in teams to answer questions like: “What is the ultimate solution to this problem?”, “How can employer, providers and government partners all contribute,” and “What are the quick win and long haul solutions for the SSA?”

These events also took place at the ACP stage, where delegates worked again in teams to answer questions like: “Why is this issue important?”, “What action would like to see taken?” and “What are the barriers to implementation or bridges that we have or need to build?”

These meetings were the start of crucial partnership working – the discussions held were vital to help all parties understand each others’ perspectives, positions and considerations. SummitSkills has been encouraged that already these events have led to some ‘quick wins’ where partners have started working together on projects that can be implemented straight away to be of immediate benefit for example the development of national occupational standards for renewables.

The key issues identified at each of the events have also been tested with existing employers’ focus groups across the sector, allowing SummitSkills to develop a solutions-based approach to these issues.

Ultimately all of the issues, recommendations and solutions to date have already been proposed and discussed around the UK by those who will be central to the SSA’s implementation. The proposals here have been well thought through and stem from employers and stakeholders already offering solutions. This has allowed SummitSkills to present here a stage 3 document for Wales containing themes and ideas that have already been extensively debated by the sector in the country.

## **2.4 Moving forward...**

The proposed solutions and actions for each party will now be tested out with employers and stakeholders to gauge their opinion and response. By the end of this stage there will be general agreement on where the sector is now in terms of skills needs and skills supply, what needs to happen to deliver the skills needed for the future, and who needs to do what to achieve that.

The consultation process will comprise one to one and group negotiations with stakeholders and wider discussions directly with employers and also through trade associations and professional bodies to share action plans, negotiate and agree on exactly what can and will be achieved. In addition, regional SSA implementation teams will be established which will consist of key local stakeholders as well as influential sector employers in the region who will take responsibility for progressing the action at local level.

This process of discussion, assessment and ultimately endorsement will pave the way for a final agreement at stage 5 which contains solid mechanisms to create a sector that has the right skills, in the right place, at the right time.

## 2.5 Structure of the report

Following the executive summary, section four presents SummitSkills' overarching vision for the sector across the UK, outlining our skills priorities and the vision on what can and will be achieved if the SSA is successful. To provide background on the research undertaken so far, sections five and six are summaries on the Sector Needs Analysis and Assessment of Current Provision respectively. These sections both also provide some UK comparison of findings, describe the consultation process undertaken at each stage and summarise the main conclusions or recommendations made.

In section seven SummitSkills has taken the findings from stages one and two and identified the gaps arising from the current supply and demand, and which of the suggested sector programmes address these gaps. This leads to section eight, where SummitSkills' suggested skills priorities and sector programmes are presented in full along with proposed action for employers and partners.

Finally in section nine, the draft solutions are broken down into a specific Welsh action plan, providing an overview of the county and outlining plans that demonstrate how the Sector Skills Agreement will be implemented in the country.

## 3 Executive Summary

### 3.1 SummitSkills and the building services engineering sector

SummitSkills is the Sector Skills Council for the building services engineering sector. SummitSkills' role is to promote skills and standards within the building services engineering sector to develop a fully skilled and qualified workforce which is able to improve productivity and compete in a globalised economy.

The building services engineering sector represents the following core industries:

- air conditioning and refrigeration
- electrotechnical
- heating and ventilation
- plumbing
- building services engineering consultancy.

The UK's building services engineering sector has an annual turnover of £16.2bn (2005), rising to £17bn in 2007, employs over 600,000 individuals in over 60,000 businesses.

There are a large number of small and micro-businesses within the sector with over 90% of businesses employing fewer than 10 people. The majority of these firms are small – 59% have five employees or fewer and less than 3% have more than 50 employees.

The sector comprises a diverse and continually expanding part of the UK economy covering a wide range of skills providing essential design, installation and maintenance services for industrial, commercial and domestic clients.

Building services engineering permeates the whole of society and industry in the United Kingdom. It plays a major role in the areas of sustainable development and energy efficiency. Without the activities of this sector, the whole of the UK economy would cease to function.

### 3.2 Sector Skills Agreement purpose

The purpose of the Sector Skills Agreement is to understand the skills issues facing our employers and to work with them and stakeholders to develop solutions which, when delivered over the short, medium and longer term, will lead to significant skills improvement in the sector and longer term productivity benefits for the sector.

The process has five key stages:

1. Sector Needs Analysis: an assessment of the sector's skills needs over the short, medium and long term future
2. Assessment of Current Provision: a review of the current training provision for the sector in terms of range, nature and employer relevance
3. Gap Analysis: a review of the main gaps in the current provision compared to employer demand and the development of employer driven solutions to address these
4. Development of collaborative action between employers, stakeholders, providers and funders to engage employers in the sector to increase investment in skills

5. Production of a final Sector Skills Agreement for the building services engineering sector with detailed costed solutions which employers will work with key stakeholders to deliver.

The process will move to implementation across the UK at regional and national level after stage five, although a number of early quick wins have already been identified and are currently being implemented.

### 3.3 Sector Needs Analysis (SNA) summary

The SNA identified the skills needs that the building services engineering sector currently has as related to improving productivity and business performance, as well as looking at the skills needs of future new entrants to the sector. From this research, the following issues were identified:

- Training is needed to meet skills deficiencies in environmental and renewables technologies across all the industries within the sector where current levels of activity are rising quickly and it is envisaged will rise further as the UK approaches the 2010 Kyoto performance assessment.
- The globalisation threat is a real one, however the sector largely perceives this not to be the case. This threat is greatest in relation to environmental technologies, with German and Danish companies already beginning to enter the market and approaching Government agencies looking for partnership agreements
- Absence of current and future skills planning makes the sector reactive to emerging markets such as renewables rather than proactive, resulting in a weakened capacity to meet future client demands.
- There is a lack of any robust form of management focus in relation to competitor analysis, competitive advantage and formal benchmarking. This is preventing strategic thinking and is contributing to productivity issues
- The sector is in need of a fundamental overhaul of the current curriculum content and requires business focused in-company training to meet the needs identified
- The basic skills of new entrants to the sector and the IT skills of experienced staff need to be improved to ensure productivity returns are maximized from capital investment in new technology
- Engagement in research, particularly with Higher Education institutions, is needed to increase the innovative 'value-added' nature of what the sector offers in products and services to clients.
- There is a surprising degree of uniformity of the needs and feelings from companies across the sector. Traditionally the electrotechnical, heating & ventilating, air conditioning & refrigeration and plumbing industries have stated considerable differences in their needs and issues. The emerging data indicates that the whole sector faces similar issues and challenges and there is minimal variety between industries.

### 3.4 Assessment of Current Provision summary

The Assessment of Current Provision, which was the second report in the process of creating a Sector Skills Agreement, further developed this work for Wales. Its purpose is to ensure that current and future training provision within the sector in Wales is 'fit for purpose'. SummitSkills researched what training is on offer and, from an employer's perspective, it has assessed whether it meets the future need of the industry.

The recommendations made supported a demand-led approach, creating 'skills of economic value'. Key recommendations for Wales included:

- Reducing the number of non-economically valuable qualifications and courses that are surplus to employers' needs.
- Technical certificates should only be funded as part of a full framework apprenticeship or part of a National Vocational Qualification. All funding for technical certificates as stand-alone qualifications should be discontinued.
- Timely updating of the sector's national occupational standards and qualifications which will be addressed as part of the Sector Qualifications Strategy to create a clear and coherent structure for the sector's qualifications.
- Urgent development of national occupational standards for environmental technologies to ensure that the skills are available across the sector to design, install, commission and maintain these new and emerging technologies so that the sector can compete in a global market against foreign competition
- Greater partnership between employers and providers to ensure provision is truly responsive to meet the changing needs and demands of employers.
- Developing a sustainable network of higher education training provision to assist more people within the sector to achieve professional qualifications.

### 3.5 Emerging skills priorities

Taking the findings, recommendations and feedback from stages one and two SummitSkills was able to map out the main issues affecting the sector and link this to the suggestions that had generated from the consultation so far. A clear series of priorities emerged, and under those 20 sector programmes that could be developed to support and address these priorities. These priorities and programmes form the basis of the Sector Skills Agreement for Wales. Here we detail the five skills priorities and what they mean for the sector:

Skills Priority	Number of sector programmes and objective
<b>Professional Image &amp; Competence</b>	Five sector programmes that will promote a positive image of the sector to attract and develop a skilled, sustainable workforce
<b>Communication &amp; Information</b>	Four sector programmes to create a knowledge centre for all sector skills development needs
<b>Training Provision</b>	Six sector programmes to enable pro-active, high quality training provision that meets the sector's priorities
<b>Funding</b>	Two sector programmes to create a structure of flexible funding to support fast-changing skills needs
<b>Management &amp; Leadership</b>	Three sector programmes to ensuring the sector has the skills to plan and develop profitable and competitive businesses

Each of these priorities, a detailed description of how they link back to the evidence uncovered so far and the 20 sector programmes that sit under the priorities can be found in section eight of this report.

### **3.6 Next steps**

In producing this report we now have a much clearer picture of building services engineering sector and the challenges it faces in Wales. SummitSkills is keen to emphasise the need for a partnership approach with stakeholders and partners organisations to tackle the issues facing our sector.

Devolution has given Wales the opportunity to shape distinctively Welsh answers to Welsh questions, with more power to guide action, both directly and indirectly. Issues that have been raised in our consultations and solutions being sought will contribute to the delivery of the Welsh Assembly Governments Skills and Employment Action Plan 2 and the forthcoming Skills and Employment Strategy document expected late autumn, which is aimed at giving Wales a skills base that is world class whilst recognising people's different needs and situations.

For each of the five skills priorities identified for the sector, a detailed action plan for Wales has been proposed with potential solutions to address the skills needs identified. These have all been derived from the extensive employer consultation and feedback undertaken already, together with the views of stakeholders.

These proposals need to be finalised with the relevant parties and firm commitment to action agreed. The actions also need to be prioritised so that a programme of work can be finalised for Wales for the coming year, taking account of areas of work already in progress such as the National Occupational Standards review for the sector which will feed into the wider Sector Qualification Strategy.

From the extensive and detailed research phase over the last year, the Sector Skills Agreement process now moves into a very practical period of delivery, to meet what the employers in the sector have told us they need. With the support of the Welsh Assembly Government, trade associations, stakeholders and providers across Wales, SummitSkills will pilot, develop and deliver a range of solutions which will be of real value to the employers across the sector and help to improve and further develop the skills of the sector to meet the changes ahead.

## 4 Overarching vision for the sector

In creating a Sector Skills Agreement for building services engineering, SummitSkills aims to use authoritative research and extensive consultation to identify skills related issues facing the sector and produce workable solutions to provide employers with the skills they need to develop their business.

The SSA will be the first overarching, coherent and all-encompassing strategy to address the sector’s future skills needs. It will be a strategy that all parties commit to and implement in order to achieve the mutually beneficial end goal.

Horizon, the project name given to the SSA, conveys the fact that we are looking towards a brighter future for the sector, with an agreement that will bring all industries together, to one common focal point.

Where previously the different industries within the building services engineering sector - electrotechnical, heating and ventilation, air conditioning and refrigeration and plumbing – have traditionally seen themselves as independent industries with unique issues, the Sector Needs Analysis research revealed a surprising degree of homogeneity that exists broadly between all of the industries within the sector. Having identified that the sector as a whole faces similar issues and challenges, we can be confident in bringing these groups of employers together to work jointly as they move forward.

Taking the findings, recommendations and feedback from stages one and two SummitSkills was able to map out the main issues affecting the sector in Wales and link this to the suggestions that had generated from the consultation so far. A clear series of priorities emerged, and under those 20 programmes that could be developed to support and address these priorities. These priorities and programmes form the basis of the Sector Skills Agreement for Wales.

For each of the five skills priorities that have been generated we have a vision for what can and will be achieved if the SSA is successful:

SKILLS PRIORITY	VISION
<b>Professional Image &amp; Competence</b>	A positive image of the sector is promoted to attract and develop a skilled and sustainable workforce
<b>Communication &amp; Information</b>	A one-stop knowledge centre for all building services engineering skills development needs
<b>Training Provision</b>	Pro-active, timely high quality training provision that meets the sector's fast-changing priorities
<b>Funding</b>	Flexible funding to support the skills needed to develop business and workforce
<b>Management &amp; Leadership</b>	Ensuring the sector has the skills it needs to plan and develop profitable and competitive businesses

Each of these priorities, a detailed description of how they link back to the evidence uncovered so far and the 20 sector programmes that sit under the priorities can be found in section eight of this report.

## 5 Summary of demand evidence base: Wales

### 5.1 Overview of the issues affecting the sector

The aim at stage one was to research, analyse and present a robust evidence base on the current and future skills needs for the sector. Following comprehensive data collection through employer interviews, statistical analysis and literature review, a series of clear themes emerged. SummitSkills grouped a number of these strands into three overarching areas: **new entrants; business & workforce development and external influences.**

For fuller detail behind any of the issues described below, please reference SummitSkills' Sector Needs Analysis for Wales.

**5.1.1 New Entrants** focused on the existing skills of the workforce, the profile of people coming into the sector and future skills requirements.

In the area of **basic skills**, 43% of employers in Wales have major issues with the low level of literacy and numeracy of new entrants (36% N. Wales, 50% S. Wales). Concerns have also been expressed at the inadequate employability skills and attitudinal skills of new entrants.

Regarding **diversity**, 80% of firms (N. Wales 80%, S. Wales 80%) do not employ women in technical roles and 15% of firms (7% N. Wales, 23% S. Wales) have employees from ethnic minority groups working in technical roles. Many companies state that they do not receive applications from these groups but would be prepared to employ them if they did.

20% of firms in Wales (N. Wales 30%, S. Wales 10%) stated they employ **migrant workers** at present, with London (67%) and Scotland (35%) being at the highest end of the scale. This highlighted a need for qualification mapping for migrant workers to enable them to receive the correct and fair rates of pay. Access to English for Speakers of Other Language courses and health & safety training is also needed to enable clear communication and safe working on site.

An assessment of the perceived **skills requirements** for the sector showed that Level 3 NVQ is seen by 78% of the sector in Wales (N. Wales 80%, S. Wales 76%) to be the minimum level for a fully trained craft operative. Across this UK, this breaks down to 100% for Northern Ireland and Scotland firms and 73% in England.

Looking to the future, 68% of firms in Wales (N. Wales 57%, S. Wales 80%) and 77% of firms across the UK believe the sector will grow in the short to medium term (up to five years). This optimism is likely to influence labour planning and recruitment, therefore SummitSkills recommends that funders and policy makers fund the most optimistic numbers for apprenticeships, provided in the main for this report by Experian.

**5.1.2 Business and Workforce Development** encompassed all the elements that an employer needed to consider in order to be productive. From the research it was clear that whilst theoretically, business management techniques such as competitive advantage analysis, benchmarking and retirement planning would be beneficial to an employer; there was a distinct lack of adoption of these techniques amongst the sector.

When asked about **current and future skills needs**, firms identified a need for team work, communication, health & safety, practical skills and IT skills. There are little current and future skills needs identified beyond courses already available, no future skills planning, with 73% of firms not foreseeing any future skills development needed for their company (73% N. Wales, 74% S. Wales).

