Energy UK

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YEP

Young Energy Professionals Forum

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Meeting the Challenge:

Attracting and retaining future energy leaders

About YEP

The Young Energy Professionals (YEP) Forum is a community that promotes the next generation of energy industry leaders, providing opportunities to meet, collaborate, develop and recognise success. The Forum represents over 3,000 professionals from more than 350 organisations.

Introduction

In the next 15 years, within the energy sector, the United Kingdom foresees a shortfall of one million jobs as 20% of the engineering workforce retires. This second edition of the YEP Forum's Meeting the Challenge report seeks to build a picture of the roles, backgrounds, motivations and experiences of YEPs to understand the factors that shape entry into the sector, the skills gaps that young professionals face, and the barriers that prevent people from pursuing energy careers. By capturing these insights, the report aims to inform strategy across the energy sector, helping to attract, develop and retain the skilled, diverse workforce required to deliver the UK's legally binding Net Zero commitment by 2050 and target of achieving Clean Power by 2030 –and to support a thriving, innovative energy sector for decades to come.

Apprenticeships are a critical talent pipeline for the energy sector, bringing in practical, technically skilled people who are essential to delivering the transition, and it is vital that the YEP Forum continues to champion, support and develop this pathway. For the first time this year, we have a focused section of the report which addresses Young Energy Apprentices (YEAs!) and how these pathways can be strengthened to better serve future talent.

Key findings

- **Retention in the sector is strong – and apprentices are even more committed.** A large majority of YEPs say they are very likely to stay in the industry for at least five years. Apprentices are almost 20% more likely than non-apprentices to say they are very likely to stay.
- **Climate change is the dominant motivator – but varies sharply by group.** Climate-motivated YEPs are **~40% less likel**y to want to leave the industry within five years.
- **The biggest barrier to entering the sector is simply knowing what jobs exist.** Regional and demographic differences are significant, particularly for those outside of London.
- **YEPs identified technical, strategic and communication skills as most important for their careers.** The skills they feel they are missing include leadership, confidence and energy system knowledge, all emerging as the most common gaps.
- **Apprenticeships are highly effective – yet under-considered. 61%** of YEPs never considered an apprenticeship (83% in London), yet apprenticeships deliver outstanding outcomes. **88%** of apprentices stayed on the same career path and gave an **8.2/10** usefulness rating of their apprenticeship for their long-term career.
- **Energy sector apprentices want clearer structure, communication and progression support.** Technical apprentices in particular are 75% more likely to cite communication gaps, and female apprentices are about a third more likely to cite structural issues.

1 Respondents were asked to select from four options to describe their gender: man, woman, non-binary, and prefer not to say. See page 25 for a full breakdown.

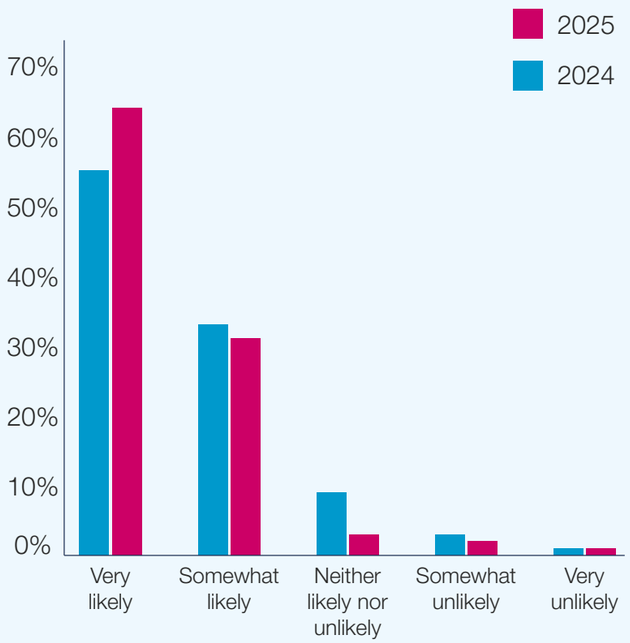
95%
of YEPs somewhat to very likely to stay

We love it here!

YEPs' likelihood of remaining in the energy sector in five years' time

Good news – YEPs are pretty happy! 63% say they are very likely to stay in the industry for at least five years, a significant increase from the prior year. These results indicate continued strong commitment to staying within energy, with no evidence of declining retention sentiment among early-career professionals. Comparable sector surveys show widely varying five-year retention expectations – from around 80%+ in construction to as low as 30% in further education – suggesting that YEPs' intention to stay is at the strong end of the spectrum, with 95% of YEPs somewhat to very likely to stay.

Diving deeper into the data, apprentices in 2025 were nearly 20% more likely than non-apprentices to say they were very likely to remain in the industry. Also in 2025, the majority of respondents who were very unlikely to remain in the industry for more than five years were in policy/regulation – a significant rise from 2024.



