

SECURING A SKILLED WORKFORCE FOR ENVIRONMENTAL TECHNOLOGIES



GREEN SKILLS FOR A GREEN FUTURE
BUILDING SERVICES ENGINEERING

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SKILLS FOR A LOW CARBON FUTURE – WHAT ISSUES ARE WE FACING?

The Building Services Engineering (BSE) sector is playing a major role in meeting the carbon reduction targets set by government. Reducing emissions, lowering energy consumption and conserving water cannot be achieved without this sector's role in specifying, designing, installing and maintaining environmental technologies.

This represents a huge challenge for skills and workforce planning if the UK is going to achieve its aims.

A number of measures being introduced by the Government are driving the agenda to increase renewable energy, minimise energy waste and address fuel poverty and fuel security.

Feed-in tariffs, introduced in April 2010, enables homeowners and other proprietors to be paid for small-scale low carbon electricity generation. The Renewable Heat Incentive, due in Spring 2011, will provide financial incentives to generators of renewable heat.

These schemes, teamed with the forthcoming changes to building regulations/standards and the future low to zero carbon targets for new homes, will have major implications on the sector's skills requirements. BSE employers and staff will have to respond to major changes in system design and working practices if the low carbon future we have planned is to be realised.



SUMMITSKILLS IS LEADING THE SKILLS SOLUTION...

As Sector Skills Council for building services engineering, it is SummitSkills' responsibility to ensure we have the infrastructure in place to help employers develop a competent workforce. This encompasses skills in all BSE sustainable and low to zero carbon environmental technologies, as well as the traditional industry skills.

Through our strategy for Environmental Technologies in Building Services Engineering, we have provided leadership for the sector on how it will implement the Government's energy policies, laid out in the 2008 Energy Act.

The specification, design, installation, commissioning, repair and maintenance of the environmental technology systems listed below all fall in the SummitSkills footprint:

- bio-fuels (bio mass, bio liquid)
- combined heat and power
- heat pumps
- mechanical heat recovery ventilation
- micro hydro generation systems
- micro wind energy
- solar photovoltaics (PV)
- solar water heating
- water harvesting and recycling

The sector also works on low energy lighting and is responsible for the repair and maintenance of energy efficient brown and white goods.

NO NEW ROLES, JUST ADDITIONS TO EXISTING SKILL-SETS

It's important to realise that all the environmental technologies covered by this sector are extensions of existing skill sets and job functions. There are no isolated roles for these technologies; existing industry workers who are already at an appropriate NVQ/SVQ level will simply up-skill via top-up training and assessment to add environmental technologies to their core competencies.



Image courtesy of Action Renewables

WE'VE ACHIEVED A LOT SO FAR

SummitSkills has already been proactive in addressing environmental technologies skills needs. At an early stage we identified the key issues affecting the sector; since then have been working with partners and stakeholders to develop and implement solutions.

So far we have...

- created a strategy for addressing skills needs
- updated existing and developed new National Occupational Standards (NOS) for renewable and low to zero carbon environmental technology systems
- identified labour market intelligence and up-skilling requirements for each environmental technology system by nation and region
- carried out a review of NOS so future qualifications can be updated more efficiently
- identified skills requirements for employers to assess training needs via qualification and credit frameworks in each of the four nations across the UK

We are currently:

- working with awarding bodies to develop new qualifications from the new NOS
- integrating environmental technology systems into apprenticeship frameworks and continuous personal development units
- negotiating funding support for employers
- ensuring qualifications are aligned to the competence requirements for schemes such as MCS, Building Regulations Competent Person Schemes and the Certifier of Construction Scheme
- working with training providers and partners to ensure appropriate training and assessment
- working with government to ensure all future publicly-funded projects include requirements for businesses to use competent workers
- working with national and regional government and public advice organisations to ensure the public is aware of the need to use competent businesses for home improvements



NATIONAL SKILLS ACADEMY

At the heart of skills development for tomorrow's low carbon workforce will be the new National Skills Academy for Environmental Technologies.

It will transform the way the sector plans, develops and delivers renewable and environmental technology skills, providing:

- clarity, vision, direction and solutions for employers who need to train in these new technologies
- a single point of contact for nationwide green skills development
- a route to ensuring the economy has the workforce it needs to deliver the low carbon future

SummitSkills is leading the development of the Skills Academy for Environmental Technologies on behalf of the sector.

It will build on the core competencies in electrotechnical, HVACR and plumbing industries to help the sector understand new environmental technologies and how they should be integrated with existing systems to deliver maximum efficiency and carbon savings.

New and upgraded skills will be delivered in design; product knowledge; commissioning and maintenance and finally innovation, entrepreneurship and business development.

Developing, coordinating and planning the right skills at the right competency level will not only strengthen the provider network but will also improve the competitiveness of the sector, boost innovation and increase the investment in skills by employers.

The whole sector has a vital role to play in the Skills Academy and SummitSkills will be working closely with stakeholders and employers throughout the academy's development, implementation and ongoing operation.