**Partnering** and partnering techniques covers only 2% of the UK sector currently whilst 70% are still in competition with each other. In Northern Ireland and some regions in England there is real concern that competition is so fierce that it is damaging the sector and reducing training budgets, as companies cut margins to the bone to win contracts to stay in business. Only a minority of the sector in Wales engages in **supply chain management** techniques to bargain with suppliers. Price is still the major bargaining factor with clients. The sector needs to move towards a more value-added approach to procurement, but persuading clients to move away from bottom line analysis may be difficult.

Only 25% of the sector carries out any form of **research and development** in Wales (North Wales 27%, South Wales 23%), with little partnership between higher education and the industry. Bringing the sector together with Higher Education would help to develop innovative products, practice and services and in turn this will help improve the sector's productivity.

The **IT skills** levels of the workforce must be maintained in order to maximise on productivity increases gained through items such as laptops and PDAs especially as Welsh employers are undertaking considerable investment in this area. Basic skills in IT, particularly for mature workers, need to be developed otherwise operatives will be unable to efficiently use new technologies purchased by firms, and in turn companies will lose productivity.

69% of the sector in Wales (N. Wales 62%, S. Wales 77%) supports the concept that **enterprise and entrepreneurship** is an important factor in business. However fewer companies feel they have the relevant skills to implement an entrepreneurial culture.

There is evidence that companies within the sector lack a clear and scientific focus on what their **competitive advantage** is. Most companies identify quality and service as their main advantage over competitors; however this appears to be demonstrated through anecdotal evidence as opposed to clear strategic planning or benchmarking. **Formal benchmarking** is one technique that could be employed by the firms to identify their competitive advantage. However, most rely (56%), on informal benchmarking techniques (N. Wales 60%, S. Wales 53%) and only 15% (N. Wales 13%, S. Wales 17%) conduct formal benchmarking. This raised the question, if the sector's companies don't know what their competitors are doing, how can they determine what their competitive advantage is?

**5.1.3 External Influences** consisted of those factors affecting businesses in the sector but beyond its direct control.

The issue of **globalisation** is not currently on the sector's radar, 76% of Welsh employers (N. Wales 73%, S. Wales 80%) do not regard that the market will be adversely affected by foreign competition. However the reality is that through open tendering systems companies may experience rivalry from abroad for work in Welsh markets, particularly in the area of new and environmental technologies where competition from the Scandinavian and German markets is particularly intensive. Consultants within the sector are more aware of the issues surrounding globalisation than the craft industries, and this may be due to the nature of the industry, where work is being carried out abroad and returned via the internet. The lack of concern about global firms entering the Welsh market may leave the sector vulnerable once foreign competition becomes established.

New **environmental technology** and the drive to reduce carbon emissions is one of the single biggest factors currently affecting the sector. The UK’s energy policy commits to cut CO2 emissions by 60% by 2050. The Welsh Assembly Government has comprehensive energy and environmental strategies that detail the development of micro-generation, renewable and sustainable technology in the country. The Energy Route Map 2005 proposes that Wales will obtain 4 Twhr per annum of electricity by 2010 and 7 Twhr by 2020 from renewable sources.

However Wales does not have the capacity to respond to environmental technology demands due to the lack of installation skills amongst the craft industries. This problem is so acute in Wales and Scotland that it may impede on Government policy in relation to renewable energy generation, as well as opening up the market to foreign competition. To meet the demand for installation and maintenance of renewable energy, more certified training opportunities need to be developed. This was supported by the additional microgeneration sector research conducted in 2007.

**Government regulation** was found to be causing problems for the sector, with competence schemes and issues around bureaucracy, red tape and increased costs being cited. There is also concern about insufficient inspection of competence cards taking place on site leading some of the sector’s companies to question the relevance of the system, or continue with renewal.

## 5.2 Geographic context

This section presents simply a flavour of the national and regional comparisons that were highlighted as part of the research and is not intended as in-depth analysis. For a more detailed geographical breakdown and analysis of the sector and employers’ attitudes and habits please see the UK Sector Needs Analysis.

Skills issues	UK average	High	Low	Wales
Employers who felt they had the requisite skills to install environmental technologies	56%	77% Northern Ireland	40% Scottish Enterprise	42%
Employers who carry out formal benchmarking	24%	43% North West	3% West Midlands	15%
Employment of migrant workers	25%	67% London	7% East Midlands	20%
Employers who did not foresee any future skills needs	52%	74% Wales	30% North West	74%
Employers who recruit females in technical roles	26%	55% Yorkshire & Humber	13% Northern Ireland	20%

It was extremely interesting to compare nations and regions around the UK. Quite often the tale behind the statistics also further explained what the reasons might be for those findings. The work of the five renewable technology academies in Northern Ireland is likely to have a factor on the country’s result. In general Wales and Scotland were outperformed by England in this area. This poses a problem to Scottish and Welsh Assembly Government as both see the development of renewable energy as being a major part of their environmental strategies.

The fact that the North West carries out the highest percentage of formal benchmarking may mean that best practice can be shared across nations and regions once further development starts in this area. The findings relating to female employment reflect regions where specific promotions of women into the sector have been pioneered such as Yorkshire & Humber by the Regional Development Agency and other partners.

## 5.3 Consultation on SNA

SummitSkills recognised that a detailed Sector Needs Analysis report may not be suitable for all audiences. Different levels of detail were required by different stakeholders. To allow the SNA issues to be communicated to a wide range of viewers, SummitSkills produced a 'key issues' document which succinctly summarised the issues facing the sector. This was distributed with the main report to provide recipients with a choice of the SNA detail or an edited but comprehensive overview.

The employer interviews undertaken at the start of the project of which 60 were undertaken in Wales (30 in North Wales and 30 in South Wales) formed the core of SummitSkills' employer engagement, but this was just the start. With the 'bottom-up' ethos of the Sector Skills Agreement for building services engineering in mind, SummitSkills undertook extensive consultation on its draft Sector Needs Analysis reports. An event was held in each nation including two in Scotland (in Edinburgh and Inverness) and nine English regions, where employers joined other partners and stakeholders to discuss SummitSkills' findings so far and suggest solutions to the skills issues the sector is facing.

These events not only allowed SummitSkills to confirm the SNA findings with the sector, but also allowed employers to get involved in the Sector Skills Agreement from the outset and playing an active role in its development. The output from these workshops allowed a 'Viewpoint' document to be produced which summarised the solutions generated by each group. This document was distributed within each region and nation to gather views from a wider audience than could attend the initial workshop.

In addition to this specific project consultation, SummitSkills also brought the SSA to the attention of employers and gathered views through its normal engagement channels – including partnership groups, employer forums, trade association meetings, college steering groups, individual visits and industry interest groups.

### 5.3.1 Other issues arising from consultation

When discussing the sector's skills issues at the consultation workshops, the notion of a training fund was suggested at a number of the events as a way of ensuring that employers train their staff. The underlying idea behind this was that if businesses were forced to contribute to a central training fund then they would be more likely to carry out training to make a return on their investment.

This issue was raised enough times to be noted within this report, however because it has not been included as a sector priority or programme as it is not SummitSkills' responsibility or position to implement such a scheme. Discussions are already underway between some of the sector's trade associations and their member firms on a potential training fund for the sector. If and when a decision is made by the majority of employers in the sector, SummitSkills will then decide how best to proceed with this matter.

It is important to note here that this is just an issue that may affect England, Wales and Scotland. The building services engineering sector in Northern Ireland has clearly stated that it does not wish to be involved in a levy-type system.

## 5.4 Conclusions from stage one

The research conducted at stage one identified a number of issues where the building services engineering sector is performing poorly, which goes some way to explaining why the sector, along with the construction industry, is not performing well against other European competition, and why SummitSkills believes that the productivity assumptions for the sector are too optimistic. SummitSkills believes that the globalisation threat is a real one. This threat is greatest in new environmental technologies, where capacity is significantly lower than what will be needed if the UK is to meet the targets it agreed to at Kyoto. Evidence that German and Danish companies are already beginning to enter the market has been given to SummitSkills by Government agencies that have been approached by companies looking for partnership agreements.

The sector lacks any robust discernible form of management focus in relation to competitor analysis, competitive advantage and formal benchmarking, which is preventing strategic thinking and is likely to contribute to the productivity issues discussed throughout the report. A lack of current and future skills planning makes the sector reactive to emerging markets such as renewables, rather than proactive, and a failure to link future skills to training matrices and from them to business plans is a further weakness in the future success of the sector.

SummitSkills believes that the sector is in need of a fundamental overhaul of the current curriculum content and an extension of business focussed in-company training to meet the needs that this report has identified. Maintaining and improving skills levels is a challenging but necessary task, if the current prosperity enjoyed by the sector is to be maintained.

It was encouraging that during the thirteen workshops conducted across the UK at the end of stage one, audience and employer views resonated with the findings to date, confirming that these were skills issues that the sector itself identified with.

## 6 Summary of the supply picture: Wales Stage 2

### 6.1 Overview of the issues affecting the sector

The aim at stage two was to assess the extent and quality of current training provision and determine whether existing supply is sufficient to meet short and long-term skills needs in the sector. For Wales, the employer interviews were once again analysed, along with statistical data from the Welsh Assembly Government.

As with the SNA, at this stage SummitSkills produced a report for each English region and nation of the UK. Due to the differing education and funding systems across England, Wales, Scotland and Northern Ireland, there were a number of distinct areas that would affect one country specifically. However a number of issues were consistent across the UK. The various strands were grouped into three themes: **sector involvement in training, the provision itself and profile of learners.**

For fuller detail behind any of the findings and issues described below please reference SummitSkills' Assessment of Current Provision.

**6.1.1 Sector Involvement in Training** analysed the employer interviews and their comments on a number of areas related to training provision. Here SummitSkills also presented a draft cost model on employer spend on training.

*Employer use of training providers* is good, with the share of total training carried out being split between FE colleges, private providers, manufacturers and universities. However, training that was immediately relevant to businesses is being placed before formal qualifications, and areas such as manufacturer training and some legitimate private provision is not adding to the formal qualification base of the sector. If formal mechanisms could be developed to recognise this kind of valuable training, skills development of this type can officially contribute to the sector's skills base.

There is some work to be done on *employer willingness to pay for training*. SummitSkills' Sector Needs Analysis saw the majority of employers across the UK citing Level 3 as the sector standard. However only 28% of employers in Wales would be willing to pay more for their training. Concerns about the quality of training providers may fuel this reluctance.

For the ACP SummitSkills created a 'work-in-progress' model that looks at *employer spend on apprenticeship training*, time allocated to mentoring and in-house training spend. A considerable amount of money (in this case via an employee's time) is spent on in-house mentoring throughout the course of the training programme. There are many hidden costs associated with training staff and employers are already making a significant contribution.

When assessing *employer views on quality of training provision*, generally that is more dissatisfaction with the quality of service and teaching provided by further education than by private training providers. Issues revolve around communication, the quality of teaching, resources and general curriculum planning.

**Employer views on content of training provision** were mixed. 32% of the sector in Wales feels that the content of provision is not suitable. Qualification content in particular is seen as being in some cases out of date and there is a need for maintaining and updating qualifications regularly, for example in relation to new technologies and renewables. Technician curriculum seems satisfactory, although there is slight concern that some of the material taught is too specialised and out of date.

**6.1.2 The Provision Itself** presented data and recommendations on the number and type of building services engineering courses available to employers and if they were providing the right kind of skills that the sector needs.

Based on the data provided, there appear to be a number of qualifications currently in the system that have not been funded (and therefore we assume have not been run) for a considerable amount of time. Because there has been no demand for this curriculum we suggest that it is no longer relevant to the sector. By **reducing the number of courses and qualifications** that are surplus to employers' requirements, we can concentrate on those that truly meet the sector's needs.

**Funding for technical certificates which do not meet employer needs** is a major issue affecting the sector. There is a significant amount of funding directed at stand-alone technical certificates, which offer a theory-based qualification but no work-related experience. People undertaking a full-time technical certificate are typically not employed in the sector and have little prospect of gaining work-based experience to allow them to gain a National Vocational Qualification. Technical certificates are seen by employers as a non-economically valuable skill and not meeting their business needs. Resources currently spent on stand-alone technical certificate training can be re-directed to develop provision in areas such as environmental technologies, business development and apprenticeships for adults.

A considerable amount of current **training provision spend** is leading to non-economically valuable skills and therefore is not relevant to the sector. Where this is the case, SummitSkills has calculated where money can be redistributed to other more relevant training and qualifications. Based on an analysis of current funding for non-economically valuable skills, there is potentially around £3.3 million across Wales that could be redistributed to much needed training provision elsewhere in the sector such as environmental technologies (solar panels, photovoltaic panels for example), business management, benchmarking, supply chain management and apprenticeships for adults.

There are a low number of higher education establishments offering building services engineering courses. This low number is spread unevenly around the UK and there are some English regions with no **higher education training provision** at all. This poses a problem for individuals who need to gain professional qualifications alongside their work.

Private training providers do not appear to obtain **quality marks** to the same extent that Further Education colleges do. There is certainly scope for more providers to achieve quality marks. Essentially it is believed that if more providers achieve these standards then it should raise the overall quality baseline of the sector's provision.

**6.1.3 Profile of learners** looked at age and diversity of students and how they attended courses (full time, part time etc.).

Regarding **diversity**, access to the sector is still dominated by white males. The lack of diversity is exacerbated in relation to ethnic minorities on work-based learning courses where there are significantly fewer people from minority groups on work-based learning courses than on technical certificates/FE-funded routes. Despite various initiatives and mechanisms being introduced to encourage under-represented groups to join the sector, there seems to have been little impact.

Following an analysis of the **mode of delivery and age of participants** in sector courses, there are significant numbers of non-employed learners, both adults and 16-19s, who are on technical certificates that the sector deems to be non-economically valuable (NEV).

## 6.2 UK comparison

Because of the different education systems and funding bodies across the four nations of the UK, the Assessment of Current Provision generated more distinct differences across the UK than was found at the Sector Needs Analysis stage.

Many findings were consistent, for instance the general lack of diversity in the sector, insufficient higher education provision, the high level of in-house training undertaken by employers, and the general higher level of satisfaction with private providers when compared to FE colleges. However, some recommendations were specific to that country based on the findings, for instance the recommended new ‘superclass’ for building services engineering courses in Scotland or the commitment to develop job-ready provision for Northern Ireland’s Training for Success programme.

Whilst English government committed fully to an implementation plan following Lord Leitch’s recommendations on employer-led skills strategy, other nations have not publicly endorsed Leitch and therefore consideration was being given to this when developing each ACP. Social justice and skills driven by the individual are significant issues in Wales, Scotland and Northern Ireland, so recognition of these facts played a part in developing solutions for the sector in these countries. In Wales, improving the basic skills of the population is a major challenge, as is developing the Welsh language across the country. Renewable energy appeared high on all agendas, which underlined the importance of developing a skilled workforce to meet this intense and concentrated government push.

Regarding employer views, this table presents simply a flavour of the national and regional comparisons that were highlighted as part of the research. It is not intended as in-depth analysis; for a more detailed geographical breakdown and analysis of the sector and employers’ attitudes and habits please see the UK Sector Needs Analysis.

