Five minute read

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Balfour Beatty

Fuelling the energy transition: tackling the skills gap

The London Power Tunnels 2 scheme will ensure a safe and secure supply of electricity to the city

67 million people and businesses across the UK are depending on our sector to deliver infrastructure to support secure, affordable, decarbonised energy by 2050.

The Government has outlined ambitious plans for carbon capture utilisation and storage, offshore wind, nuclear power and upgrading the power grid.

How do we ensure the skilled workforce is ready to deliver?

If you would like to find out more, please read on or connect with me via LinkedIn and contact me via direct messenger.

1. **Embed a more collaborative approach:** With c.400,000 additional workers needed by 2050[1], existing skills gaps and insufficient new talent entering the sector pose an increasing challenge. Without action, demand spikes will fuel fierce competition among employers, driving up wage costs and leading to higher costs for customers. We welcome the launch of Skills England to bring together the fractured skills landscape and look forward to working with the Government as it is established over the next year. We're also organising a forum to discuss a bolder, more collaborative approach to tackling this, between companies, Government bodies, and educational institutions. Please get in touch if you want to understand more or join the forum.

2. **Upfront funding around Net Zero industrial clusters:** We cannot wait until contracts are signed to start training the individuals needed to build schemes. But without funding for training and the certainty that schemes will proceed, the sector is in a Catch-22. Initial upfront funding to kickstart training around the Net Zero industrial clusters would provide confidence to businesses to invest and could be transformative. See more detail in our Energy skills initiative proposal.

3. **Invest in core engineering skills alongside digital:** The renewable energy sector is still emerging. Instead of trying to predict every skill needed for new technologies, companies should prioritise accelerated investment in core engineering disciplines including mechanical and electrical skills, as well as broader skillsets such as data analysis, modelling, digital technologies, and electronics, which will become increasingly vital. See more detail in our case study "Industry-leading training centres" on page 4.

4. **Scale up and combine outreach efforts:** None of this is workable unless more people enter the sector. We already undertake outreach with schools and colleges, highlighting that these careers offer competitive salaries, progression, secure long-term employment, cutting-edge digital, AI, and the chance to do something meaningful. Scaling up and combining efforts, with Combined Authorities or other relevant regional bodies and starting with younger children are both important ways of improving reach and impact. See our case study "Combining outreach efforts on HS2" on page 5.

5. **A more targeted approach to diversity:** We know the sector must become more representative. Despite some positive signs, progress isn't fast enough. Companies that offer career development and contribute to a sustainable future through the work they do, are increasingly attractive to people from all backgrounds. Our sector has that in spades but must get better at communicating this and understanding and accommodating the needs of different groups. See more detail in our case study "Tangible action to improve the diversity of our energy workforce" on page 6.

6. **Evolve the Apprenticeship Levy to support upskilling and multi-skilling:** Reskilling the current workforce is essential. Many core engineering skills are transferable, but some additional training is needed to work on complex energy infrastructure, which we believe the Apprenticeship Levy should support. Encouraging employees to develop multiple skills can also enhance productivity. We welcome the Government's plans to adapt the Apprenticeship Levy to support shorter technical courses, as outlined in our Position Paper on the Apprenticeship Levy. We look forward to seeing the detailed plans for the reforms and will continue to engage with the Government as they develop.

7. **A responsive immigration system:** Even if we deliver the solutions we have set out here, demand will outstrip supply. We must ensure that the immigration system is not too onerous, for example, critical overhead lines operatives have to be brought in to the country one-by-one under Skilled Worker Visas, in spite of the large number needed, and the associated admin and cost. We have made the case to Government about roles that are essential to connect critical national infrastructure to the grid being added to the Immigration Salary List.

The UK has the opportunity to lead on the energy transition, using its expertise, innovation, and geographical advantages to create new solutions for a sustainable future in key areas such as floating offshore wind. It's time to act collaboratively and decisively.

[1] https://bit.ly/building-the-net-zero-energy-workforce

Scan the QR to watch our our 'We're Powering up Britain' video to find out more about how Balfour Beatty is ready to deliver the infrastructure needed for the energy revolution.

The Inveraray – Crossaig 275kV Overhead Line scheme ensures the continued supply of power throughout the West of Scotland

Balfour Beatty and skills for the energy sector

Balfour Beatty has over a century of experience in energy generation. We are involved in the UK's most ambitious power transmission and distribution schemes and are the biggest provider of technical engineering solutions across the full spectrum of the electricity grid in the UK, employing c.3,000 people in this sector alone.