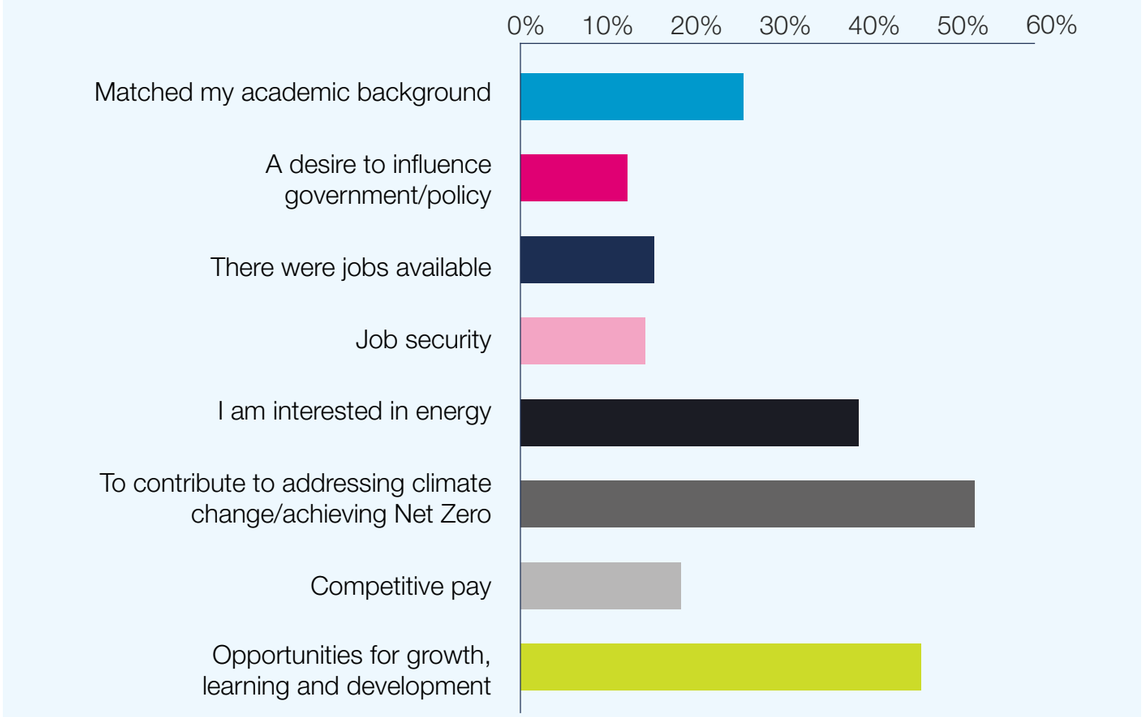
Why do people join and stay in the industry?

What motivated YEPs to join the energy sector?

Addressing climate change and achieving Net Zero remains by far the strongest motivator for people joining the sector – a trend fully consistent with 2024's findings, where climate action was also identified as the primary reason to enter the industry. Indeed, climate-motivated YEPs are around 40% less likely to seek to leave the industry within five years.

Within these motivators, there are clear patterns. Those who work in policy/regulation were 4.7 times more likely to say they joined with the intention to impact government policy than average. While mid-ranking overall as a driver, growth, learning and development, was cited far more prominently among people with fewer than five years of industry experience.

Several unexpected and important patterns arose too – for example, regarding job security, which appears to be a modest motivator for YEPs in aggregate but is a major motivator for apprentices and early-career entrants. Apprentices are around twice as likely as non-apprentices to cite job security as a reason for joining the sector.



Which YEPs were most motivated by climate change?

While addressing climate change is the most prominent motivation for pursuing a career in energy, when we look at different sub-populations in our survey respondents, variations emerge. The most climate-motivated groups are concentrated among non-apprentices and in strategic or analytical sectors. Those working in energy management and efficiency, policy/regulation, renewables and research and development show consistently high interest in Net Zero, reflecting the strong link between their day-to-day roles and decarbonisation goals.