Key sector issues	England	Northern Ireland	Scotland	Wales
Employers willing to pay more for training	42%	37%	57%	28%
Employers who carry out In-house training	74%	73%	82%	73%
Employers who use manufacturers for training	34%	17%	27%	23%
Employers who felt content of training provision was suitable	36%	57%	67%	68%
Employers who had experienced problems with quality of training in FE colleges	52%	40%	27%	45%
Employers who had experienced problems with quality of training with private providers	8%	17%	7%	5%

The consistently high level of in-house training undertaken highlights the importance of ensuring that where appropriate this training, along with manufacturer and other training, is accredited so that it formally contributes to the sector's skills levels. A clear pattern has also emerged across the UK with employers being more satisfied overall with the quality of training from private providers than further education colleges.

As the SSA moves forward it is vital to work with partners across the UK to develop not only overarching programmes where employers are experiencing similar issues, but also tailored programmes where necessary to meet needs in a specific nation or region.

### **6.3 Consultation on ACP**

In order to communicate the findings of the ACP, a second set of 'key issues' documents were produced for the ACP alongside the more detailed reports, to provide an alternative level of detail to SummitSkills' various audiences. The four-page document summarised the issues facing the sector and outlined the recommendations being made at this stage.

Once again the employer interviews undertaken at the start of the project were key to understanding the needs of the sector. The feedback given during the interview to questions related specifically to training provision were analysed and detailed within the reports. At this stage SummitSkills undertook a detailed consultation exercise across the UK. An event was held in each nation and nine English regions where employers joined other partners and stakeholders to discuss the findings so far and SummitSkills' recommendations.

These events allowed SummitSkills to confirm the ACP findings with the sector, and also allowed employers for a second time to participate in the Sector Skills Agreement. By this stage a sense of 'ownership' was clearly developing with employers taking a leading role in the project. Meetings between stakeholders to discuss the ACP were extremely beneficial in allowing different parties to understand and appreciate each others' positions and priorities.

The output from these meetings allowed a second 'Viewpoint' document to be produced which summarised the solutions generated by each group. This document was distributed within each region and nation to gather views from a wider audience than could attend the initial workshop.

Some early success has already been achieved as a result of these meetings, with SummitSkills being asked to input into funding bodies' planning cycles to affect what will be delivered for 2007/2008.

In addition to this specific project consultation, SummitSkills also brought the SSA to the attention of employers and gathered views through its normal engagement channels – including partnership groups, employer forums, trade association meetings, college steering groups, individual visits and industry interest groups.

## 6.4 Conclusions from stage two

Using the findings at stage two, a series of recommendations were outlined and short, medium and long term priorities were identified. At present SummitSkills has identified short term to be recommendations which can be completed in a year, medium term to be completed within two years and long term longer than two years.

Recommendations	Short/ Medium or Long Term Priority
<b>Recommendation 1</b> SummitSkills recommends that the identified curriculum that is surplus to employers requirements is removed from the curriculum data which Wales basis its funding model on,	Short term. The Welsh Assembly Government and SummitSkills can work together to reduce and refine Schedule 98 to include courses that truly meet the sectors needs.
<b>Recommendation 2</b> SummitSkills recommends that technical certificates should only be funded as part of a full framework apprenticeship or part of a National Vocational Qualification. All funding for technical certificates as stand-alone qualifications should be discontinued	Short term. SummitSkills will work with the Welsh Assembly Government to agree a strategy and timetable to address the problem of stand along technical certificate courses.
<b>Recommendation 3</b> SummitSkills will work with Welsh HEI's partners in Wales to develop a network of providers offering degree and sub-degree courses across Wales to help close the gap between operatives and consultants in the sector.	Medium term. Providers need to be convinced of the financial viability in running HE programmes within the building services engineering sector. Partners and stakeholders may need to work together to facilitate the development of sustainable funding sources to maintain curriculum offer.
<b>Recommendation 4</b> SummitSkills will work with the Credit and Qualifications Framework Wales to develop credit-accumulation transfer <sup>2</sup> and quality assurance for manufacturers and non qualification based courses from private training providers.	Medium term. Working with partners and stakeholder to develop credit accumulation transfer for manufacturer training, and develop new occupational standards for new and environmental technologies. This will be developed further in SummitSkills' Sector Qualifications Strategy.
<b>Recommendation 5</b> SummitSkills will work closely with partners and the training provider network to ensure that the curriculum and training structure are right so that employers can see the benefit and value in training.	Short term. SummitSkills work with partners and the training provider network to deliver the curriculum employers want and deliver the added value to their businesses.
<b>Recommendation 6</b> SummitSkills will work with partners, stakeholders and providers to seek a more effective use of funding to increase productivity performance and skills levels in the sector.	Short term. SummitSkills will work with the Welsh Assembly Government to produce an action plan to use the current funding in a more productive way for the sector.
<b>Recommendation 7</b> SummitSkills will develop the models on employer spending on apprenticeship training to assess the total costs of training on employers and use this information to work with the Welsh Assembly Government to achieve a sensible balance between employer and government contribution to training.	Medium term. SummitSkills will work with the Welsh Assembly Government, partners and stakeholders and in particular the sector's trade associations to develop and refine the various funding models currently being developed to analyse employer contribution to training.
<b>Recommendation 8</b> SummitSkills will continue to work with partners and stakeholders to increase the engagement of women and ethnic minorities by facilitating innovative progression pathways into the sector.	Medium to long term. SummitSkills will engage in more research on issues surrounding ethnic minorities, as well as continuing to work with partners, stakeholders other SSCs and employers in encouraging engagement in the sector from non-traditional groups.
<b>Recommendation 9</b> SummitSkills will work with partners, including the Basic Skills Agency, to reduce the large number of NEVS courses and instead develop sustainable entry and progression routes into the sector for a reduced number of non-employed status learners.	Medium to long term. SummitSkills will continue to work with the Welsh Assembly Government, partners and stakeholders to facilitate and develop sustainable entry routes for all aged learners into careers within the sector.
<b>Recommendation 10</b> SummitSkills will work with the Welsh Assembly Government to explore how potential restructuring of the sector's provision, in line with employers needs, will be developed and implemented.	Medium to long term. SummitSkills will work with the Welsh Assembly Government, partners and providers to maintain and improve quality of provision for learners and employers.

<sup>2</sup> For instance allowing a manufacturer course to provide credit towards a wider qualification

<p><b>Recommendation 11</b> SummitSkills will work with providers to increase achievement of quality marks. Essentially it is believed that if more providers achieve these standards then it should raise the overall quality baseline of the sector's provision.</p>	<p>Short to medium term. SummitSkills will work with partners and stakeholders to encourage the provider network to engage in the acquisition of more appropriate quality marks.</p>
<p><b>Recommendation 12</b> SummitSkills and partners will work with providers across Wales to improve the quality of both the administration and teaching of those courses, to address issues of poor service from providers.</p>	<p>Medium to long term. SummitSkills will work with partners and stakeholders to create a flexible framework that allows the sector's qualifications to respond rapidly according to technological advances and new skill sets.</p>
<p><b>Recommendation 13</b> SummitSkills will work with the bodies' responsible for qualification to update existing qualifications in line with the sector's requirements, to address the issue of unsuitable curriculum content. This would also include the development of new content to meet the needs in areas as environmental technologies to support the implementation of the Welsh Energy Policy.</p>	<p>Medium to long term. SummitSkills will work with partners and stakeholders to establish adequate training provision to ensure employers can gain the required skills needed to design, install and maintain emerging renewables systems.</p>
<p><b>Recommendation 14</b> SummitSkills will work with the Basic Skills Agency and employers to support and encourage new entrants and existing employees in the sector, to improve their basic skills for personal development and to improve sector productivity.</p>	<p>Medium to long term. SummitSkills will work with the Basic Skills Agency to raise awareness of the impact of poor basic skills on the sector and the promotion of the Basic Skills Pledge to the sector to help improve productivity.</p>
<p><b>Recommendation 15</b> SummitSkills continues to develop and implement its Welsh Language scheme through consultation with key stakeholders and the Welsh Language Board.</p>	<p>Medium to long term. SummitSkills will continue to implement its Welsh Language scheme to ensure that bilingual needs and aspirations are met.</p>

## 7 Gap Analysis: comparing Stages 1 and 2

This gap analysis identifies issues that arise from SummitSkills' Sector Needs Analysis and Assessment of Current Provision. The main gap areas are summarised together and then tables are presented with details of employer demand, the current sector situation and the resulting gap. Each gap is then directly linked to a proposed sector programme to be taken forward to address and reduce the gap. These programmes are then grouped into the five skills priority areas already summarised. These priorities and programmes form the basis of our Sector Skills Agreement.

### 7.1 Headline issues and skills gaps

Issues raised by employers highlighted concerns around the level of literacy and numeracy, employability and attitudinal skills of some of the new entrants, and the need to be able to attract good quality applicants into the industry in order to be able to deliver the increasing demand for building services engineering.

In addition a high level of concern has been expressed across the UK regarding the development of sustainable entry routes into employment within the sector. The use of standalone technical certificates lifted from an approved framework has not resulted in the full progression of learners into employment with low numbers progressing to achieve the level 3 qualifications which industry has deemed demonstrate the required level of competence. SummitSkills is committed to working with providers and stakeholders to develop a sustainable entry route into the building services engineering sector to ensure that real opportunities are created, whilst delivering the required level of high quality new entrants needed by employers to support a growing sector.

A key area to be addressed was the need to review our existing qualifications to allow them to reflect current industry practice, remove out of date material, and develop new qualifications and training to allow sector employers to be competent to design, install, service and maintain the new range of microgeneration renewable systems needed to meet Government energy targets.

Concern was also raised about the lack of training on supervisory and management skills, the business development areas of benchmarking and supply chain management, and the need for more higher education provision to address the gap in design skills. Employers were also keen to see a sensible balance struck between employer and government contributions to training

In addition the building services engineering sector has a number of training needs, which can be categorised under two significant headings: new and environmental technologies and business acumen.

#### **New and environmental technologies**

The building services engineering sector has a major role to play in the development of new and environmental technologies within Wales, which will directly contribute to the environmental strategies of the Welsh Assembly Government, which has identified significant investment in renewables technologies in the run up to the assessment of Kyoto priorities in 2010. The actual business readiness of the sector however may be running behind that of the developing market as a significant number of companies claim to have some of the skills required to install the new technologies.

This leaves the sector open to global competition as building services engineering companies abroad, particularly in Germany and Denmark but also the rest of Europe have more advanced skills in environmental technologies, and already European companies are winning contracts for installation to environmental technologies in Wales and the UK, with the Olympics in 2012 expected to exacerbate the situation. It is therefore imperative that the sector improves its skills in environmental technology installation.

Currently the data returns on courses currently receiving public funding failed to identify any courses that specifically undertook environmental technologies training. As currently the National Occupational Standards (NOS) are being developed this is perhaps not too surprising, but leaves the sector vulnerable to competition and being unable to respond to developments within the market in renewables technologies that many companies identified within the SNA.

The lack of formalised qualifications within an accredited qualifications framework means that currently the sector is relying on manufacturers and some private companies to carry out non-accredited installation training. This training develops specific product skills but possibly fails to develop generic skills in these technologies. In addition there is no way to quality assure the end product. There is no development of these skills in the generic apprenticeship schemes currently, which suggests that the sector is not developing the new skills at entry level to the sector. All these issues identify a significant gap between requirement and provision currently which needs to be addressed urgently.

To ensure full integration of these technologies into existing occupational activities will require revision of National Occupational Standards and new entrant qualifications to raise general awareness and post apprenticeship a full suite of qualifications not only at installer / craft level but also for design and marketing.

This activity is ongoing whilst the Sector Skills Agreement is being developed and will play a fundamental part of the final SSA implementation.

### **Business acumen**

The Sector Needs Analysis utilised the business model developed by Professor Porter of Harvard University to measure the productivity and competitive advantage performance of the sector within the UK. International benchmarking data suggests that the UK construction industry generally is performing at a lower productivity rate than the majority of it European competitors, making the potential threat from globalisation even worse. Generally, the building services engineering sector is generally performing badly in:

- defining competitive advantage
- formalised benchmarking
- competition analysis
- research and development
- succession planning
- current and future skills analysis
- first line supervisor and middle management training

The building services engineering sector has significant productivity issues surrounding business management and acumen, however currently the data returns from Northern Ireland, England, Scotland and Wales highlight very few funded courses that contain a management and business focus within them and a very low take-up of these courses, with courses closing across the UK, rather than opening.

There are a number of generic courses such as the NVQ 3 in supervisory management managed by the Chartered Management Institute. However, there seems from the SNA to be little appreciation of these courses, although there is a desire for a sector specific qualification. Currently management training on the HNC and at degree level is not built around the sector, but is more generic in nature and is more construction than building services engineering related, with the exception of perhaps the MSC in Construction Management courses.

Concerns from contractors about BEng/BSc graduate courses within the ACP, suggests that undergraduate programmes are also too highly focussed on the design and consultancy industry within the sector, rather than the needs of the contractors, generally although not specifically related to management and business acumen.

There is therefore a fundamental and wide gap between what the sector needs to improve productivity through enhanced business acumen and currently what is on offer at all levels for the sector. As with the environmental technologies issues, urgent action is needed to address these gaps.

## 7.2 Mapping demand to current supply and identifying gaps

Taking the findings from stages one and two, the tables below details the sector demand, the current supply and the resulting gap, i.e. what is needed. Finally in the last column we detail the suggested solution to address this gap. In section eight SummitSkills presents these solutions as suggested sector programmes and details the actions and outcomes of this activity.