We welcome the commitment the new Government has articulated to the energy sector, including carbon capture utilisation and storage, offshore wind, nuclear power, hydrogen and upgrading the power grid. As a business, we have capabilities across all of these areas and have built up an expert and established capability on schemes including Hinkley Point C which will ultimately transfer to Sizewell C and support other emerging markets.

Balfour Beatty has a strong track record of investing in skills and the training of apprentices and graduates for over 40 years. We are committed to providing inspiring technical training routes, vital to generating the home-grown skilled workforce and high-skill, high productivity economy we believe the UK is capable of. We have plans to almost triple our early careers population in our energy business in 2024 and will look to maintain hiring this number for the foreseeable future based on the growth we are seeing with a significant increase in site engineering, overhead line apprenticeships and design and engineering roles.

Details of how to register for roles can be found via our Careers site.

Case Study

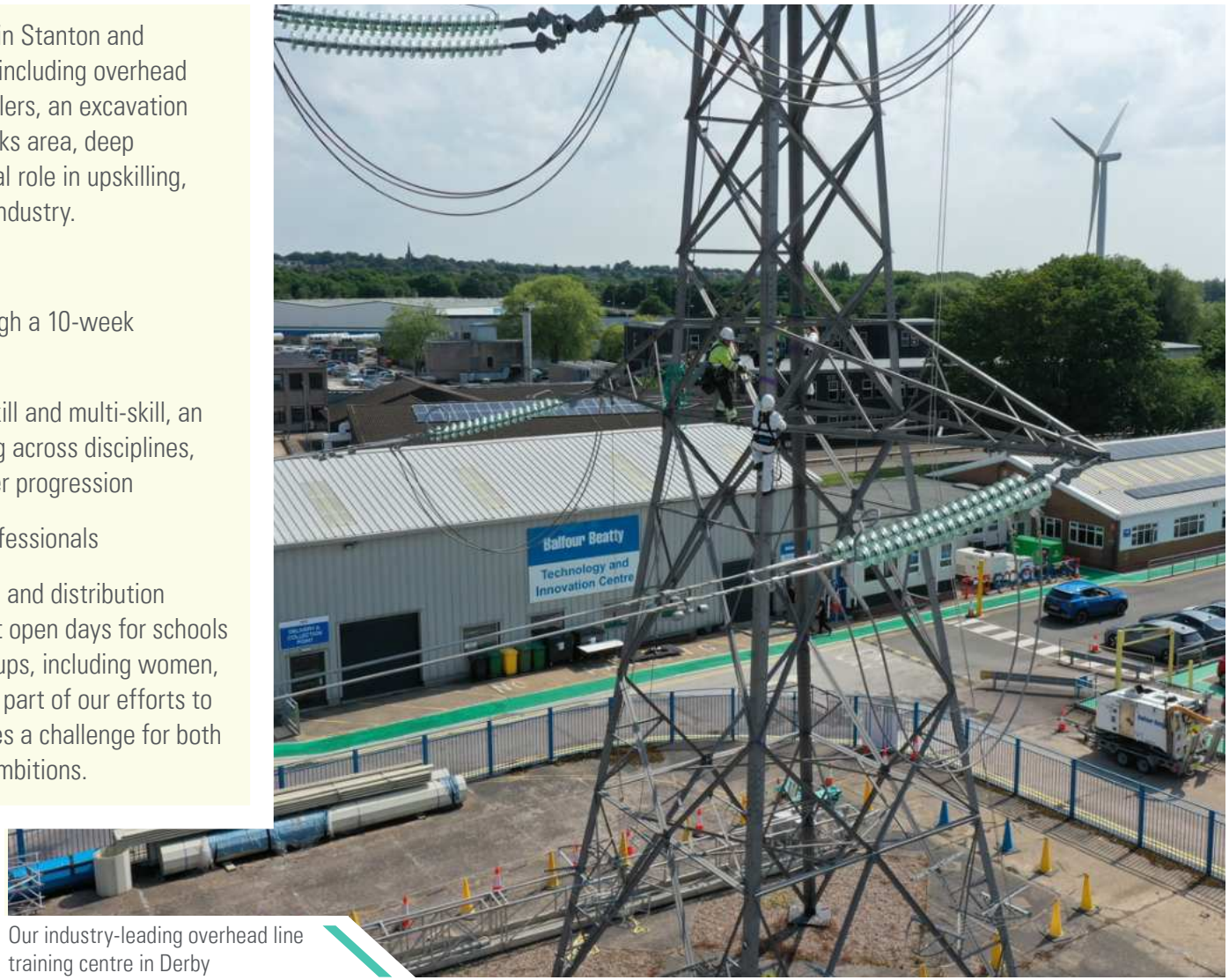
Industry-leading training centres

We operate two industry-leading training centres, located in Stanton and Raynesway near Derby, offering bespoke training facilities including overhead lines, a scaffold area for lifting to height including telehandlers, an excavation area including excavators, dozers, trench support, steelworks area, deep excavation and cable winches. These facilities play a pivotal role in upskilling, reskilling, multi-skilling and introducing newcomers to our industry.