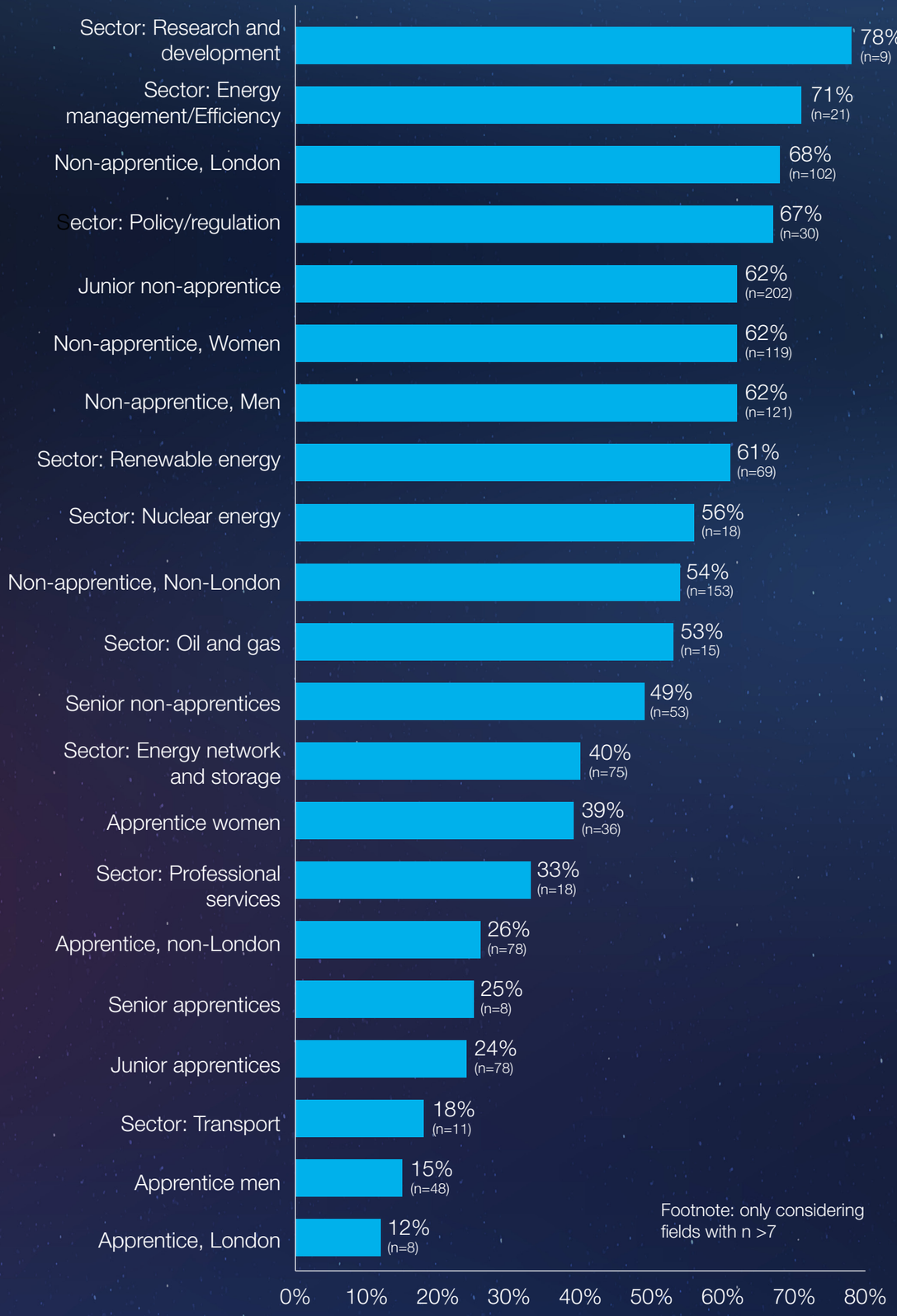
By contrast, groups with lower climate motivation are driven by a very different set of priorities. For example:

- Those in the transport sector are primarily motivated by interest in energy (55%) and job security (18%).
- Male apprentices show a similar pattern: their top motivations are interest in energy (35%), job security (27%), and working on new technologies (15%). By contrast, female apprentices were 2.7 times more likely to be motivated by climate change (39%), with this being their second strongest factor (after opportunities for growth (58%)). However, among non-apprentices, women and men were essentially identical in how motivated by climate change they were.
- Apprentices in London show the clearest departure from climate-related motivations, with their leading drivers being job security (50%), working on new technologies (50%), and interest in energy (38%).

55%

motivated by interest in energy

Climate/Net Zero as a motiviation by profile



What do YEPs think is the biggest barrier preventing people from pursuing a career in the energy sector?

The biggest perceived barrier discouraging YEPs from entering the energy sector was overwhelmingly a gap in knowledge about which jobs exist – far exceeding any other factor. This is followed by a perception of a low number of entry-level roles and a gap in understanding of what skills or qualifications are needed, pointing to a foundational information gap about how to access energy careers.