### Skills Priority 1: Professional Image and Competence

Sector Demand	Current Supply	Gap – what is needed?	Solution/Sector Programme
Improved sector careers guidance and marketing to establish the sector as an aspirational career choice.	Parents, careers advisors and students rarely understand sector careers. Misperceptions deter many suitable people considering sector careers.	Careers advisors and students with a clear understanding of career routes and options. A sector that is recognised as a profession of choice.	Aspirational sector image
Transform the attitudes of students and parents from all backgrounds towards the sector.	Girls, ethnic minorities and their mentors have a negative perception of the sector leading to an under-representation of these groups in the workforce.	To attract the necessary quantity, quality and diversity of people into the BSE sector at all levels.	Fresh approaches to diversity
A way to recognise achievement in terms of qualifications, standards and training which is fit for purpose and meets employers' needs.	People in the sector have a range of experience, some are partly qualified or with no qualifications or recognition of competency.	Flexible methods to up-skill and recognise competence for different groups or categories of workers.	Ensuring everyone in the sector is competent
A common understanding of competence across the sector which is easy to understand and communicate.	Customers do not have a clear understanding of competence in the sector and so do not know how to check competence before awarding work contracts.	A mandatory, fully registered and qualified workforce which is recognised by the workforce and the public to raise the image of the sector.	Public recognition of competence
Benchmark existing skill card schemes for the sector and harmonise into a single skill card.	There are a variety of sector competency cards which have little recognition or understanding by customers. Employers are frustrated at the many cards not actively policed.	One skill card which recognises competency across the sector is valued by the workforce and understood by customers.	One well policed competency card

## Skills Priority 2: Communication and Information

Demand	Current Supply	Gap – what is needed?	Solution/Sector Programme
A one stop knowledge centre for sector skills matters.	Information on skills development is scattered across a variety of sources and is difficult to assess.	A business focused national hub for sector skills knowledge, development and support, providing authoritative sector insight and market intelligence.	SummitSkills knowledge hub
Clarity on providers, authorised progression pathways and availability of public funding.	A significant number of sector courses and qualifications which are surplus to employer requirements.	Employers with a clear understanding of available provision and how it fits with their business and employee needs.	Provision clarity
Working models which review all costs, including employer contributions, of apprenticeship training.	Employers in the sector make a significant contribution to staff training and development, especially supporting and mentoring apprentices. This contribution is not understood or recognised by Government.	A robust model to assess the total costs of apprenticeship training to help achieve a sensible balance between employer and government contributions to training.	Apprenticeship cost benefit analysis
Demonstrate the benefit of training to employers to clearly define the contribution training makes to increased productivity and profitability.	Employers need convincing about the business benefits of training to fund more than they do currently.	Employers to value technical and business training, train their staff and fund training to increasing levels.	Proof training pays

## Skills Priority 3: Training Provision

Demand	Current Supply	Gap – what is needed?	Solution/Sector Programme
Qualifications need to be updated and maintained regularly to reflect the real world requirements of employers.	Qualification content is seen as being in some cases out of date or not suitable for the needs of the sector.	A completed sector qualification strategy which meets the needs of the sector and is updated in a timely fashion.	Relevant training reflecting NOS at all levels
A system to allow in-house and other non-qualification based courses to be formally accredited/recognised	Non-qualification based training is not currently monitored or recognised formally across the sector.	A credit accumulation transfer mechanism to monitor employer manufacturer and non qualification based courses.	Accredited training mapped to NOS
Authorised entry and progression routes that support the required number of people into the sector on an annual basis	Currently across the UK there is an overuse of standalone technical certificates where learners are not progressing into sector employment and do not gain an industry recognised qualification	Recognised entry and progression routes to maximise recruitment and retention of a wide range of sector applicants, minimising potential for partly trained staff. Linking requirements to LMI to ensure maximum recruitment and retention for a specific number of people.	Sustainable entry routes
UK-wide HE provision which is relevant to the real world.	A low number of HE establishments offering sector courses spread unevenly around the UK, with some regions with no provision at all.	A sustainable network of providers offering degree and sub-degree courses within all regions and nations.	Wider and sustainable HE provision
Review existing training inspection regimes provide support to improve. Consider feasibility and usability of a quality mark scheme for the sector.	The take up of quality marks by providers across the sector is varied.	Employers with confidence that FE, HE and private training providers deliver quality training which reflects up to date legislation.	Quality assured training provision including quality marks

**Skills Priority 3: Training provision cont...**

Demand	Current Supply	Gap – what is needed?	Solution/Sector Programme
National occupational standards for current and emerging environmental technologies to embrace craft and professional occupations.	NOS and qualification content are out of date in relation to renewables and environmental technologies in the sector.	Updated NOS and qualifications which reflect the sector's changing needs in relation to renewables and environmental technologies.	Renewables & environmental technologies

**Skills Priority 4: Funding**

Demand	Current Supply	Gap – what is needed?	Solution/Sector Programme
Flexible demand-led funding.	Current funding mechanisms do not fully meet sector needs. There are special requirements for funding to support areas which are not the norm. e.g. mature adults.	Public funding for training that delivers maximum benefit to businesses and individuals.	Influencing flexibility of funding
A more effective use of public funding to meet the needs of the sector, increase productivity and skills levels.	Some current training provision spend is directed towards skills that are of no economic value to the sector.	All public funding is used to support training recognised by the sector and demanded by employers.	Redeployment of NEVS funding

**Skill Priority 5: Management and Leadership**

Demand	Current Supply	Gap – what is needed?	Solution/Sector Programme
Effective continual professional development opportunities for craft operatives to technician and first line management.	There is a skill gap between craft and first line supervisory levels which is currently not being addressed.	Improved succession planning in SMEs with increased use of supervisory training for first line managers to create greater effectiveness and productivity for the sector.	Progression and development of first line and middle managers
Tools to prepare current and future managers of SMEs and micros with the skills to thrive in a competitive market	The sector is very reactive to new opportunities	Equip people with business skills to increase competitiveness and proactively develop new business opportunities.	Developing enterprise skills for SMEs and micros
Address the skills needed for business managers and leaders to realise the benefits of management and leadership training for their companies.	There is a general lack of the use of general business skills across the sector.	The sector is proactive in the exploitation of innovation, service and business competitiveness.	Developing skills to increase competitiveness of the sector.

In section eight to follow, SummitSkills expands on the sector programmes and presents more detail on how activity is structured under each of the five skills priorities.

## 8 Identified skills priorities and sector programmes: our draft collaborative solutions

Taking the findings, recommendations and feedback from stages one and two SummitSkills was able to map out the main issues affecting the sector and link this to the suggestions that had generated from the consultation so far. A clear series of priorities emerged, and under those a number of programmes that could be developed to support and address these priorities.

In this section we map out those priorities and explain the programmes. These priorities and programmes form the basis of our Sector Skills Agreement. At the end of each sub-section, SummitSkills has created a table for each skills priority which identifies the priority and within it at national level the programmes (presented here as draft solutions), along with partner involvement, timescales and the positive impact that activity will make if it is successful.

### 8.1 Skills Priority 1: Professional Image and Competence

Sector image and competence was a hot topic at the workshops around the country. It was felt that in order for the sector to recruit and train the right level of personnel, the public needed to have an image of building services engineering that is professional, aspirational and competent. All around the UK, stakeholders were calling for the promotion of a professional image and the development of a competent workforce.

The strength of feeling around this topic also linked to some of the issues identified in the SNA and ACP reports: concerns around competence card inspection, lack of basic skills of new entrants and the lack of diversity within the sector.

Within this priority are five sector programmes:

#### 8.1.1 Aspirational sector image

It is difficult for people on the outside of the sector – parents, careers advisors and students – to understand building services engineering careers and the routes to enter the workforce. Lack of clarity, awareness and misperceptions deter many suitable and high-achieving people from considering sector careers. This programme will promote an aspirational sector image by improving building services engineering careers guidance and active marketing to establish work in the sector as an aspirational choice for high-achievers.

***“Make the sector clear in terms of career progression”***

Wales workshop comment

By developing sector ambassadors, updating careers materials and implementing a sector marketing campaign we aim to ensure that careers advisors and students have a clear and current understanding of the sector's career options to position base as the occupation of choice for 16-21 year olds.

### 8.1.2 Fresh approaches to diversity

Females, ethnic minorities and their mentors either have no understanding of or a negative perception of the building services engineering sector, which has led to an under-representation of these groups in the workforce. Migrant workers that may be qualified at home have no way of recognising their skills in the UK. Taking fresh approaches through diversity will transform the attitudes of students and parents towards vocational and professional careers in the sector. We will conduct research on diversity and recruitment patterns, develop a migrant work qualification framework and promote the sector to under-represented groups to attract, recruit and retain a diverse workforce.

### 8.1.3 Ensuring everyone in the sector is competent

The sector currently has people with a range of experience, who are partly qualified or with no qualifications or recognition of competence at all. There is a need to recognise these workers and upskill them, to recognise achievement in terms of qualifications, standards and training which is fit-for-purpose and meets employer needs. Through developing flexible upskilling methods and promoting these qualifications, SummitSkills will recognise competence for different groups and categories of workers to ensure everyone in the sector is competent.

### 8.1.4 Public recognition of competence

People that only hold a technical certificate are working as self-employed in the sector. Because customers do not have a clear understanding of what a competent craftsperson is, they do not know how to make sufficient checks before awarding work, which leads to a perception of cowboy workforce. By developing a competence assurance framework against which people can be assessed and registered, it will create a mandatory, fully registered and qualified workforce which is recognised by the sector and public, and in turn will raise the image of the sector.

*“Raise the profile of the sector to encourage higher calibre of entrant.”*

Wales workshop comment

### 8.1.5 One well-policed competency card

There are a variety of competence cards across the sector which have little recognition or understanding by clients. Employers are also frustrated about the many cards which are not actively policed. This programme will benchmark existing skill card schemes and harmonise into a new skill card which is well publicised, consistently recognises the competence of the sector, valued by the workforce and understood by customers.

## Skills Priority 1: Professional Image and Competence

### Promoting a positive image of the sector and develop a skilled and sustainable workforce

The issue		Proposed solution	
<ul style="list-style-type: none"> <li>Lack of awareness and mis-perception of the sector deter many suitable people from considering building services engineering careers.</li> <li>Underrepresented groups have either no understanding or a negative perception of the sector.</li> <li>There are many in the sector with a range of experience but are part-qualified or have no qualifications or recognition of competence.</li> <li>Customers do not have an understanding of competence when awarding work to contractors.</li> <li>There are a variety of competence cards which are causing confusion across the sector. Many cards are not actively policed.</li> </ul>		<ul style="list-style-type: none"> <li><b>Aspirational sector image:</b> Improve careers guidance and active marketing to establish work in the BSE sector as an aspirational career choice for high achievers.</li> <li><b>Fresh approaches to diversity:</b> Transform the attitudes of students and parents towards vocational and professional careers in the BSE sector.</li> <li><b>Ensuring everyone in the sector is competent:</b> Implement ways to recognise achievement in terms of qualifications, standards and training which is fit for purpose and meets employer needs.</li> <li><b>Public recognition of competence:</b> Develop a competence assurance framework against which people can be assessed and registered. A common understanding of competence across the sector which is easy to understand and communicate.</li> <li><b>One well policed competency card:</b> Benchmark existing skill card schemes for the sector and harmonise into a new skill card which is well publicised.</li> </ul>	
Proposed action for employers	Proposed action for partners	Impact/outcome if successful	Timescales
<p>Employers to act as ambassadors and role models for the sector with schools.</p> <p>Stakeholder trade associations, including employer members, to market the sector and promote careers information.</p>	<p>Careers &amp; Diversity Interest Group develop and steer career strategies and diversity research.</p> <p>Training providers: Train new entrants prepare new entrants effectively for the sector.</p> <p>Career advisors and organisations to provide up to date information advice and guidance on the opportunities in the sector</p> <p>Schools motivate interest in the sector and vocational qualifications.</p> <p>Learndirect advice line provides clear advice and guidance to all enquirers</p> <p>Trade Union: part of the negotiation of one competency card.</p>	<ul style="list-style-type: none"> <li>Careers routes that are clearly understood by people from all groups and backgrounds to position the sector as the occupation of choice.</li> <li>Flexible methods are established to create a mandatory, fully registered and qualified workforce which is recognised both internally and externally, to raise the image of the sector and its employees.</li> <li>One skill card which recognises competency across the sector which is valued by the workforce and understood by customers.</li> </ul>	<p><b>Yr 1:</b> careers materials developed; diversity and recruitment patterns researched; Sector marketing programme implemented; Sector Ambassadors developed; Flexible upskilling developed; National Training Awards delivered; Migrant worker equivalence qualification framework produced; existing competency cards benchmarked.</p> <p><b>Yr 2:</b> flexible upskilling methods implemented; high achiever ambassador programme developed; student &amp; parent initiative implemented; criteria for new harmonised competency card developed; recognised entry and progression pathways promoted; Skills competitions UK and World Skills supported.</p> <p><b>Yr 3:</b> one competency card implemented for the sector, including marketing campaign and policing mechanism; UK World Skills and UK skills competitions supported.</p>

## 8.2 Skills Priority 2: Communication and Information

Underpinning all of the consultation to date was the need for clear communication to and between all parties involved in the sector, and up-to-date, easy to digest information on skills issues. What emerged from the research was a lack of understanding of business issues such as research & development, benchmarking and competitive analysis and the emerging opportunities and threats related to areas such as these.

Many firms in the sector did not understand fully what training provision was on offer, or the curriculum content within the courses they were aware of. This was teamed with a general unwillingness to pay more for training or recruit apprentices. Consultation around the country revealed that if businesses were made aware of the current training system and the benefits of staff development it may result in a change of approach and attitude.

A series of sector programmes dedicated to communication and information was seen to be vital to remedy these issues:

### 8.2.1 SummitSkills knowledge centre

Information on skills development in the sector is scattered amongst a wide variety of sources and it is difficult for companies and people to access, resulting in confusion and skills gaps across the sector with firms not taking action due to a lack of knowledge. A business focused national hub will become a one-stop-shop for the sector's skills matters, using simple language and consistent terminology to help businesses understand benchmarking, supply chain management and other issues. This knowledge centre will provide authoritative insight and market intelligence on building services engineering competitiveness to educate and help businesses plan ahead.

***“Industry-driven awareness”***

Wales workshop comment

### 8.2.2 Provision clarity

A significant number of courses and qualifications across the sector are surplus to employer requirements, with confusion over what training and funding is on offer to employers and their workforce. SummitSkills will work with the Welsh Assembly Government to remove any out-of date curriculum and develop clarity with providers on authorised progression and funding routes. To assist this, a course database for upskilling the sector will be publicised to employers. Through this activity, employers will have a clear understanding of the provision available and how it fits with their needs.

### 8.2.3 Apprenticeship cost/benefit analysis

Employers in the sector already make a significant contribution to the training and development of staff, especially in supporting and mentoring apprentices and in-house training. But as yet this is not officially quantified and therefore not understood or recognised by Government.

SummitSkills will develop and refine its work-in-progress cost models to place costs on employer support of this kind, which will be promoted to Government in order to help achieve a sensible balance between employer and government contributions to training.

***“Better communication from top right down to bottom – Government to micro business.”***

Wales workshop comment

#### **8.2.4 Proof that training pays**

The majority of employers are unwilling to pay more for their training and need convincing about the benefit to business of funding more than they do currently. Through developing case studies that show the benefit of training and clearly defines the contribution that training makes to increased productivity and profitability will provide employers with the proof that training pays. The anticipated result will be employers that value technical and business training and commit to training their staff and fund this training to increasing levels.