Our training approach has a three-pronged focus:

- Equipping new individuals with fundamental skills through a 10-week introductory scheme
- Training in new technologies and work practices to upskill and multi-skill, an approach which enables us to support people in working across disciplines, benefitting both our business and our workforces' career progression
- Refreshing essential or mandatory skills for existing professionals

Every year, we train approximately 450 power transmission and distribution operatives and site engineers at this location. We also host open days for schools and targeted recruitment events for under-represented groups, including women, and provide training on behalf of the wider industry. This is part of our efforts to help address the skills gap in the energy sector, which poses a challenge for both our industry and the delivery of the Government's energy ambitions.



Our industry-leading overhead line training centre in Derby

Balfour Beatty

Case Study

Combining outreach efforts on HS2

Our joint venture, Balfour Beatty VINCI, is proud to be delivering key elements of HS2: extensive earthworks, ground engineering, viaducts and tunnels along a 90-kilometre stretch of the project, working from the south at the Long Itchington Wood Green tunnel to the north at the West Coast Main Line tie-in near Litchfield. The 90-kilometre stretch also includes work on a major junction into central Birmingham at Curzon Street.

Not only will the arrival of HS2 benefit users of the service – it will also benefit the local community by creating a substantial number of jobs. In the West Midlands, it is estimated that the construction of HS2 will generate a constant labour demand of around 10,000 jobs from now until 2027/28. Through the delivery of the main civil engineering works contract, Balfour Beatty VINCI is one of the biggest recruiters in the West Midlands with up to 7,000 skilled people of all ages and backgrounds required to deliver the contract.

As part of this, Balfour Beatty VINCI is delivering a broad-ranging Skills, Employment, and Education programme. The scale of the scheme and the certain pipeline of work over a long period of time has enabled us to develop strong links with local partners and to coordinate our supply chain partners to help deliver shared objectives. Through our procurement processes, we have cascaded and enlisted the support of our supply chain partners to optimise the impact and to leave a positive local legacy long after construction has been completed.

We are working with Jobcentre Plus and the National Careers' job brokerage service to promote these opportunities. Where it is deemed there are skills shortages, HS2, its construction partners and key stakeholders including local authorities, training delivery organisations and Local Enterprise Partnerships work together to invest in plugging the skills gap.

In partnership with our supply chain, we are reaching under-represented groups, directly targeting local unemployed and underemployed young people and adults from diverse backgrounds including people who may need additional or specialist support. Balfour Beatty VINCI is working closely with local authorities and charities such as The Princes Trust and Remploy to bring new people into the sector and close the skills gap.

HS2, a state-of-the-art high-speed railway line, providing the UK with additional rail capacity