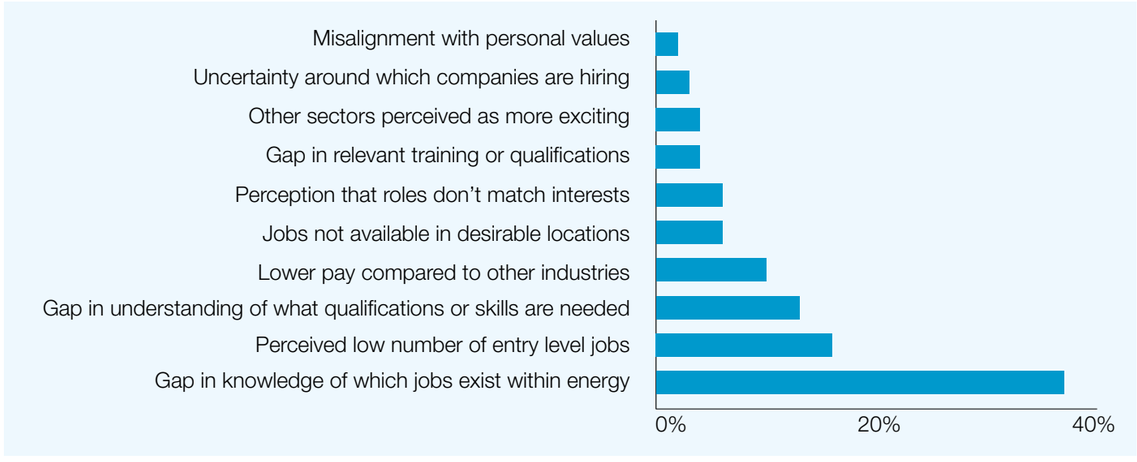
Those outside of London were more than twice as likely to cite a lack of availability of jobs in desirable locations, with the contrast particularly distinct for apprentices: 8% of apprentices outside London selected this barrier, compared with 0% in London. Scotland stands out even further: 16% of Scottish respondents identified location as a barrier, the highest of any region or nation. Given the importance of Scotland to the energy transition, this trend warrants further examination. Conversely, Londoners were around four times more likely than people based elsewhere to say that other sectors feel more exciting.

How can the energy sector best promote the industry and overcome barriers?

These motivational differences reveal a structural divide in what attracts people into the sector and have important implications for how the sector positions itself to future talent. A single message will not resonate across all audiences: mission-driven graduates and early-career professionals respond strongly to climate impact, innovation and the opportunity to shape national policy, whereas apprentices and operational entrants are far more motivated by job security, skills development and exposure to new technologies. Factors as diverse as geography, gender and sub-sector demonstrate clear differences.

At the same time, the biggest barriers sit at the very start of the pipeline – widespread lack of knowledge about what energy jobs exist, limited understanding of required skills, and too few visible entry-level opportunities. These challenges are unequally distributed: state-educated young people face larger information gaps, those outside London struggle with location-based barriers and Londoners are far more likely to perceive other sectors as more exciting.

To attract a broader and more diverse talent pipeline, the industry must tailor its messaging – emphasising purpose, system change and decarbonisation for analytically oriented and policy-driven roles, while highlighting clear career pathways, stability, hands-on experience and progression for vocational or technical routes. The sector must also improve the visibility of entry-level roles, clarify qualification requirements and demystify the full range of careers available. Targeted communication, rather than generic climate-centric branding, will be key to reaching the full breadth of future YEPs.



What skills do YEPs need?

What skills did YEPs report as most important for their careers?

Across the survey as a whole, YEPs most frequently identified technical skills (54%), strategic thinking (46%), and communication (40%) as the most important skills for their careers. Policy and regulatory knowledge (35%) and project management and networking (both ~22%) round out the top factors. But these headline figures mask significant variation by gender, entry pathway, sector, and location.

Men were substantially more likely than women to rate technical skills as career-critical (64% vs 46%). Women, in contrast, rated strategic thinking more highly (52% vs 44%) and were also slightly more likely to value project management and networking. Policy and regulatory knowledge was considerably more important to men (41% vs 30%).

Apprentices were far more likely than non-apprentices to rate technical skills as career-important (77% vs 48%) and more likely to value leadership and team management (22% vs 9%). Non-apprentices, by contrast, rate communication almost as important as technical skills – both at 48% – and are much more likely to emphasise commercial and financial skills than apprentices (26% vs just 6%). Apprentices and graduates appear to hold fundamentally different mental models of what a successful career in energy requires.

The skills YEPs view as most important are strongly shaped by which sector they are in. Respondents in networks and storage are the most technically oriented: 77% rate technical skills as important, more than five times the share in policy/regulation (13%). Those in energy management and efficiency place particularly strong emphasis on strategic thinking (62%), reflecting the analytical and cross-cutting nature of efficiency work. Renewables respondents place comparatively greater weight on communication (46%) and project management (35%) than most other sectors. In contrast, policy/regulation respondents prioritise policy knowledge (80%), roughly double the level seen in most technical sectors.