## Skills Priority 2: Communication and Information

### Create a one stop knowledge centre for all building services engineering skills development needs

The issue		Proposed solution	
<ul style="list-style-type: none"> <li>Information on skills development is scattered amongst a variety of sources and is difficult to access, resulting in confusion and skills gaps. Sector LMI is not regularly available.</li> <li>There are a significant number of sector courses and qualifications that are surplus to employer requirements. There is also confusion over training availability and access to public funding.</li> <li>Employers in the sector make a significant contribution to the training and development of staff, especially in supporting and mentoring apprentices, but this contribution is not understood or recognised by Government.</li> <li>The sector needs convincing about the business benefits of training and persuaded to train more than they currently do.</li> </ul>		<ul style="list-style-type: none"> <li><b>SummitSkills knowledge centre:</b> develop and communicate a one stop knowledge centre for sector skills matters. Implement annual LMI surveys and wider research and share business insights to improve competitiveness.</li> <li><b>Provision clarity:</b> work with the Welsh Assembly Government to remove out of date curriculum from the Super class Database and develop clarity with providers on authorised progression pathways and availability of public funding. Develop and publicise a course database for upskilling the sector.</li> <li><b>Apprenticeship cost benefit analysis:</b> develop and refine models that review all the costs, including employer contributions, of apprenticeship training.</li> </ul> <p><b>Proof that training pays:</b> develop and communicate employer case studies to show the benefit of training, clearly defining the contribution that training makes to increased productivity and profitability.</p>	
Proposed action for employers	Proposed action for partners	Impact/outcome if successful	Timescales
<p>Employers provide data on apprenticeship costs to help refine cost models and case studies to show training pays.</p> <p>Stakeholder trade associations contribute data to the knowledge centre and help to publicise its availability and value, and proof that training pays.</p>	<p>Welsh Assembly Government and other relevant nations funding bodies: work with SummitSkills to develop clarity in the sector provision available.</p> <p>Welsh Assembly Government: consider the apprenticeship cost benefit models developed to achieve a funding balance for employers.</p> <p>Welsh Assembly Government: work with the Knowledge centre to refine the sector LMI at regional level.</p> <p>HE / HEFCW: share research data on the sector with the knowledge hub.</p> <p>FE: work with SummitSkills to provide clarity in the provision offered through authorised progression routes.</p> <p>Various LMI sources: work to develop up to date information on the sector.</p> <p>Regional observatories: share information and work with the knowledge hub on sector issues.</p> <p>Trade Union: help to promote the proof that training pays.</p>	<ul style="list-style-type: none"> <li>A business focussed national hub for skills-related knowledge, development and support, providing authoritative insight and market intelligence on sector competitiveness and skills matters.</li> <li>Employers have a clear understanding of provision and how it fits with their business and employee needs.</li> <li>A robust model that assesses the total costs of apprenticeship training and helps to achieve a sensible balance between employer and government training contributions.</li> <li>Employers value and commit to training, and to fund it to increasing levels.</li> </ul>	<p><b>Yr 1:</b> national data set for approved qualifications refined; learning databases tidied; course database developed and publicised; Employer/student /provider meetings; 'training pays' case studies developed and publicised; apprenticeship models developed; Business Solutions portal expanded; sector LMI projects implemented.</p> <p><b>Yr 2:</b> LMI communications plan implemented; Government lobbied for funding balance using apprenticeship model; skills gap matrices for the sector developed; SummitSkills knowledge hub developed.</p> <p><b>Yr 3:</b> knowledge hub launched linked with observatories and sector; Proactive skills gap planning implemented; E-learning material sourced available through knowledge hub.</p>

## 8.3 Skills Priority 3: Training Provision

SummitSkills' sector needs analysis at stage one identified a need for business and management provision and renewable energy training. Following this, the assessment of current provision highlighted the strengths and shortcomings of the sector's existing training mechanisms, and revealed the need for a considerable amount of work to address fundamental concerns and areas for improvement. A requirement for sustainable entry routes; more relevant and better quality provision; mechanism to identify informal training, standalone technical certificates and improved higher education provision were all high on the agenda.

SummitSkills' report findings and recommendations were supported by the views of employers around the UK who attended the workshops held to discuss these issues.

Six sector programmes were identified to tackle these issues and create a sustainable training structure for the sector that would benefit both the sector's employers and the wider economy.

### 8.3.1 Relevant training reflecting NOS at all levels

Qualification content is seen in some cases as being out of date or not suitable for the needs of the sector. With the need for qualifications being driven by external influences such as renewable energy targets, high quality and relevant training needs to be developed within fast timescales. Within this programme of work, SummitSkills will develop a process through its Sector Qualifications Strategy for maintaining and updating qualifications regularly to reflect the real work requirements of employers.

### 8.3.2 Accredited training mapped to NOS

There is a significant amount of high-quality training that is either non-qualification-based, being carried out in-house or through manufacturers, but does lead to formally recognized qualifications. Through creating a system of credit accumulation transfer and accrediting training mapped to national occupational standards, the sector can ensure that these types of valuable training can add to the sector's skills base.

***“The sector and employers need training to Level 3 - make the funding and training to prioritise this”***

Wales workshop comment

### 8.3.3 Sustainable entry routes

There are significant numbers of learners on technical certificate courses and other qualifications that lead to non-economically valuable skills and are not suitable entry routes into the sector. The number of people receiving this training outstrips any sector requirement by at least five fold. SummitSkills will work with partners to develop authorised entry and progression routes for a specific number of people that have been directly linked to the sector's skills requirements. This will ensure that new entrants have a realistic chance of employment in the sector and employers can support a sustainable number of workers.

### 8.3.4 Wider and sustainable HE provision

There are a low number of higher education establishments offering building services engineering sector courses spread unevenly around the UK, resulting in some areas with no provision at all. This is an acute problem for individuals who need to gain a professional qualification alongside their work. SummitSkills would like to work with new and existing providers to develop a sustainable UK-wide network of HE provision which is relevant to the 'real world'. This will bridge the gap between operatives and professionals within the sector and encourage the uptake of higher level qualifications.

### **8.3.5 Quality assured training provision including quality marks**

Employers have a general dissatisfaction with the quality and service and teaching provided by further education, this is combined with a wide variation in the achievement of quality marks by providers. In this programme SummitSkills plans to work with providers to improve the quality of teaching and administration and also encouraging achievement of quality marks. The end result will be that employers will have confidence that FE, HE and private training provision delivers quality training that motivates trainees and maintains good communication links between provider, trainee and employer.

***“Realistic courses – not just for bums on seats.”***

Wales workshop comment

### **8.3.6 Renewables and environmental technologies**

There is a real government commitment for renewables and environmental technologies but the sector’s national occupational standards and qualifications are not up to date in this area, which means the sector is lagging behind in vital skills needed for this new market. By developing and implementing standards and qualifications for environmental technologies that embrace craft, technical and professional occupations, we can ensure these skills are in place. A mechanism will also be put in place to review and update qualifications expediently in this fast-changing arena.

## Skills Priority 3: Training Provision

### Pro-active, timely, high quality public funded provision for all training and fast-changing sector priorities

The issue		Proposed solution	
<ul style="list-style-type: none"> <li>Some qualification content is seen as out of date or not suitable for sector needs. New content needs to be developed to meet the changing needs of the sector.</li> <li>Non qualification based training is not currently monitored or formally recognised across the sector.</li> <li>A significant amount of funding is directed at standalone technical certificates* and non-economically valuable skills, which only offer a theory based qualifications and which are not suitable entry routes into the sector. The number of people receiving this training outstrips any sector requirement at least five fold.</li> <li>There very few HE establishments offering sector courses which are also spread unevenly around the UK, with some regions with no provision at all.</li> <li>Employers in Wales are generally very satisfied with the quality of service and teaching provided by FE colleges and private training providers.</li> <li>NOS and qualification content is out of date in relation to renewables and environmental technologies. This means that the skills of the sector are lagging behind the market requirements to be able to design, install and maintain new technologies.</li> </ul> <p>* standalone technical certificates do not apply in Scotland</p>		<ul style="list-style-type: none"> <li><b>Relevant training reflecting NOS at all levels:</b> develop a process to regularly maintain and update qualifications to reflect the real world requirements of employers</li> <li><b>Accredited training mapped to NOS:</b> develop credit accumulation transfer and ensure manufacturer and non -qualification-based training is mapped to NOS</li> <li><b>Sustainable entry routes:</b> authorised entry and progression routes into the sector are defined, implemented and promoted for a specific number of people and directly linked to the skill needs of the sector</li> <li><b>Wider and sustainable HE provision:</b> develop a UK-wide sustainable network of HE provision which is relevant to the real world, including foundation degrees, to help bridge the gap between sector operatives and professionals</li> <li><b>Quality assured training provision including quality marks:</b> work with partners to improve the quality of teaching and administration and increase achievement of quality standards. Existing inspection regimes reviewed for the sector and support provided to improve them. SummitSkills to decide if it develops its own quality mark scheme for the sector.</li> <li><b>Renewables &amp; Environmental Technologies:</b> develop and implement national occupational standards for current and emerging environmental technologies to embrace craft and professional occupations. Ensure environmental technologies are fully integrated within other activities such as the careers strategy and apprenticeship training frameworks.</li> </ul>	
Proposed action for employers	Proposed action for partners	Impact/outcome if successful	Timescales
<p>Employers: contribute to the development of up to date NOS and a process for accrediting training</p> <p>Trade associations: work with SummitSkills to support development and implementation of NOS and qualifications, including HE</p> <p>Manufacturers: contribute to develop an accreditation process for the sector</p>	<p>WAG: work in partnership with providers to ensure sector approved qualifications and courses are funded</p> <p>FE: actively remove standalone technical certificate provision and will ensure their provision reflects the latest NOS delivered in a quality and professional way</p> <p>HE/ HEFCW/Professional Bodies: work with SummitSkills to develop sustainable HE network of degree and sub-degree courses for the sector</p> <p>Nations standards bodies: ensure the latest sector NOS are reflected in the qualifications</p> <p>Awarding Bodies: develop qualifications reflecting the latest NOS</p> <p>Welsh Assembly Government: work to accredit qualifications for the sector</p> <p>Third party certification bodies: work to develop an accreditation process for the sector</p> <p>Welsh Assembly Government : help to ensure appropriate inspection regimes maintain quality provision for the sector</p>	<ul style="list-style-type: none"> <li>A sector qualification strategy which meets the needs of the sector and is updated in a timely fashion.</li> <li>A credit accumulation transfer mechanism to monitor and recognise employer, manufacturer and non qualification based courses</li> <li>Recognised entry and progression routes to maximise recruitment and retention of a diverse range of applicants, minimising potential for partly trained practitioners and linking requirements to LMI</li> <li>A sustainable network of degree and sub degree courses across the UK</li> <li>Employers have confidence that all providers deliver quality training with good communication links between provider, trainee and employer.</li> <li>Updated and maintained NOS and qualifications that reflect renewables and environmental technology skills needs.</li> </ul>	<p><b>Yr 1:</b> L1/2 entry routes developed; NOS review completed; renewable technologies NOS completed; SQS started; sector-specific criteria developed for quality standard;; professional body forum established; more employers involved in HE</p> <p><b>Yr 2:</b> New entry routes implemented; SQS continued; LSC standard implemented; fast track accreditation process developed; variety of HE delivery modes developed; Proactive new skills planning for sector undertaken</p> <p><b>Yr 3:</b> SQS completed; credit accumulation process completed; early adopters of accredited training promoted; CPD passport scheme developed; UK HE network completed</p>

## 8.4 Skills Priority 4: Funding

In order to help the sector achieve its aims to create a skilled workforce, a more flexible funding system is imperative. Current structures that include age caps on funding or funding for non-sector approved courses are seen to be restrictive or even detrimental to the sector’s progression, development and productivity.

Through the programmes below SummitSkills intends to create a mutually beneficial funding system that not only assists the sector in recruiting, training and developing a productive workforce but also ensures that funding agencies are directing money at skills that will be of economic benefit.

*“Provide access to grants funding via one place”*

Welsh workshop comment

### 8.4.1 Increased flexibility of funding

Current funding structures often restrict employers in their training efforts and they often have special requirements to fund areas that are not the norm, such as mature entrants. At the same time it is difficult for public bodies to ensure that funding is aligned to employer needs. SummitSkills will develop employer-centric brokerage for building services engineering skills development, supported by flexible demand-led funding, to ensure that public funding for training delivers maximum benefit for businesses and individuals.

*“Re-adjust focus of funding – NVQ – work based.”*

Welsh workshop comment

### 8.4.2 Redeployment of NEVS funding

As detailed in the ACP summary, a considerable amount of current funding is directed at qualifications that are of no economic value and not relevant to the sector. Working with regional partners, SummitSkills will seek a more effective use of this funding and redirect it into areas that will increase the sector’s productivity and skills levels. The aim is to ensure that all public funding available to the sector is used to support training recognised by the sector and demanded by employers, with all non-economically valuable skills training eradicated.

## Skills Priority 4: Funding

### Flexibility in funding to meet fast-changing skills needs to develop business and workforce

The issue		Proposed solution	
<ul style="list-style-type: none"> <li>It is difficult for public funders of training to ensure it is aligned to employer needs. There are also special requirements across the sector for funding to support areas which are outside of the norm e.g. mature adults.</li> <li>A considerable amount of current publicly funded training provision leads to non-economically valuable skills (NEVS) and therefore is not relevant to the sector. There is also a need for new training provision to be funded to meet the changing needs of the sector.</li> </ul>		<ul style="list-style-type: none"> <li><b>Influencing flexibility of funding:</b> develop employer-centric brokerage for sector skills development, supported by flexible demand-led funding</li> <li><b>Redeployment of NEVS funding:</b> work with regional and national partners to seek a more effective use of public funding to meet the changing needs of the sector, to increase productivity and skills levels of the workforce</li> </ul>	
Proposed action for employers	Proposed action for partners	Impact/outcome if successful	Timescales
<p>Employers: promote and support authorised entry and progression routes with their providers and help to deliver up to date provision</p> <p>Trade associations: promote and support authorised entry and progression routes with their employers and help to deliver up to date provision</p>	<p>WAG: work with providers to review and reduce all NEVS funding</p> <p>FE providers: actively reduce any NEVS provision and replace it with new provision demanded by the sector</p> <p>Welsh Assembly Government: help to ensure the total funding available for the sector is maintained</p> <p>Trade Unions: to lobby for flexible funding opportunities for the sector</p>	<ul style="list-style-type: none"> <li>Public funding for training delivers maximum benefit to businesses and individuals.</li> <li>All public funding available is used to support training that is recognised by the sector and demanded by employers.</li> <li>All non-economically valuable skills training is stopped.</li> </ul>	<p><b>Yr 1:</b> Alternative uses for NEVS funding mapped; NEVS redeployment started; social agenda items identified for funding; common strategy for ESF opportunities developed, brokers working with managing agents modelled; adult retention initiatives developed</p> <p><b>Yr 2:</b> NEVS redeployment continued; funding opportunities outside academic year developed; fast track process approved for skills gap funding</p> <p><b>Yr 3:</b> NEVS redeployment completed; further NEVS prevented</p>

## 8.5 Skills Priority 5: Management and Leadership

Business management and leadership was a clear theme emerging from the Sector Needs Analysis – a lack of any discernable business planning or management is affecting competitiveness and makes firms vulnerable when pitched against those who are prepared and proactive in this respect. A number of SummitSkills' stakeholders also have management and leadership as a priority, which will be highlighted through the regional action plans.

Three programmes of work here will underpin SummitSkills' work in this area to develop and support managers and leaders who will create successful, productive and profitable businesses.

### 8.5.1 Progression and development of first line and middle managers

There is a skill gap between craft and first line supervisory levels which is not being addressed, and people on the tools being placed in supervisory positions without relevant training, which has a negative impact on staff and business performance. SummitSkills will develop continual professional development opportunities for craft operatives through to technician and first line management to help address this gap. Pilot initiatives in developing business and management skills that are rolled out to encourage take-up will increase the use of supervisory training for first line managers which will lead to not only greater business effectiveness and productivity but also staff motivation.

***“Early stage training – benchmarking and business skills to raise awareness amongst new entrants.”***

Wales workshop comment

### 8.5.2 Developing enterprise skills for SMEs and micros

The sector is very reactive to new opportunities and generally SMEs and micro-businesses do not forward plan or proactively manage their business to take external drivers into account. This is affecting the sector's productivity. In this programme various tools will be developed to prepare current and future managers with the enterprise skills needed to thrive in a competitive market. SummitSkills will develop and implement pilot initiatives such as the already successful 'action learning for leaders' to equip the workforce with the skills needed to proactively develop new business opportunities. National occupational standards will also be developed as part of this activity to create standards that tailor specific entrepreneurial skills to the needs of the sector.

### 8.5.3 Developing skills to increase business competitiveness

One of the major findings of the SNA was the lack of awareness and use of business skills such as benchmarking, competitiveness analysis or future skills planning. Inaction in this respect is creating a reactive sector that is extremely vulnerable to competition both home and abroad. There is a real need to develop skills in this area and help business managers realise the benefits of this work. SummitSkills will do this by developing training and pilot programmes on strategic business planning skills and promote those who are already reaping rewards. This activity will pave the way for the building services engineering sector to become proactive in both management approach and exploitation of business innovation.