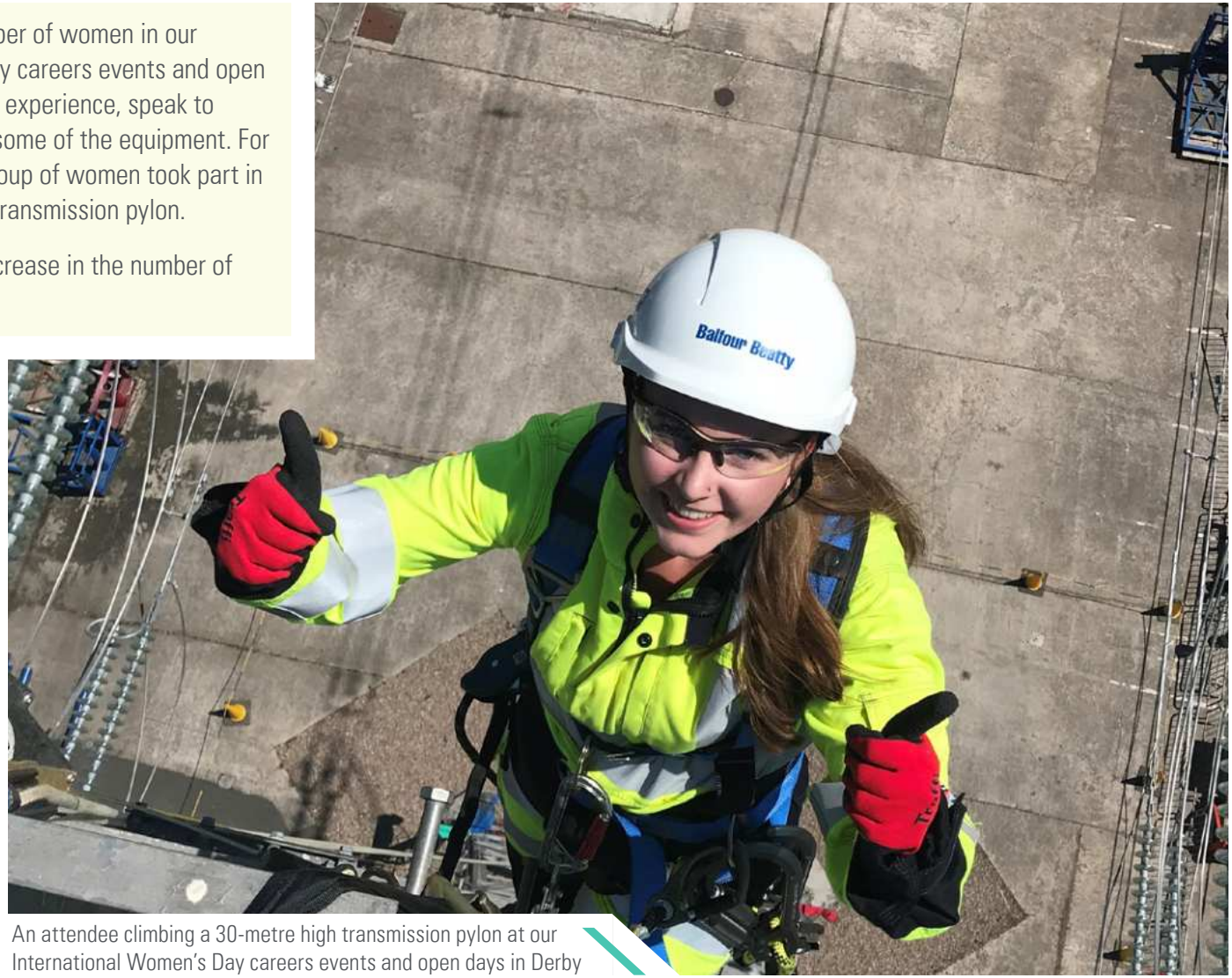
Case Study

Tangible action to improve the diversity of our energy workforce

Our business is taking targeted action to increase the number of women in our Energy business. We have done this by hosting women-only careers events and open days, that give attendees the opportunity to gain hands-on experience, speak to women who are already working in the sector and try out some of the equipment. For example, in celebration of International Women's Day, a group of women took part in an open day event that included climbing a 30-metre high transmission pylon.

By providing these opportunities, we have seen a 100% increase in the number of women joining our business as overhead lines operatives.

Scan the QR to watch our video from our International Women's Day careers event and open day.



An attendee climbing a 30-metre high transmission pylon at our International Women's Day careers events and open days in Derby

Case Study

Developing digital and cyber skills

Balfour Beatty is investing heavily in digital technology and simultaneously cultivating a skilled workforce capable of harnessing its full potential. This includes nurturing a pipeline of emerging talent and elevating their expertise in digital and cyber from the outset of their careers.

One element of this is Balfour Beatty's partnership with independent charity WorldSkills UK, the local branch of a global organisation which operates in collaboration with employers, educational institutions, and governments to run competition-based training programmes with the objective of implementing international best practice that elevates standards in apprenticeships and technical education. Balfour Beatty is a proud sponsor of WorldSkills competitions in digital and cyber and has been delighted to have employees who are winners and finalists of the competition, including BIM Coordinator, Mona Nawaz who was our 2022 finalist for the internationally acclaimed competition.

Utilising digital tools and technology on our Midland Metropolitan University Hospital project in Birmingham

Case Study

Our commitment to "earn and learn" and the next generation

We have been committed to "growing our own" skills pipeline for over 40 years, with a strong focus on supporting "earn and learn" roles. As a proud member of The 5% Club, we have long been committed to investing in young people, supporting them to obtain the knowledge and experience they need to build their confidence and skills. We are proud to exceed The 5% Club's target of having 5% of our employees in earn and learn roles, having reached 7.4% at the end of 2023, including 310 new entrants in the year.

We also look to engage students through school outreach and college engagement, showcasing the wide range of careers in the sector and improving the image of the sector.

Many of our projects undertake this outreach in the schools and colleges around our schemes and a number of our colleagues act as either STEM Ambassadors – working with pupils through STEM Learning to help promote careers in engineering – or Enterprise Advisors – working with school staff. 36% of these are female ambassadors, going into schools as role models to ensure that the sector is seen a welcoming place for women.

To find out more about The 5% Club, please visit 5percentclub.org.uk

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