

Today's investment, tomorrow's asset: Skills and employment in the Wind, Wave and Tidal sectors



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SQW Energy

The logo for SQWgroup, featuring the text "SQWgroup" in a green, sans-serif font, enclosed in a thin black rectangular border.

- Established in 1983; Groups companies have a combined annual turnover of £14M, and around 150 employees between the 3 divisions; 5 UK offices + Asia office (HK); 15 Innovation Centres.
- SQW Energy – a new division of SQW Group; launched in April this year with an experienced team working on:
 - Energy markets and regulation
 - Energy policy and technology
 - Carbon Assessment and Management

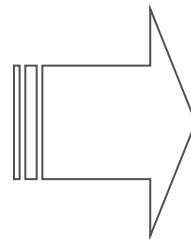
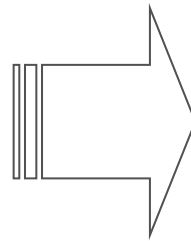
Overview

- Relationship of the two studies (SQW Energy/Bain & Co)
- The skills landscape – a quick guide
- Skills, occupations and qualifications
- How many people, what types of skills?
- Should the sector be concerned?
- Implications and actions

Relationship of the SQW Energy/Bain & Co studies

Bain & Co

- Quantitative study of WWT sector
 - Employment by sector and occupation
 - 3 growth scenarios (slow, steady, dynamic)
- **Headline:**
 - WWT sector employment '36,000 total employees by 2020' (solid progress scenario)



SQW Energy

- Qualitative analysis – skills policy and landscape for WWT
 - Mapped sector occupations to skills and qualifications
 - Identified skills providers
 - Current & future supply requirements
- **Implications and actions:**
 - Where the WWT sector should seek support?
 - How to progress
 - Opportunities

Why are skills important?

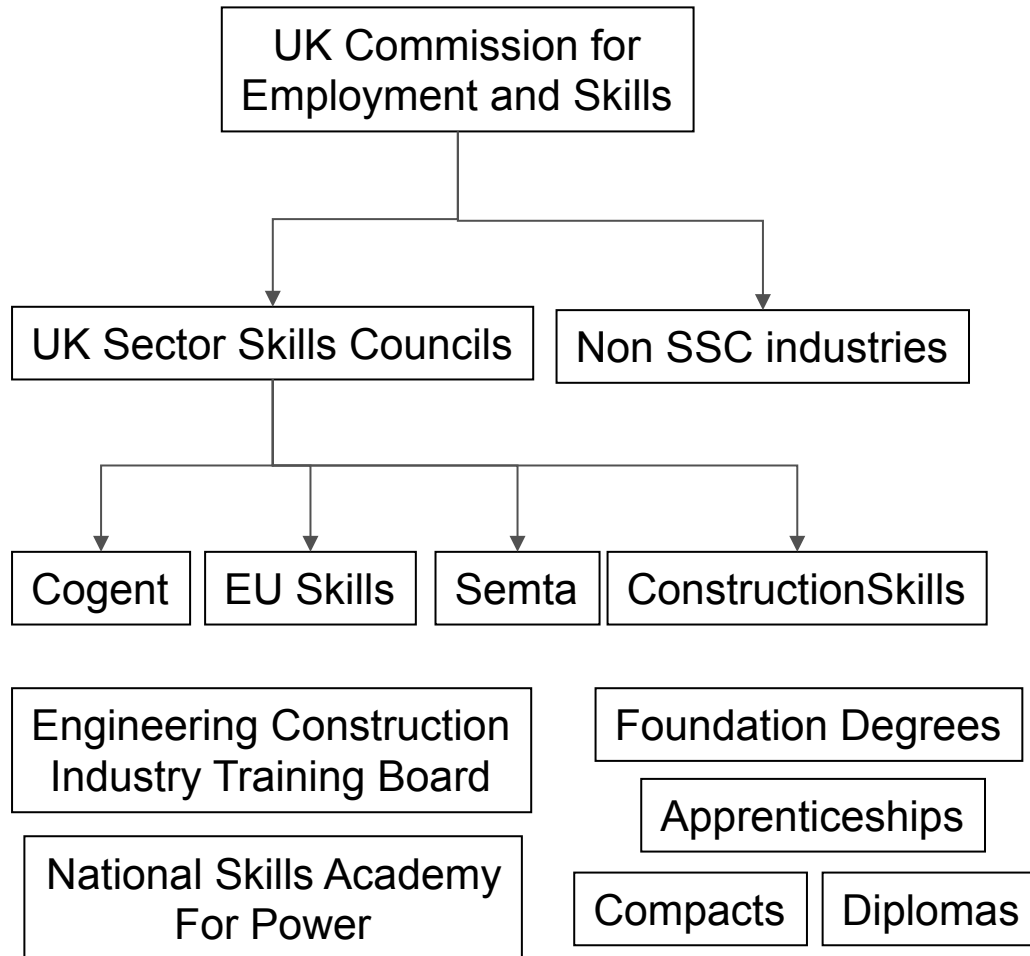
- The key determinant in meeting National renewable energy targets will be the availability of an appropriately skilled and qualified workforce
 - globally competitive environment
 - need to identify, attract and retain the right type of individuals with the right skills
- Skills are an important priority for Government as a key driver of productivity (along with Enterprise, Innovation, Investment and Competition)



- which ticks the box!