Skills rated most important for career, by sector[2]

	Technical skills	Policy and regulatory knowledge	Strategic thinking	Communication	Commercial and financial skills	Project management	Networking
Renewable energy (n=69)	57%	26%	43%	46%	30%	35%	23%
Networks and storage (n=75)	77%	40%	39%	31%	17%	21%	19%
Energy mgmt/ efficiency (n=21)	67%	57%	62%	43%	5%	24%	0%
Policy/ regulation (n=30)	13%	80%	47%	57%	0%	17%	43%

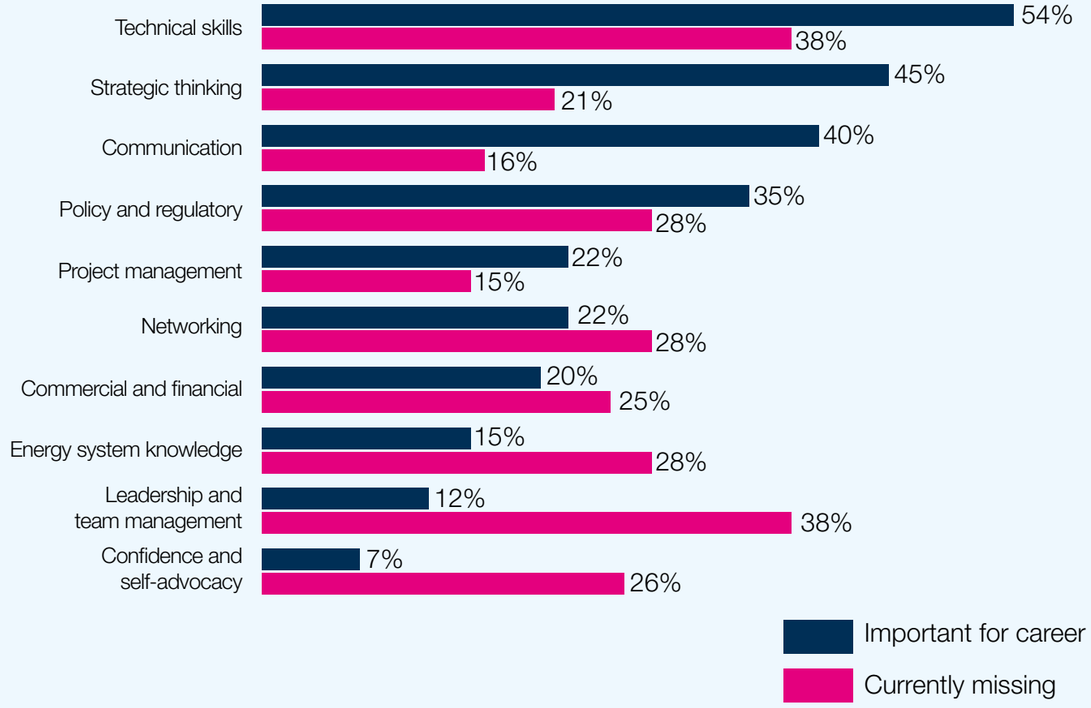
100%
0%

2 Table lists the top four largest groupings surveyed. For a comprehensive list, please refer to page 23.

What are the skills YEPs feel they are missing?

There were strong differences between the skills that YEPs feel they need to excel in their careers, and the skills they feel they are missing or want to improve. A clear gap emerges between career-critical skills (technical, strategic and communication) and the skills YEPs most feel they lack, particularly leadership, confidence and energy system knowledge.

Of those skills that YEPs feel they are missing, technical skills and leadership or team management were the gaps most commonly cited, each selected by around 38% of respondents. These were followed by networking and relationship-building (28%), understanding the wider energy system (28%), and policy and regulatory knowledge (28%). Within specific sectors and demographic groups, however, differences were considerably more pronounced.



Energy management and efficiency respondents most frequently cited missing technical skills (57%), around 1.5 times higher than the overall average – consistent with the engineering-heavy nature of these roles. Renewables respondents emphasised leadership and team management more than any other sector (52% vs 34% elsewhere), suggesting that fast-growing teams and rapid career progression are creating acute demand for people management capability. Networks and storage respondents showed a more balanced profile with no single dominant perceived weakness, though technical skills (47%) and strategic thinking (31%) were most commonly cited. Policy/regulation respondents were notable in flagging both leadership (43%) and policy knowledge itself (40%) as gaps.

Missing skills[3] by sector (% of respondents)

	Technical skills	Leadership and team management	Energy system knowledge	Policy and regulatory knowledge	Confidence and self-advocacy	Commercial and financial skills	Strategic thinking
Renewable energy (n=69)	32%	52%	36%	20%	33%	22%	7%
Networks and storage (n=75)	47%	39%	23%	32%	28%	16%	31%
Energy mgmt/ efficiency (n=21)	57%	24%	38%	14%	24%	19%	33%
Policy/ regulation (n=30)	20%	43%	20%	40%	30%	27%	37%

100%
0%

Men and women reported similar rates of missing technical skills (40% and 37% respectively). The more significant gender difference lies elsewhere: women were 1.7 times more likely than men to report missing confidence or self-advocacy, while men were 1.5 times more likely to cite missing policy and regulatory knowledge.