THE SKILLS CHALLENGE AHEAD

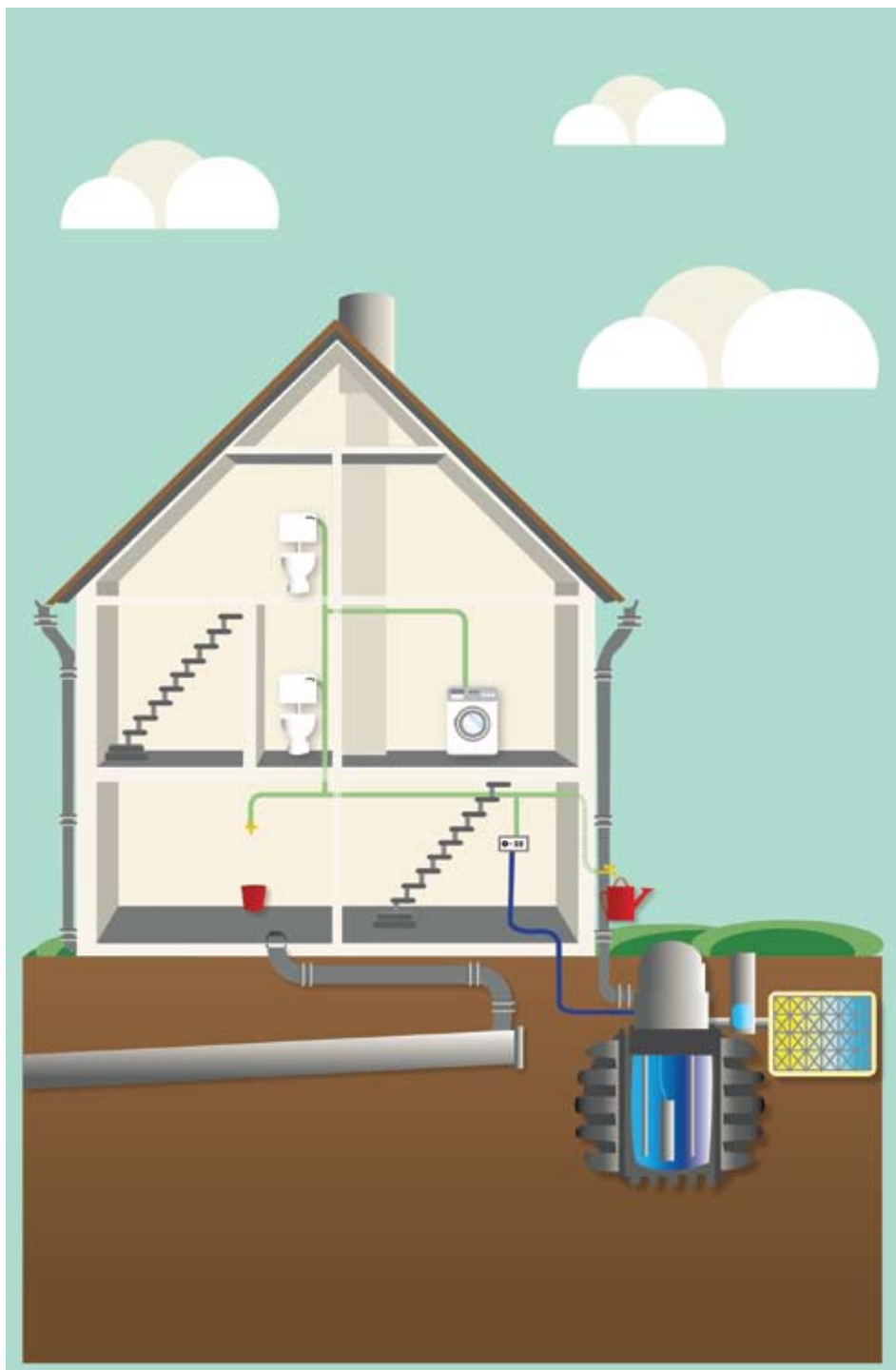
SummitSkills is laying the foundations for up-skilling the sector. But employers will only plan and finance additional training if they see a demand from clients.

To date, client demand has not been sufficient to encourage any significant number of employers to up-skill. This will affect the UK's ability to meet carbon saving targets set and, should demand increase at a later date, there is a risk of significant skill shortages once the sector realises the need for training.

HOW YOU CAN SUPPORT THE SECTOR

We are keen to work with all our partners and stakeholders to ensure the BSE sector is fully skilled and prepared for the boom in environmental technologies. We'd like your support – you can help us by:

- ensuring that new project specifications recognise the need for renewable and low to zero carbon environmental technologies
- ensuring all your staff are aware of the BSE's sector scope in environmental technologies and the skills projects already underway by attending the new awareness programmes
- linking with the SummitSkills representative in your area. Visit www.summitskills.org.uk/nations to find out your local contact
- register at www.summitskills.org.uk to ensure you keep up-to-date on progress



**MAKE SURE YOU'RE
READY FOR THE LOW
TO ZERO CARBON
REVOLUTION.**

**PREPARE TODAY FOR
BUSINESS SUCCESS
TOMORROW.**

Summit SKILLS

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