- But, how do you (the sector) work out where to go if there is a shortage or gap in skills provision?
- Who do *businesses* influence to ensure that they get the skills they needs, rather the skills *providers* think they need?

The skills landscape – a quick guide



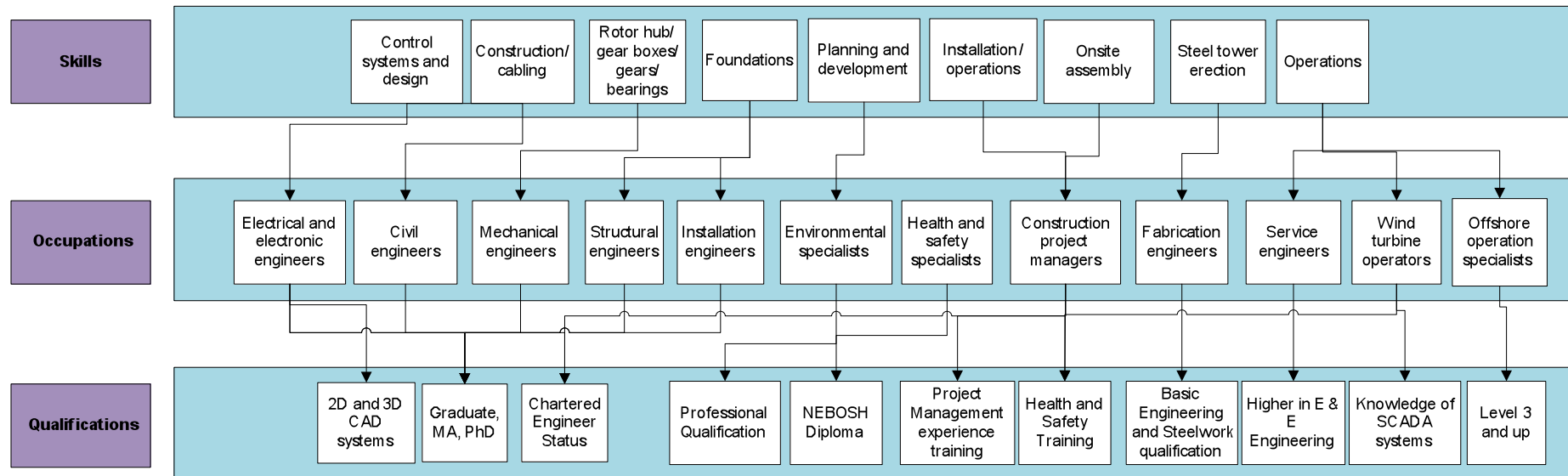
- Sec.of State (DIUS) – with consultation
- Funds & Monitors performance of SSCs
- Relicensing of SSCs during 2008-09
- Provides cover for industries outside SSCs

- Provide labour market intelligence
- Identify skills needs at all levels
- Influence UK's education and learning sector
- Map training and education supply to ensure it meets sector demand

- 4 SSCs of most relevance to WWT sector

- Additional organisations/initiatives

WWT Sector: Skills, Occupations and Qualifications



Source: SQW Energy

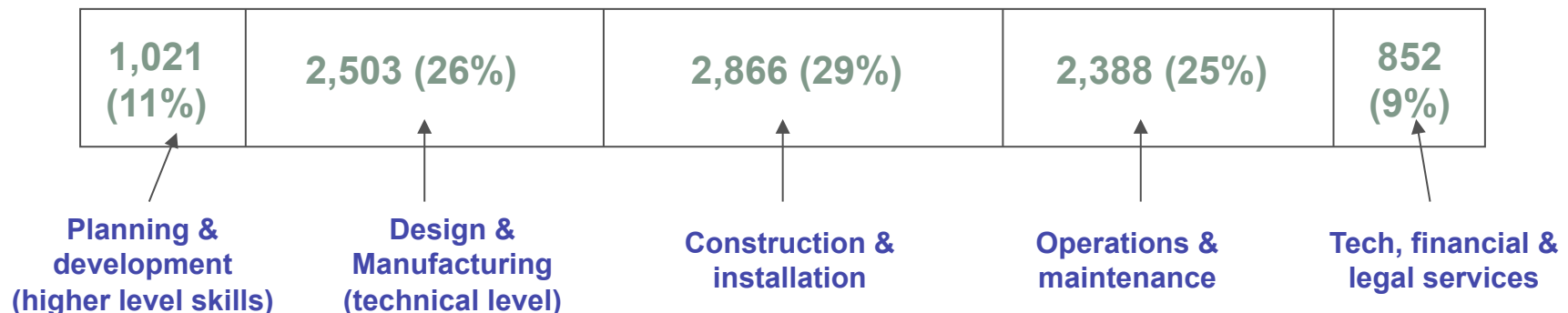
- Occupational base requirements for sector identified from Occupational and functional map of UK Renewable Energy Sector (EU Skills) and industry discussion
- Skills requirements are predominantly high level
- Wind, wave and tidal sector is a small player against overall demand

How many people with what type of skills?