## Skills Priority 5: Management and Leadership

### Ensuring the sector has the skills it needs to plan and develop profitable and competitive business

The issue		Proposed solution	
<ul style="list-style-type: none"> <li>There is a skill gap between craft and first line supervisory levels which is currently not being addressed. People on the tools are being placed in supervisory positions without relevant training to maximise effectiveness and productivity.</li> <li>The sector is very reactive to new opportunities. Generally SMEs and micro-businesses do not actively manage their business to take external drivers into account. As a result the productivity of the sector is low.</li> <li>There is a general lack of the use of business skills across the sector to formally benchmark the effectiveness of businesses and improve competitiveness. The sector uses informal benchmarking rather than formal methods.</li> </ul>		<ul style="list-style-type: none"> <li><b>Progression and development of first line and middle managers:</b> develop and promote continual professional development opportunities for craft operatives to technician and first line management. Pilot initiatives in business and management skills and encourage employer take-up.</li> <li><b>Developing enterprise skills for SMEs and micros:</b> develop and promote various tools to prepare current and future managers of SMEs and micros in the sector with the skills to thrive in a competitive market. Develop and use pilots to encourage wider employer take-up. Develop enterprise national occupational standards relevant for the sector.</li> <li><b>Developing skills to increase competitiveness of the sector:</b> develop benchmarking and strategic planning training to help businesses realise the benefits of management and leadership training and increase competitiveness and productivity. Pilot programmes, document and promote benefits achieved.</li> </ul>	
Proposed action for employers	Proposed action for partners	Impact/outcome if successful	Timescales
<p>Large employers: pilot the first line manager training on key sites regionally.</p> <p>Employers: recognise and understand the benefits of management training and be more prepared to train their staff and then promote the benefits.</p> <p>Trade associations: provide training courses and guidance to their employers to encourage management and leadership development.</p>	<p>Welsh Management Council: help to develop an action learning programme for leaders in the sector.</p> <p>Welsh Assembly Government: provide funding for management and leadership training for the sector.</p> <p>Business solutions: develop the business leader development initiative.</p> <p>SFEDI: promote to employers the benefits of management and leadership training.</p> <p>DBERR: help to develop leadership skills for innovation for the sector.</p> <p>Kingston College Management Centre: develop the enterprise zone for the sector.</p> <p>Trade Unions to promote the benefits of management and leadership training.</p>	<ul style="list-style-type: none"> <li>Improved succession planning in SMEs with increased use of supervisory training for first line managers leading to greater effectiveness and sector productivity.</li> <li>People equipped with increasingly sophisticated business skills to increase competitiveness and proactively develop new business opportunities.</li> <li>The UK BSE sector is proactive in the exploitation of innovation, service and business competitiveness.</li> </ul>	<p><b>Yr 1;</b> pilot programme for first line managers mapped; benefits of KPI and benchmarking promoted; Solutions for Business website promoted; business benefits for manager/leader training developed and promoted ;'business planning made easy' developed.</p> <p><b>Yr 2;</b> Programme of employers using KPIs and benchmarking reviewed; case studies of first line manager programmes developed and promoted; develop pilot enterprise skills programme developed; wider strategic skills programme developed.</p> <p><b>Yr 3;</b> Implement enterprise skills programme in sector implemented, case studies developed and promoted; wider strategic skills programme in sector piloted, case studies developed and promoted; best practice 'business planning demystified'.</p>

## 8.6 Underpinning programmes: enabling activity

Positioned across all of the priorities and programmes listed above are two areas that are a fundamental part of any activity carried out under the Sector Skills Agreement. Rather than allocate these under one particular priority or programme, it was felt important that the forming of partnerships and exerting influence on government weaved through most if not all of the programmes planned for the sector and will act as enablers to support the various projects being undertaken.

### 8.6.1 Partnerships

Setting up networks to foster a partnership culture was seen to be vital following the events around the country. There was much enthusiasm for all parties within the sector working together, but a requirement for some coordinated activity to encourage people to work more closely together.

SummitSkills will be setting up various partnership networks as part of the Sector Skills Agreement and also encouraging other parties to do the same. Already in many regions there are successful forums and we want to maximise on this. The SSA implementation groups that will be established as part of this project will also be a core partnership mechanism. Consisting of key local stakeholders and influential employers, these groups will take responsibility for progressing SSA action at local level. They will be the lynchpin of the Sector Skills Agreement implementation on the ground.

Employers, providers, manufacturers, government and other key stakeholders working together: partnership of this kind is the source of a more proactive sector and will enable members to share knowledge and best practice and instill a sense of society into the sector.

### 8.6.2 Government influence

Ensuring that the sector liaises closely with the Welsh Assembly Government will be central to the whole Sector Skills Agreement process. All areas of the SSA will involve helping the Welsh Assembly Government and its agencies to understand the building services engineering sector and its employer needs. For each skills priority the Government will have a central role, either through learning from the sector and recognising its activity, or directing funding to ensure a structure is in place to support skills development.

In many areas the sector is also looking for the Welsh Assembly Government to lead by example to assist the sector in its efforts. Specifying and awarding contracts to firms that can demonstrate clear staff training and development for instance, or creating legislation in consultation with the sector to avoid potential pitfalls when trying to implement on the ground.

Working with the Welsh Assembly Government to influence and liaise in this way will provide the Sector Skills Agreement with a solid foundation from which to work and progress.

***“Influence WAG procurement through built environment strategy and sustainable development initiative to include provision for “sustainable workforce” in tender criteria e.g. have an apprentice.”***

Wales Workshop Comment

## 9 Proposed actions and solutions for Wales

The UK-wide skills priorities and programmes detailed in section eight have been taken down to Welsh national level to reflect more closely the proposed collaborative solutions between employers and partners for the sector. These action plans also detail how the proposals link to Welsh stakeholder policy and priorities.

### 9.1 Nation overview: Wales

Characteristics of the building services engineering sector in Wales include:

- There are 21,000 employees in the building services engineering sector representing around 1% of all Welsh jobs.
- There are significantly fewer female employees.
- More than 70% of all contractors work in micro companies with 1-3 employees
- The average weekly full time wage is £500, 10 per cent higher than the Welsh average.
- Where hard to fill vacancies exist, most are hard to fill for reasons other than skill shortages.
- Approximately 38% of the contractors are self employed.

None of the industries within the building services engineering sector are currently in decline and indeed the whole of the sector is currently in a period of growth. The SummitSkills SNA explores this idea of decline and growth and this is highlighted in the fact that 68% of companies interviewed within Wales believe that the building services engineering sector will continue to grow.

#### **New and emerging markets - environmental and renewable technologies**

Wales is a major driver in the UK for renewable energy generation, and therefore needs a building services engineering sector that is fully conversant with renewables technology and its installation both in large renewable generation and micro generation. SummitSkills believes that currently the skills available in Wales do not have the capacity to meet demand of the type that is being discussed by policy makers in the Welsh Assembly Government.

### 9.2 Welsh stakeholders and partners

In seeking to address the issues identified in the work undertaken in Stages 1 & 2 of the Welsh SSA, SummitSkills will be working with and contributing to many Welsh stakeholders' own policies, priorities and programmes. These include:

**Welsh Assembly Government;** Policies and programmes such as The Learning Country 2: Delivering the Promise; Skills and Employment Action Plan 2; Wales a Vibrant Economy; the Microgeneration Action Plan; Reaching Higher: Higher Education and the Learning Country: A Strategy for the Higher Education Sector in Wales; 14-19 Learning Pathways in Wales; Iaith Pawb: A National Action Plan for a Bilingual Wales and Words Talk-Numbers Count. The essence of these policies is widening access and creating opportunities for all Welsh citizens determined to succeed in the Welsh economy. Creating better employer/college/HE partnerships and tackling climate change.

**Careers Wales;** whose priorities are investing in the workforce of the future, reducing economic inactivity among young people, improving productivity through personal career planning.

**Learndirect Wales;** helping to create, support and sustain a lifelong learning network where learning providers will offer the time, place, pace and style of learning that most closely meets the learners needs.

**Welsh Assembly Government – DCELLS ;** whose main role is to distribute funding to colleges in Wales, with one of its remits being to hold colleges accountable for delivering the quantity, quality and relevance of further and higher education and research sought by Welsh Ministers for achieving best value from public funding, and for managing their financial and other resources in a sustainable way.

**Futureskills Wales;** whose aim is to analyse the Welsh labour market to inform policy making in Wales and further afield. Also to improve the availability, quality and consistency of labour market information and intelligence across Wales, work closely with Careers Wales to provide the organization and its clients with labour market information.

**Jobcentre Plus;** supporting people of working age from welfare into work, and help employers to fill their vacancies. Key areas for them is providing high quality and demand led services to employers which help fill job vacancies quickly and efficiently with well prepared and motivated employees, and helping unemployed or economically inactive people move into employment.

**Trade Unions;** the TUC Skills & Lifelong Learning Team supports trade unions in Wales to encourage and help workers take up opportunities to develop the learning and skills.

### **9.3 Wales proposed activity against skills priorities and sector programmes**

In the tables to follow SummitSkills presents Welsh action plans for consideration which detail how we will seek to address these issues through partnerships to encourage employers, stakeholders and key partners to work closely together to provide a well trained and qualified workforce for the building services engineering sector which can make a significant contribution to the wellbeing and economy of Wales.

Under each of the five skills priorities we have detailed the employer need, how it links with existing stakeholder policy, the actions that need to be taken against each sector programme, which stakeholders are primarily involved, potential employer engagement and a target date for the activity.

### **9.4 Next steps**

SummitSkills will now be meeting with stakeholders in Wales to discuss the proposed action plans and consider what can and will be both committed to and achieved.

### SummitSkills Sector Skills Agreement Stage 3 Action Plan for Wales

<b>Skills Priority 1</b>	<b>Professional Image &amp; Competence:</b> promote a positive image of the sector and develop a skilled and sustainable workforce		
<b>Employer Need</b>	<ul style="list-style-type: none"> <li>To attract good quality candidates into the sector who will become skilled and competent employees.</li> <li>Lack of awareness and misperception of the sector deter many suitable people from considering building services engineering careers.</li> <li>Underrepresented groups have either no understanding or a negative perception of the sector.</li> <li>There are many in the sector with a range of experience but are part-qualified or have no formal qualifications or recognition of competence.</li> <li>Customers do not have an understanding of competence when awarding work to contractors.</li> <li>There are a variety of competence cards which are causing confusion across the sector. Many cards are not actively policed.</li> </ul>		
<b>Stakeholder Strategies/Policies</b>	<b>Welsh Assembly Government:</b> Skills and Employment Action Plan Words Talk Numbers Count Reaching Higher	Wales A Vibrant Economy The Learning Country 2 : Delivering the Promise 14-19 Learning Pathways in Wales	laith Pawb
<b>Additional Partner Strategies</b>	Careers Wales Trade Associations Go Wales	Trade Unions JIB Minority Groups eg Chwarae Teg	Estyn Employers JCP Built Environment Strategic Group

Sector Programme	Actions	Led By [Stakeholder/s]	Employer/Stakeholder Engagement/Action	Target Date
1.1 Aspirational sector image	SummitSkills are developing a Wales specific web based interactive Careers Map to assist potential entrants to understand entry routes, and thereafter potential for progression from craft to more technical and managerial positions. Provide reciprocal links to both organisations websites.	SummitSkills	Careers Wales/Training Providers to promote.	S 2007/08
	SummitSkills will work in partnership with Careers Wales to improve the IAG advice dispensed to students of all ages and all levels, to ensure accurate, honest advice is given as part of the SSA Agreement with Careers Wales.	SummitSkills/Careers Wales/Training providers	Careers Wales to use latest BSE promotional materials. Employers to provide case studies from the different BSE occupations.	S 2007/08
	SummitSkills will have the latest information/careers material for BSE to take into schools/careers events.	SummitSkills/Careers Wales	Careers Wales to use the most up to date careers materials available.	S 2007/08
	SummitSkills to meet with Careers Wales annually to update careers advisors on any changes to the BSE sector and to promote collaborative working practices between both organisations, example areas being, vocational pathways, modern apprenticeships, adult returners.	SummitSkills/Careers Wales	Arrange annual <i>Keeping in Touch</i> meetings or greater frequency as required.	M 2008 onwards
	SummitSkills to provide accurate up to date LMI for use by Careers Wales in their work with all age career planning.	Careers Wales/SummitSkills	Careers Wales to use LMI from Welsh SSA, and the LMI Welsh BSE Sector Profile.	M 2008
	To co-ordinate products and services between the two organisations to ensure client's needs are met.	Careers Wales/SummitSkills	Range of material that suit different client groups.	S 2008
	Assist with the dissemination of Careers Wales products/activities/events. Assist and attend with other relevant careers event.	Careers Wales/SummitSkills.	Support at Careers Events etc. Employers/training providers to assist at events when applicable.	S 2007 onwards

	SummitSkills Careers and Diversity group developing a new Careers CD for use in Schools, at Careers Events and by industry training providers to show people what the sector has to offer.	SummitSkills	Careers Scotland/Training Providers to promote in Schools and at Careers Events.	S 2007 onwards
	Work with the Welsh Assembly Government to ensure only sector approved qualifications are publically funded.	Welsh Assembly Government/SummitSkills	Regular communications.	S 2007 onwards
	Initiate a public awareness campaign, to ensure the general public understand what a competently qualified plumber, electrician and HVCA engineers is.	Welsh Assembly Government/SummitSkills	Welsh Assembly Government to support and promote the campaign.	M 2008 onwards
	Lobby for funding to allow sole traders and SMEs in South Wales employing under five, access to training funds to improve their productivity, competence and investment in skills.	Welsh Assembly Government/SummitSkills	Welsh Assembly Government to fund the requirement by potentially redirecting funding from NEVS	M 2008/09
	Use Skills Competitions as a way of promoting the best young talent in the sector for example regional skills competitions, Skills City and World Skills.	SummitSkills/Training Providers/Trade Associations	Employers nominate candidates and provide support. Providers to run the Local competitions and nominate winners to go forward into National & International competitions.	S/M 2008 onwards
1.2 Fresh approaches to diversity	SummitSkills Careers & Diversity Group to develop innovative promotional material aimed at attracting more Women and Ethnic minorities to apply to work in the BSE sector.	SummitSkills Diversity Interest Group/JCP	Targeted Careers material produced	S 2008
	SummitSkills to do further research on female and minority group issues within the BSE sector to ascertain why these groups do not view BSE as viable career choice.	SummitSkills/Employers/Trade Associations/Minority Groups/Built Environment Strategic Group	Research to be undertaken with female, BME groups and employers	S/M 2008 Onwards
	SummitSkills to ensure that bilingual training provision is made available to end users and monitor the demand from Welsh medium schools.	SummitSkills/Estyn	More employers taking on welsh speakers.	S/M 2008 onwards
	Develop materials and mechanisms to engage with A-Level students and university graduates to encourage them to apply for higher level roles within the sector.	SummitSkills/Go Wales	Explore suitable materials and vehicles to access these groups in Wales.	2009
	SummitSkills will actively encourage partnership working with Trade Unions and other stakeholders to address the diversity and BME issue.	Trade Unions/SummitSkills/ Stakeholders	Equality and diversity issues being discussed and addressed	S/M 2008/09
1.3 Ensuring everyone in the sector is competent	The BSE sector regards NVQ Level 3 as the competence level for people working in the sector. Anyone completing a Modern Apprenticeship will gain an NVQ Level 3.	Welsh Assembly Government/SummitSkills/Trade		
	Promote the financial incentives of the Workforce Development Fund to employers in South Wales and the Workplace Fund to employers in N Wales	Providers/Welsh Assembly Government	Welsh Assembly Government/Employer participation	2007/2008