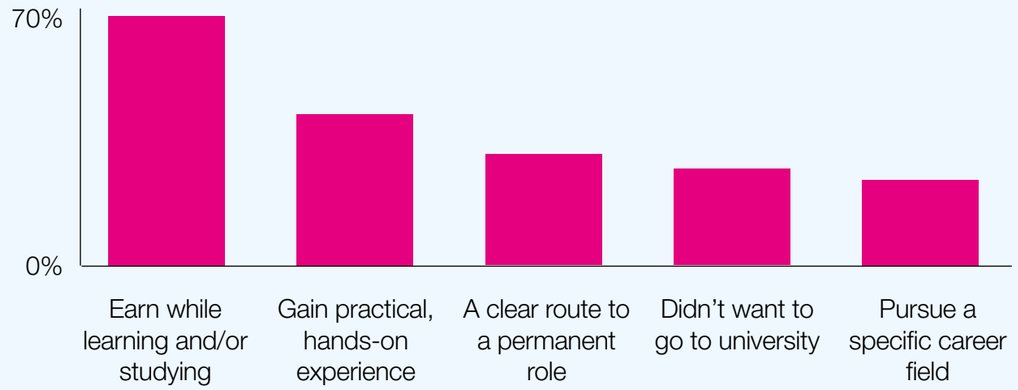
Privately educated respondents were more likely to perceive commercial and financial skills as missing (30% vs 24%), whereas state-educated respondents were about 20% more likely to cite technical skills gaps. There was little difference in perceptions of communication or leadership gaps by schooling background.

Apprentices were considerably more likely to perceive themselves as missing technical skills (49% vs 35%), suggesting that while apprenticeships build strong practical foundations, they may leave some participants feeling behind on the technical dimensions of their roles. Apprentices were also notably less likely to cite commercial or financial skills as a gap (19% vs 28%). This reflects a structural divide in how different entry pathways shape professional self-perception: graduates, who tend to come through more academically and commercially framed environments, are more likely to perceive their own soft skills and commercial awareness as weaknesses, while apprentices perceive their skills gaps as primarily technical.

3 Table lists the top four largest groupings surveyed. For a comprehensive list, please refer to page 23.

How can we support Young Energy Apprentices (YEAs)?

Why did young apprentices choose their path?



When interviewing YEAs, the primary trigger for pursuing an apprenticeship appeared to be a strong interest in a particular vocation – or, in some cases, a desire to move on from formal education – usually combined with a willingness to be flexible around the specific role. For example, candidates interested in 'engineering' often apply widely across different sub-disciplines. Many apprentices described applying to numerous programmes they believed they might enjoy, accepting as many interviews as possible, and ultimately choosing the best offer. For those who have an inkling of what career they may enjoy, apprenticeships appear to be a route with excellent results – 100% of those interviewed said that they would recommend doing an apprenticeship to anyone who is interested in a specific role or line of work, 90% said they felt happy with their salary, particularly expecting the salary uplift post-apprenticeship to place them among the top of their peer group, and 100% said they felt that they had more opportunity now than before they did their apprenticeship.

From those surveyed, YEAs from backgrounds where their parents did not hold a degree were more financially and practically motivated, with 73% selecting 'earn while learning' compared with 62% from degree-educated households, and 47% vs 42% for gaining hands-on experience. Although very few YEAs in our sample are London-based, 100% of those in London said earning while learning was a priority, and they were far more focused on gaining a permanent role (50%) or pursuing a specific career path (38%) than those outside of London. Notably, motivations such as gaining technical skills dropped off sharply among London YEAs.

When comparing experience levels, both senior and junior YEAs[4] ranked earning while learning as their top motivation, but senior YEAs were much more driven by employer and career alignment, being almost three times more likely than juniors to select pursuing a specific employer and 86% more likely than juniors to cite pursuing a specific career. Apprenticeships appear to deliver on these expectations, with around 88% of former apprentices still working in the same career path and on average rating the value of their apprenticeship for their long-term career at 8.2/10.

Socioeconomic background shows one of the clearest divides in apprenticeship uptake. People from state-educated backgrounds are more than twice as likely to take an apprenticeship route into the sector. This reinforces the role of apprenticeships as a critical access pathway for people who may be less likely to follow a traditional university route.

However, these benefits sit against a backdrop of low consideration. Most YEPs never even considered an apprenticeship, rising from 61% overall to 83% among those in London. For those who did consider one but ultimately did not pursue it, the university experience was the dominant draw, followed by a lack of information. Perceptions also matter; people who are most motivated by climate and Net Zero outcomes are more than three times less likely to consider apprenticeships or view them as a viable entry route, reinforcing a persistent narrative disconnect between vocational pathways and mission-driven roles.