- Competing sector total new recruits by 2014 (growth and replacement demand); 600k in total of which 148,600 at professional and technician level

	Semta – science, engineering, manufacturing, marine	EU Skills – electricity, gas, waste water	Cogent – oil and gas, nuclear, polymers	ConstructionSkills/ ECITB – engineering construction	Total
Professionals	22,400	10,000	13,000	15,000	70,400
Associate Professionals (Technical)	33,200	12,000	17,000	16,000	78,200
Total	55,600	22,000	30,000	31,000	148,600

- Bain WWT employment projections in 2014
 - 9,630 WWT additional employees – ‘Solid progress scenario’ (~ 6% of total)



Projected Total Employment & additional employees within the WWT Sector by sub sector and supply chain

Year	Sub sector	Slow Growth	Solid Progress	Dynamic
2014	Wind, Wave & Tidal	12,000	14,500	18,000
2020	Wind	23,100	35,900	56,900
	Wave & Tidal	350	1,600	2,100

	Total Additional employees required by WWT sector	Planning & Development (11%)	Design & Manufacturing (26%)	Construction & Installation (29%)	Operations & Maintenance (25%)	Technical, Financial & Legal Services (9%)
2014 Slow growth	7,170	790	1,865	2,080	1,790	645
2014 Solid Progress	9,630	1,060	2,505	2,790	2,410	865
2014 Dynamic	12,895	1,420	3,355	3,740	3,220	1,160
2020 Slow growth	18,710	2,060	4,865	5,420	4,680	1,685
2020 Solid Progress	32,710	3,600	8,505	9,485	8,175	2,945
2020 Dynamic	54,210	5,965	14,095	15,720	13,550	4,880

Source: SQW Energy

Should the WWT sector be concerned?

- Currently an opportunity to influence – recognition of the link between skills, productivity and competitiveness at the highest levels within the public sector
- Awareness of the fundamental role that employer involvement plays in ensuring a demand-led agenda for skills – ensuring that *businesses* get the skills they need rather than the skills that *providers* think they need
- Key question to discuss is how does the sector engage; toolkit of options to explore and develop
 - Influence
 - Direct action
 - Partnership and alignment of activities

Implications and actions: Influence

- Raise profile with UK Commission for Employment & Skills – input to SSC licensing process
- Engage with, and contribute to, EU Skills activities
 - Direct dialogue & membership of SSC Board – who in BWEA is currently engaged with EU skills?
 - Input to various working groups such as Power Sector Strategy Group (and sub groups); seek named responsibility for Renewables within EU Skills
- Work with SSC and industry to identify/create appropriate National Occupational Standards suites
 - Capable of mapping to NVQs
 - Map WWT occupations to appropriate NVQs
- Contribute to proposed Scottish Funding Council's Renewable Working Group
- Develop dialogue with other relevant SSCs – Semta and Cogent, and at other levels e.g. ECITB, professional institutions, specifically IMechE and ICE
- Develop relationships with other national development and funding agencies

Direct action

- Create a WWT Skills Forum
 - For collaboration with HE Institutes on new courses, course development and funding discussion
 - To encourage branding and positioning of the industry
- Focus on regions where WWT is of strategic importance to the regional economy and socio economic agenda
 - Identify “test bed” Region where opportunities for skills development are evident and initiate contact with key staff
 - > Funding for investment in training facilities; retraining
 - > Input to regional skills partnerships
- Make contact with HEIs expressing interest in BWEA
- Learn from and adopt other initiatives eg Danish Wind Energy Associations “Talent Factory”
 - Summer School
 - Nominated company contact for employment queries
 - Guest lectures
 - Company visits
 - Talent Award

Partnership & alignment of activities

- Lever BWEA's greatest assets
 - Significant and growing industrial sector (policy and public perspective)
 - Vocal and active employer membership able to articulate demand
- Through EU Skills, make the case for sector specific IAG service which includes WWT information
 - BWEA to take lead on behalf of overall sector?
- Lobby with professional bodies and others for electrical and mechanical engineers to be placed on the immigration shortage occupation list
- Work with others within the skills sector on activities aimed at STEM development such as Science Learning Centres and the British Association

Get a seat at the table!

- Sector's greatest assets are its significance as a growing industrial sector (from a policy and public perspective)
- Together with a vocal and active membership able to articulate the demand for skills
- Need to ensure that this voice is heard and acted on
- For discussion:
 - Prioritisation
 - Timescales
 - Resources needed
 - Role of BWEA

Thank you

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