	Lobby for funding to allow the sector access to training funds to improve their productivity and competence via Accreditation of Prior Learning (APL) schemes to enable them raise their productivity and competence levels. APL schemes include: <ul style="list-style-type: none"> <li>Crediting Electrotechnical Competence (CEC) is the APL scheme for the Electrical Industry, and can be accessed through selected colleges.</li> <li>The SummitSkills National Assessment Programme (SNAP) is the APL scheme for the Heating, Ventilating, Air Conditioning &amp; Refrigeration industry, and again can be accessed through selected colleges.</li> </ul>	Welsh Assembly Government/SummitSkills/Training providers	Welsh Assembly Government to fund the requirement by potentially redirecting funding from NEVS	S/M 2009 onwards
	An APL scheme for Plumbing is under development by SummitSkills.	SummitSkills/Providers/Industry partners/Employers/Built Environment Strategic Group	Partner organisations to work together to develop a suitable scheme	S
	SummitSkills to work with the Union Learning Representatives (URLs) and employers to identify employees training needs and encourage them to develop their skills.	Trade Unions/SummitSkills/Employers	Training needs identified	M
1.4 Public recognition of competence	The BSE sector regards NVQ Level 3 as the competence level for people working in the sector, and qualifies them to obtain a Competence Scheme Card. The public need to be made more aware of this, and the need to ask for such a Card before placing work with a contractor.	Employers/Trade Associations	Public more aware of what constitutes a competent person	M/L 2009
	Work with the Welsh Assembly Government and relevant organisations to raise public awareness of competency.	SummitSkills/Welsh Assembly Government/appropriate partners	Public more aware of what constitutes a competent person	M/L 2009
	Lobby for funding to allow the sector access to training funds to improve their productivity and competence via Accreditation of Prior Learning (APL) schemes to enable them raise their productivity and competence levels. APL schemes include: <ul style="list-style-type: none"> <li>Crediting Electrotechnical Competence (CEC) is the APL scheme for the Electrical Industry, and can be accessed through selected colleges.</li> </ul> The SummitSkills National Assessment Programme (SNAP) is the APL scheme for the Heating, Ventilating, Air Conditioning & Refrigeration industry, and again can be accessed through selected colleges.	Welsh Assembly Government/SummitSkills	Welsh Assembly Government to fund the requirement by potentially redirecting funding from NEVS	S/M 2009 onwards
1.5 One well policed competency card	At present each discipline in the sector has their own version of a Competence Card, explore with appropriate Joint Industry Boards if there is scope to develop a common Competence Card for the BSE sector.	JIBs/Trade Unions	National/Regional JIBs to discuss. TUC	L
	Lobby the Welsh Assembly Government to ensure all publicly funded contracts have a no card entry policy on site.	Welsh Assembly Government/Built Environment Strategic Group/SummitSkills	Welsh Assembly to promote to Local Authorities and their own divisions the need for carded operatives on site.	M/L 2009 onwards

<b>Skills Priority 2</b>	<b>Communication &amp; Information:</b> one stop knowledge base for all BSE skills development needs	
<b>Employer Need</b>	<ul style="list-style-type: none"> <li>• A source of current information on, LMI, training, provision and basic business planning and solutions tools.</li> <li>• Information on skills development is scattered amongst a variety of sources and is difficult to access, resulting in confusion and skills gaps. Sector LMI is not regularly available.</li> <li>• There are a significant number of sector courses and qualifications that are surplus to employer requirements. There is also confusion over training availability and access to public funding.</li> <li>• Employers in the sector make a significant contribution to the training and development of staff, especially in supporting and mentoring apprentices, but this contribution is not understood or recognised by Government.</li> <li>• The sector needs convincing about the business benefits of training and persuading to train more than they currently do.</li> </ul>	
<b>Stakeholder Strategies/Policies</b>	<b>Welsh Assembly Government:</b> Skills and Employment Action Plan Words Talk Numbers Count Reaching Higher Iaith Pawb	Wales A Vibrant Economy The Learning Country 2 : Delivering the Promise 14-19 Learning Pathways in Wales
<b>Additional Partner Strategies</b>	TUC; Careers Wales; Employers; Trade Associations; Training Providers; Learndirect Wales; Basic Skills	

<b>Sector Programme</b>	<b>Actions</b>	<b>Led By [Stakeholder/s]</b>	<b>Employer/Stakeholder Engagement/Action</b>	<b>Target Date</b>
2.1 SummitSkills knowledge hub	Supply relevant and up to date LMI data and sector information from Wales to the SummitSkills hub.	SummitSkills	Use data from SSA and the Welsh LMI Sector Profiles	S/M 2008 onwards
	SummitSkills to launch new sectoral web-based resource - <a href="http://www.solutions4business.info">www.solutions4business.info</a> which signposts businesses to the provision and services they need, and can use to deal with specific issues and problems.	SummitSkills	Employers using solutions4business.info web resource	S 2008 onwards
	SummitSkills to establish link on our website to signpost Welsh Union Learning website. – <a href="http://www.unionlearn.org.uk/ulf/learn-1056-f0.cfm">http://www.unionlearn.org.uk/ulf/learn-1056-f0.cfm</a>	SummitSkills/TUC/Trade Associations	Web link provide/	S 2008
2.2 Provision clarity	Work with Careers Wales to develop their IAG on our sector both for on-line delivery and face-to-face delivery.	SummitSkills/Careers Wales	Careers Wales to hold all BSE information in a common area.	S 2008 onwards
	SummitSkills to work with the Welsh Assembly Government on updating Section 98 and Section 96/97 to remove non-economically valuable skills i.e. funding that is used for provision what is viewed by the industry as not leading to employment within the sector. SummitSkills will agree with the Welsh Assembly Government what are deemed to be sectoral NEVS and an action plan over the next four years to remove them from the funding lists or in the case of stand alone technical certificates initially limited the number of starts working towards no stand alone technical certificates being publically funded in Wales.	Welsh Assembly Government/ SummitSkills	Agree a timetable for reduction and implementation.	S/M 2008 onwards
	SummitSkills to work with industry partners, Welsh Assembly Government and providers to reduce the numbers of such courses being, offered, prevent any new such courses being offered, and re-direct this funding into provision in priority areas for industry such as renewables.	SummitSkills/ Employers/Trade Associations/ Training Providers	Providers to stop offering NEVS courses	M/L 2009 onwards

	Build closer links with Learndirect Wales to see how both organisations can best promote the breadth of learning opportunities available to employers in our sector.	SummitSkills/ Learndirect Wales.	Make full range of learning material/support more visible to employers	S/M 2008
	SummitSkills to provide accurate and up to date LMI for the BSE sector.	SummitSkills/ Learndirect Wales	learndirect to make use of LMI for SSA, and the Welsh LMI Sector Profiles	S 2008
	SummitSkills to promote the range of services offered by Learndirect such as; their Individual Advice Line, Business Advice Line, Basic Skills, Training Partner Service and SME Support Service, Learning Bytes for Business, The National Learning Opportunities Database, Network of Branded Learning Centres. <a href="http://www.learndirect.co.uk/cymraeg/?view=Wales">http://www.learndirect.co.uk/cymraeg/?view=Wales</a>	SummitSkills/ Learndirect Wales	Provide a link on the SummitSkills Welsh section of our website to the learndirect website. Publish the numbers of the Individual and Business training Help-Lines.	S 2008
	Look for opportunities to work with Learndirect's marketing team to help increase SME awareness of the opportunities available to increase the productivity of their people through training and development.	Learndirect Wales/ SummitSkills	Increased SME awareness of training opportunities	S/M 2008
2.3 Apprenticeship cost benefit analysis	SummitSkills to work with Industry partners to further develop costing models which show the true cost to employers of training an apprentice. Once developed, to use these to inform discussions with the Welsh Assembly Government on ac employer and government contributions to training.	SummitSkills/Employers/Trade Associations SummitSkills/industry	Develop cost models Discuss training contributions with government/enterprise companies	S/M 2008/09
	Work with the Welsh Assembly Government to improve the apprenticeship management process in the BSE sector to encourage employers to engage meaningfully with the apprenticeship process and equip students with the appropriate learning to contribute to the sector's economy.	Welsh Assembly Government/Summit Skills/Employer/Trade Associations/TUC/Industry/Basic Skills Agency	Welsh Assembly Government to fund the programme and SummitSkills to manage and implement the process.	S/M 2008/09
2.4 Proof training pays	Work with the Welsh Assembly Government to improve the apprenticeship management process in the BSE sector to encourage employers to engage meaningfully with the apprenticeship process and equip students with the appropriate learning to contribute to the sector's economy.	SummitSkills/Trade Associations/Training Providers/Trade Unions/Basic Skills Agency	Encourage employers to engage with the Modern Apprenticeship process.	S/M 2008/09
	Use current research into the reasons why employers are not training. Identify role models and positive case studies to prove the benefits to the rest of the sector.	SummitSkills/Training Providers/Welsh Assembly Government	Produce positive case studies to evidence that training pays for the business.  Encourage employers to act as role models to demonstrate the benefits.	M 2009/ 2010

<b>Skills Priority 3</b>	<b>Training Provision:</b> proactive, timely, high quality public-funded provision for all training and fast changing sector technologies
--------------------------	---

<b>Employer Need</b>	<ul style="list-style-type: none"> <li>• Good quality training delivered when required at an affordable price.</li> <li>• Some qualification content is seen as out of date or not suitable for sector needs.</li> <li>• Non qualification based training is not currently monitored or formally recognised across the sector.</li> <li>• A significant amount of funding is directed at standalone technical certificates and non economically valuable skills.</li> <li>• There are very few HE establishments offering sector courses.</li> <li>• Employers have a general dissatisfaction with the quality of service and teaching provided by FE.</li> <li>• NOS and qualification content is out of date in relation to renewable and environmental technologies.</li> </ul>
----------------------	--

<b>Stakeholder Strategies/Policies</b>	<p><b>Welsh Assembly Government:</b> Skills and Employment Action Plan Words Talk Numbers Count Reaching Higher</p> <p>Wales A Vibrant Economy The Learning Country 2 : Delivering the Promise 14-19 Learning Pathways in Wales</p> <p>laith Pawb</p>
--	---

<b>Additional Partner Strategies</b>	Basic Skills Agency; Employers; TUC; KEF; HE; Training providers; JCP; FForwm
--------------------------------------	---

Sector Programme	Actions	Led By [Stakeholder/s]	Employer/Stakeholder Engagement/Action	Target Date
3.1 Relevant training reflecting NOS at all levels	SummitSkills are currently undertaking a project to review the content of all its NOS.	SummitSkills	Employers and Industry partners participating in Technical Working Groups/Focus Groups to review the standards	S 2007 onwards
	SummitSkills to develop a Sector Qualifications Strategy to show all available provision from craft to professions level, mapped to the Welsh Credit and Qualifications Framework.	SummitSkills/Welsh Assembly Government	Sector Qualifications mapped to the Welsh Credit and Qualifications Framework	S 2007 onwards
	On completion of the NOS review, these will be given to the Welsh Assembly Governments Qualifications Authority division to allow them to update the existing associated qualifications to reflect the required changes.	Welsh Assembly Government/ SummitSkills	Welsh Assembly Government Qualifications Authority division to provide updated qualifications	S/M 2008 onwards
	Work with the Welsh Assembly Government to ensure that all publicly funded vocational qualifications and associated learning programmes are mapped against the NOS to identify that they reflect the relevant NOS before they are funded.	Welsh Assembly Government/ SummitSkills	Map public funded BSE courses against the NOS	S/M 2008 onwards
	SummitSkills to achieve the Basic Skills Pledge. Create and implement an action plan to raise awareness & commitment to the Basic Skills Pledge within the sector.	SummitSkills/Basic Skills Agency/Employers/TUC	SummitSkills to complete Basic Skills Pledge template.	S 2008
	SummitSkills to develop a Basic Skills Employer Ambassador for the sector.	SummitSkills/Basic Skills Agency/Employer	Recruit and train an employer ambassador to promote the importance of the Pledge	S 2008
	Basic Skills Employer Ambassador to promote the benefits of the Basic Skills Pledge to employers in terms of raising productivity in the work place.	SummitSkills/Basic Skills Agency/Employers	Employer visits and promotional events.	S/M 2008/09
	SummitSkills will work in partnership with the Knowledge Exploitation Fund Project WEST to examine how to provide sufficient training provision for upskilling BSE employees in areas of new technology such as microgeneration and emerging environmental technologies.	SummitSkills/KEF Project WEST/Training providers/HE	Establish sufficient training provision to meet demand for upskilling the existing workforce.	S 2008

3.2 Accredited training mapped to NOS	Work with the Welsh Assembly Governments Credit and Qualification Framework Wales to develop credit-accumulation transfer to accredit and quality assure suitable manufacturer and private provider training courses.	SummitSkills/Welsh Assembly Government CQFW Division	Identify suitable training. Suitable ad-hoc training accredited and levelled against the CQFW	M 2009 ongoing
3.3 Sustainable entry routes	BSE sector employers have set minimum entry criteria for new entrants. In all cases potential new entrants must undertake an industry approved pre-employment assessment before starting an apprenticeship. This is to gauge the persons likely ability to achieve an NVQ Level 3 which is the minimum industry recognised standard to work in the sector.	Employers/Training providers/Welsh Assembly Government	Ensuring all employers use an industry approved selection test	M 2009
	Work with the Welsh Assembly Government to improve the apprenticeship management process in the BSE sector to encourage employers to engage meaningfully with the apprenticeship process and equip students with the appropriate learning to contribute to the sector's economy.	Welsh Assembly Government/ SummitSkills/Employer/ TradeAssociations/TUC/Industry/Basic Skills Agency	Encourage employers to engage with the Modern Apprenticeship process.	S/M 2008/09
	Employers/SummitSkills/Training Provider partners to look at the services Jobcentre Plus can provide employers; <ul style="list-style-type: none"> <li>• Advertising jobs and finding people with the right skills to apply for them.</li> <li>• Provide support and advice on employing people with disabilities.</li> <li>• Working with Local Employment Partnerships to prepare people furthest from the labour market for specific roles, and delivering to employers the trained candidates they need.</li> <li>• Provide support and advice on employing people from ethnic minorities and females.</li> </ul> In the case of the BSE sector, this may be improving a persons current skill level to prepare them to undertake the industry pre-employment assessment, or taking someone on initially as an extra pair of hands and allowing the employer to assess their ability to progress to higher level work.	Jobcentre Plus/Employers/SummitSkill s/ Training Providers	Jobcentre Plus to provide information to employers on the services they offer	S/M 2008/09
	SummitSkills to arrange for Jobcentre Plus to meet appropriate Trade Associations/Employer Forums to allow them to explain their offer.	SummitSkills	Meetings arranged with interested Trade Associations/Employer Forums	S 2008
	Develop the case for the expansion of adult re-training and the Modern Skills Diploma for Adults (MSDA) in the sector.	SummitSkills/training providers	Welsh Assembly Government to redirect funding from NEVS to adult re-training and MSDA	S/M 2008/09
	Promote the uptake of the 14-19 diplomas in Welsh schools.	Welsh Assembly Government FForwm/SummitSkills	Promote the benefits of the diploma to schools and employers.	S/M 2008 onwards
	3.4 Wider and sustainable HE provision	SummitSkills to engage further with HE and FE to ensure there is sufficient provision to provide progression routes from craft to technician and professional levels.	SummitSkills/KEF Project WEST	Meetings to be arranged in association with KEF Project WEST initially before future development work.
Work with HE and FE institutions to seek to develop a network of providers offering degree and sub-degree courses across Wales. The development of alternative distance learning modes of delivery may assist with this issue.		SummitSkills		