> **"So many doors have been opened to me"**
>
> Madeleine Warburton, RWE - Apprentice Wind Turbine Technician

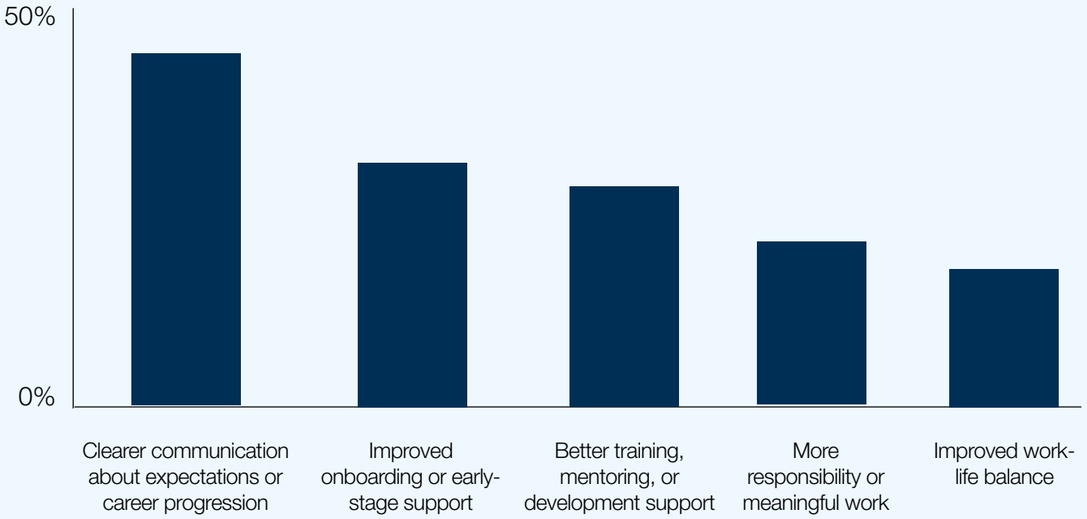
4 Senior is defined as having five to 10 years' experience and Junior as having less than two years' experience.

Interested in applying for apprenticeships?

Here are some useful sites that YEAs flagged to us:

- Energy & Utilities Skills & Jobs
- Energy Jobline
- Skills England - Apprenticeships
- Energy UK - Jobs in Energy
- Not Going to Uni
- Higherin
- Indeed
- Linkedin

How would YEAs improve their apprenticeships?



Clearer communication about expectations and career progression was the most common improvement area for YEAs, selected by 43%, followed by 30% who wanted better onboarding. Interviews also highlighted that the apprenticeship application process can feel complex, time-intensive, and difficult to navigate – particularly for individuals without access to strong personal or professional networks. Many YEAs noted limited guidance, inconsistent feedback, and a lack of transparency during recruitment. More broadly, apprentices observed that energy-sector apprenticeships are often not visible to students early enough in their decision-making journey. Schools continue to place significant emphasis on university pathways, with comparatively limited structured exposure to vocational routes. As a result, awareness of apprenticeships frequently depends on family connections, informal networks, or individual proactivity – for example, a strong desire to enter a specific profession or pursue a more applied route outside traditional academic study.

Regional patterns also stood out. Despite the small sample, London apprentices showed distinctly different top priorities, with 63% calling for higher pay, 50% for a clearer path to a permanent role, and 38% for better work-life balance – figures that dwarf those of apprentices outside London, where only 10%, 10% and 15% selected the same priorities respectively. Beyond the survey, when interviewed, YEAs often described geography as an important factor for being accepted into positions, with large numbers of apprenticeships only offered to candidates within certain postcodes. However, once the apprenticeship has begun, apprentices almost unanimously reported being happy with travel arrangements, including generous policies around company cars, mileage and travel time allowances.

Gender differences were also notable, with 81% of female YEAs highlighting a lack of structure, communication or support compared with 60% of males.

Networks apprentices were 2.6 times more likely than others to highlight work-life balance as an area for improvement. Technical apprentices were much more likely to call for clearer expectations and stronger onboarding, being 75% more likely than non-technical YEAs to cite communication gaps. When interviewing YEAs, we found that they felt that some employees on-site (e.g. for engineering apprenticeships) could be better trained on how to work with relatively younger apprentices. Non-technical YEAs, by contrast, were far more focused on pay, progression clarity and securing permanent roles, and 70% more likely to seek clarity on permanent pathways.

In particular, there appear to be critical issues with degree apprenticeships, which are highly competitive to attain and also have a very high dropout rate (c.40%) – significantly higher than our European peers in Germany and Austria (both below 20-25%). In England, degree apprenticeships attract students with relatively high prior attainment but struggle to provide parity of experience with full-time university routes, often resulting in weaker integration and support structures at the institutional level. This suggests that without stronger wrap-around mentoring, workload alignment and academic support –particularly for young apprentices balancing full-time work and study – these programmes risk replicating issues seen in both traditional vocational training and conventional higher education dropout patterns.

Networks apprentices

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Studying and learning in apprenticeships

Across interviews with YEAs, the studying experience was described as intensive and at times isolating. Cohorts were typically small (10–40 learners), and many apprentices travelled significant distances for training – sometimes staying away for weeks. One described extended time away from home as “really tough and demanding,” highlighting the level of independence required at young ages.

While some programmes were largely online, many apprentices said they preferred in-person learning, citing stronger engagement and peer interaction. Others were the only apprentice in their company on a given course, limiting informal support. What many wanted was access to someone who had completed the same qualification – a near-peer mentor to provide practical guidance. This suggests an opportunity to increase cohort density, strengthen alumni networks, and expand specialist provision across colleges.