	At present there is a lack of HE Grad/Post Graduate provision in the sector for those seeking professionally recognition.			
	Discussions opened with Cardiff University School of Architecture as project Managers of the KEF Project WEST initiative to explore the development of qualifications from Levels 3 to 5 to address the need for individuals within the sector to undertake training in microgeneration and emerging technologies.	KEF Project WEST Cardiff University/SummitSkills/ Industry Partners	Project WEST to ascertain from the FE and HE sector what training they are willing and able to currently deliver	S 2007
	Identify and promote the sectors HE provision in Wales to employers by establishing links on our website to signpost HE provision in Wales.	SummitSkills/HE	Web links to be collated.	S 2008
3.5 Quality assured training provision	SummitSkills to work with Welsh Assembly Government to ensure that all provision links back to NOS and is delivered by approved/accredited training providers.	SummitSkills/Welsh Assembly Government	Accredited provision delivered by approved providers.	S/M 2008/09
	Lobby for funding to allow sole traders and SMEs with under five employees in S Wales, access to training funds to improve their productivity and competence via Accreditation of Prior Learning (APL) schemes to enable them raise their productivity and competence levels.	SummitSkills/Welsh Assembly Government	Welsh Assembly Government to fund the requirement by potentially redirecting funding from NEVS	S/M 2009 onwards
	Work with the Welsh Assembly Governments Credit and Qualification Framework Wales to develop credit-accumulation transfer to accredit and quality assure suitable manufacturer and private provider training courses.	SummitSkills/Welsh Assembly Government CQFW Division.	Suitable ad-hoc training accredited and leveled against the CQFW	M 2009 ongoing
	SummitSkills to consult industry on the value of developing a Quality Mark to assess the quality of BSE training providers.	SummitSkills/Employers/ Training Providers	If required, new BSE Quality Mark developed	M 2009/10
3.6 Renewables and environmental technologies	SummitSkills has developed an Environmental Technologies Strategy to define competence through development and implementation of NOS to ensure employers have the opportunity to develop their workforce, allowing them to advise on, design, install, commission, service and maintain domestic, and industrial/commercial systems which incorporate current and emerging environmental technologies.	SummitSkills	Environmental Strategy in place	S 2007/08
	SummitSkills is adding renewables technology requirements into the review of its NOS, covering design, installation maintenance and servicing.	SummitSkills/Employers/ Industry Partners	Produce the National Occupational Standards	S 2008/09
	SummitSkills to work through its Manufacturers Interest Group to identify future technologies in order to identify new skills and training requirements for employers.	Manufacturers Interest Group	New skills and training needs identified and developed	M/L 2009
	SummitSkills working with the Welsh Assembly Governments Microgeneration Action Plan team to look at the skills issues around the integration of renewable energy into buildings.	Welsh Assembly Governments - Microgeneration Action Plan	SummitSkills to develop NOS for microgeneration	S/M/L 2008 onwards
	SummitSkills working with KEF Project WEST and training providers to ensure there is sufficient training provision on microgeneration systems for BSE employers.	SummitSkills/KEF Project WEST/Training Providers	Adequate training provision to meet employer needs	S/M 2007 onwards
	Signpost the training route to employers and training providers	SummitSkills	Develop relevant signposting to training routes	S/M 2008

<b>Skills Priority 4</b>	<b>Funding:</b> flexibility to meet fast changing skills needs to develop businesses and workforce	
<b>Employer Need</b>	<ul style="list-style-type: none"> <li>• A sensible balance between employer and government contributions to training a well skilled and competent workforce.</li> <li>• It is a difficult for public funders of training to ensure it is aligned to employer needs. There are also special requirements across the sector for funding to support areas which are outside of the norm e.g. mature adults.</li> <li>• A considerable amount of current publicly funded training provision leads to non-economically valuable skills (NEVS) and therefore is not relevant to the sector. There is also a need for new training provision to be funded to meet the changing needs of the sector.</li> </ul>	
<b>Stakeholder Strategies/Policies</b>	<p><b>Welsh Assembly Government:</b>  The Skills and Employment Action Plan for Wales 2005      Words Talk Numbers Count  The Learning Country 2      Wales A Vibrant Economy  Reaching Higher      14-19 Learning Pathways in Wales  Iaith Pawb</p>	
<b>Additional Partner Strategies</b>	Training Providers Industry Partners	

<b>Sector Programme</b>	<b>Actions</b>	<b>Led By [Stakeholder/s]</b>	<b>Employer/Stakeholder Engagement/Action</b>	<b>Target Date</b>
4.1 Influencing flexibility of funding	SummitSkills to discuss with the Welsh Assembly Government the BSE employers desire for equitable funding for apprenticeships regardless of age.	SummitSkills	Meetings with appropriate departments of the Welsh Assembly Government.	S 2008
	SummitSkills to support Industry training organizations in seeking an adequate allocation of apprentice funding from the Welsh Assembly Government to meet the increasing demand from employers for training places.	Welsh Assembly Government/ SummitSkills	Funding allocation that meets employer demand	S 2008/09
	Lobby for funding to allow sole traders and SMEs in South Wales employing under five, access to training funds to improve their productivity, competence and investment in skills via Accreditation of Prior Learning (APL) schemes to enable them raise their productivity and competence levels.	SummitSkills/Welsh Assembly Government	Funding contribution agreed	S/M 2008/09
	Lobby for funding to allow sole traders and SMEs with under five employees in S Wales, access to training funds to improve their productivity and competence via Accreditation of Prior Learning (APL) schemes to enable them raise their productivity and competence levels.  APL schemes include: <ul style="list-style-type: none"> <li>• Crediting Electrotechnical Competence (CEC) is the APL scheme for the Electrical Industry, and can be accessed through selected colleges.</li> <li>• The SummitSkills National Assessment Programme (SNAP) is the APL scheme for the Heating, Ventilating, Air Conditioning &amp; Refrigeration industry, and again can be accessed through selected colleges.</li> </ul>	SummitSkills/Welsh Assembly Government	Welsh Assembly Government to fund the requirement by potentially redirecting funding from NEVS	S 2008/09

	Develop the case for the expansion of adult retraining and the Modern Skills Diploma for Adults (MSDA) in the sector.	SummitSkills/Welsh Assembly Government	Welsh Assembly Government to redirect funding from NEVS to MSDA	S/M 2008/09
	Work with the Welsh Assembly Governments Credit and Qualification Framework Wales to develop credit-accumulation transfer to accredit and quality assure suitable manufacturer and private provider training courses.  SummitSkills to ask the Welsh Assembly Government if they will fund these courses as opposed to full qualifications.	Welsh Assembly Government /SummitSkills	New upskilling Units developed and accredited for funding.	S/M 2008/09
	SummitSkills to work with the Welsh Assembly Government to see how to ensure that funding for renewables training is only available for training that is industry approved, and delivered by accredited trainers.	Welsh Assembly Government Government/SummitSkills	Only accredited training funded	S/M 2008/09
	Raise awareness of employers/employees of ILA Wales funding to help pay for skills development. SummitSkills to establish link on our website to signpost the ILA website - <a href="http://www.ila-wales.org.uk/">http://www.ila-wales.org.uk/</a>	SummitSkills to provide link to ILA website and promote in newsletters	Link provided on SummitSkills website. Article in Skills Insight	S/M 2008/09
4.2 Redeployment of NEVS funding	Where expenditure is taking place on non industry supported courses (NEVS), work with the Welsh Assembly Government and training providers to reduce these as part of a managed programme over the next four years.	Welsh Assembly Government/Industry Partners/SummitSkills	Reduction in NEVS courses being offered over the next four years.	M 2009 onwards
	Re-direct this funding into areas of identified industry need such as renewables technologies and management training.	Welsh Assembly Government/Training Providers	NEVS funding transferred into new sector priority areas	M 2009 onwards
	Work with Welsh Assembly Government and training providers to agree no new course are developed without reference to the BSE sector bodies to ensure they have industry support.	Welsh Assembly Government /Training Providers/Industry Partners/SummitSkills	Pre-approval of new courses with industry	L 2010

<b>Skills Priority 5</b>	<b>Management and Leadership:</b> ensuring the sector have the skills they need to plan and develop profitable and competitive business.
--------------------------	--

<b>Employer Need</b>	Variety of solutions required to suit micro, SME and large companies. Scenario planning, current and future skills needs, retirement and natural wastage, enterprise, competitive advantage, benchmarking, government regulation, diversity.
----------------------	--

<b>Stakeholder Strategies</b>	<b>Welsh Assembly Government:</b> <ul style="list-style-type: none"> <li>• The Skills and Employment Action Plan for Wales 2005</li> <li>• Wales A Vibrant Economy</li> <li>• The Learning Country 2 : Delivering the Promise</li> <li>• Reaching Higher: Higher Education and the Learning Country: A Strategy for the Higher Education Section in Wales</li> <li>• Iaith Pawb: A National Action Plan for a Bilingual Wales</li> </ul>
-------------------------------	--

<b>Additional Partner Strategies</b>	Institute of Leadership and Management. (ILM) Welsh Management Council Basic Skills Agency
--------------------------------------	--

<b>Sector Programme</b>	<b>Actions</b>	<b>Lead by [Stakeholder/s]</b>	<b>Employer Engagement/Action</b>	<b>Target Date</b>
5.1 Progression & development of first line and middle managers	VRQs Level 2 – Certificate in Team Leading – Open & Distance Learning.	Employers	Employers undertaking qualifications	S 2008/09
	SVQ Level 2 – Team Leading.	Employers	Employers undertaking qualifications	M 2009/10
	SVQ Level 3 – Management.	Employers	Employers undertaking qualifications	M 2009/10
	SummitSkills to work with the Welsh Management Council to promote M & L qualifications to the sector. Establish a link on our website to signpost the Welsh Management Council website - <a href="http://www.walesmanagementcouncil.org.uk/practicalsupport.asp">http://www.walesmanagementcouncil.org.uk/practicalsupport.asp</a>	SummitSkills/ Welsh Management Council	Web link provided	S 2008/09
5.2 Developing enterprise skills for SMEs and micros	Launch of the Solutions4Business web based resource. <a href="http://www.solutions4business.info">www.solutions4business.info</a>	SummitSkills	Employers using the resource	S 2008/09
	Promote the use of SummitSkills knowledge hub to employers	SummitSkills		
5.3 Developing skills to increase competitiveness of the sector	Solutions4Business – <a href="http://www.solutions4business.info">www.solutions4business.info</a>	SummitSkills	Employers using the resources	S 2008
	Learndirect Wales - <a href="http://www.learndirect.co.uk/cymraeg/?view=Wales">http://www.learndirect.co.uk/cymraeg/?view=Wales</a>	SummitSkills	Employers using the resources	S 2008
	Promote the uptake of the Basic Skills Employer Pledge to the sector. SummitSkills to establish a link on our website to signpost the Basic Skills Employer Pledge website - <a href="http://www.basic-skills-wales.org/bsastrategy/resources/Employers.Pledge.UK1.pdf">http://www.basic-skills-wales.org/bsastrategy/resources/Employers.Pledge.UK1.pdf</a>	SummitSkills/Basic Skills Agency	Employers signing up to the Basic Skills Employer Pledge	S 2008 onwards

## 10 References

Note: All these references are extracted from references found in the relevant Sector Needs Analysis and Assessment of Current Provision reports.

Energy Wales (2005) Energy Wales: Route Map to a clean, low carbon and more competitive energy future for Wales Cardiff, Welsh Assembly Government.

Future Skills Wales (2003) Sector Skill Survey Bedwas, Future Skill Wales.

Future Skills Wales (2005) Sector Skill Survey Bedwas, Future Skill Wales.

Leitch Review of Skills (February 2007), Skills in the UK, The Long Term Challenge, Final Report.

SDAP Welsh Assembly Government (2004) The Sustainable Development Action Plan of the Welsh Assembly Government 2004-2007 Cardiff

<http://www.wales.gov.uk/themessustainabledev/content/review/action-plan-final-e.thm>

Welsh Assembly Government (2006) Microgeneration Action Plan For Wales: Consultation Document, Welsh Assembly Government.

Welsh Assembly Government (2001) The Learning Country: A Paving Document: A Comprehensive Education and Lifelong Learning Programme to 2010 in Wales Cardiff, Welsh Assembly Government.

Welsh Assembly Government (2005b) Skills and Employment Action Plan, WAG.

Welsh Assembly Government (2006) Iaith Pawb: A National Action Plan for a Bilingual Wales, WAG

Welsh Assembly Government (2006) The Learning Country 2: Delivering the Promise, WAG

Welsh Assembly Government (2005) Words Talk Numbers Count, WAG

Welsh Assembly Government (2006) Wales: A Vibrant Economy The Welsh Assembly Government's Strategic Framework for Economic Development, WAG

Welsh Assembly Government (2002) Higher Education and the Learning Country - A strategy for the higher education sector in Wales, WAG

Welsh Assembly Government (2004) Learning Pathways 14-19 Years, WAG

Welsh Assembly Government (2005) A Winning Wales: The National Economic Development Strategy of the Welsh Assembly Government Cardiff, Welsh Assembly Government.

Welsh Assembly Government (2005), All Wales Training Needs Analysis Final Report (JULY 2005) Commissioned by the Welsh Assembly Government.

Welsh Assembly Government (2001), Better homes for people in Wales; A national housing strategy for Wales, WAG.

Welsh Assembly Government (2004), Black Minority Ethnic (BME) Housing; a good practice guide for local authorities and housing associations, WAG.

Welsh Assembly Government, (2006) Communities First; Race Equality Guidelines 2006, WAG.

Welsh Assembly Government (2006), Eradicating child poverty in Wales, WAG.

Welsh Assembly Government (2005), National Homeless Strategy for Wales 2006-2008, WAG.

Welsh Assembly Government, (2006) Preparing local housing strategies 2007, revised guidance to local authorities in Wales from the Welsh Assembly Government, final version.

Welsh Assembly Government, (June 2005) Social Enterprise Strategy, WAG.

WAG, (2002) Supporting people in Wales; sizing the pot and financial arrangements, WAG.

Welsh Assembly Government, (2005) Tackling Domestic Abuse: The All Wales National Strategy, WAG.

Welsh Assembly Government, (2005) Tackling substance misuse in Wales Performance Management Framework: The Welsh National Database for Substance Misuse- First Annual Report 2005-2006.

Welsh Assembly Government (2005) The Home Energy Efficiency Scheme Making a difference in Wales, The Home Energy Efficiency Scheme (Wales) Annual Report, 2005/2006.

Welsh Assembly Government (2005) The social justice and regeneration research programme, April 2006- March 2008, WAG.

Welsh Assembly Government (2006), The Social Justice Report, WAG

WLGA (2006) Management Sub Committee: Child Poverty Implementation Group.