Where high-quality technical facilities were available – either at college or via employer training centres – learning outcomes were consistently strong. Syeda Akhtar at Energy Systems Catapult benefitted from having a centralised, flexible platform without deadlines, enhancing learning.

Several skills gaps were also identified, particularly around systems thinking and financial context. One apprentice noted that early in their career they lacked understanding of “how [the] market actually affect[s] our investment decisions,” despite operating in a highly regulated sector. As apprentices move into more senior roles, this broader commercial awareness becomes increasingly important.

Programme structure also influenced outcomes. Those who experienced broader exposure (e.g. to a range of roles or teams) reported stronger long-term capability. Oliver Feeney at Drax highlighted the benefit of sequencing in his degree apprenticeship: the first two years of university study were lighter while he was still developing in-role capability, with academic intensity increasing later. This alignment improved sustainability and learning outcomes.

Junior YEAs were more than twice as likely as seniors to want stronger early-stage support, while senior YEAs were increasingly focused on progression and meaningful work, and were 60% more likely to want clearer permanent role pathways and more than twice as likely to seek meaningful responsibilities.

These patterns highlight common foundations all YEAs need, but also distinct improvement priorities linked to role type, region, gender and seniority.

Case study

One apprentice we interviewed, Nathan Hunt, began their career in an apprenticeship at National Grid and has since progressed into a strategic role at the National Energy System Operator (NESO). Now in a senior-level role relative to their age, they described the apprenticeship as having given them “a lot more opportunities”, rigorous training and as an experience that accelerated both their professional development and confidence in ways a purely academic pathway may not have done

However, they highlighted structural barriers that limit the portability and recognition of apprenticeship qualifications. After completing their programme, they “got rejected from every single university [they] applied to,” despite holding qualifications equivalent on paper to A-levels. This reflects a wider disconnect between how apprenticeships are mapped within qualification frameworks and how they are perceived in practice. With significant variation in standards, oversight and recognition across programmes, making progression routes and accountability unclear. Strengthening consistency and regulatory clarity would improve learner protection while enhancing the long-term credibility, perceptions and mobility of the pathway.

These structural constraints are reinforced by the rigidity of entry points. Apprenticeship routes are typically concentrated at age 16 or 19+, with limited structured opportunity in between. As a result, young people who wish to reconsider their pathway shortly after leaving school face relatively few formal mechanisms to pivot. Improving permeability between vocational and academic routes – at both entry and progression stages – would help ensure that alternative pathways remain flexible rather than becoming closed loops.

The apprenticeship has given

“a lot more opportunities”

What can the energy sector do to support and encourage apprenticeships?

To better support and encourage Young Energy Apprentices, the priority is not wholesale reform but clearer visibility, stronger quality signalling and more consistent delivery. The most significant barrier identified was a lack of knowledge about what energy jobs exist and how to access them. Apprenticeships remain under-considered, particularly in London, despite delivering strong long-term outcomes. This underlines the need for improved careers guidance in schools that actively promotes vocational routes alongside university, with clear mapping of energy career pathways, qualification requirements and progression routes. The Government has already taken steps to strengthen technical education through reforms to apprenticeship standards, the introduction of T-levels, the Lifelong Learning Entitlement (LLE) and the establishment of Skills England. However, the evidence here suggests that sector-specific visibility still requires sustained focus.

Despite the strong outcomes they deliver, apprenticeships are generally not considered to be high-value pathways into the energy sector, and quality and consistency are important to change this perception. Apprentices most frequently called for clearer expectations, better onboarding and stronger communication, with technical and female apprentices reporting the greatest structural gaps. The Government has tightened apprenticeship standards, strengthened end point assessment and introduced greater oversight of providers to improve quality. Nonetheless, variation in delivery remains visible at programme level. There is a case for the energy sector to complement national reforms with clearer benchmarking of its own apprenticeship schemes, focusing on mentoring provision, progression clarity, completion rates and diversity outcomes. Making quality more transparent would help address perception gaps without duplicating existing regulatory structures.

Degree apprenticeships require particular attention. While the Government has introduced changes intended to simplify standards, increase flexibility and improve alignment between vocational and higher education routes, concerns remain nationally about completion rates and workload intensity. The evidence in this report suggests that apprenticeships are most successful where academic sequencing, protected study time and structured mentoring are carefully managed. The issue is therefore less about structural redesign and more about implementation and support. Employers and providers should prioritise workload alignment, wrap-around mentoring and clearer progression planning to reduce attrition and strengthen parity of experience with traditional university routes.

Finally, the findings highlight the importance of infrastructure. Access to specialist technical equipment significantly enhances learning, yet apprentices often travel long distances and experience isolation during training blocks. The Government is already investing in technical skills infrastructure through institutes of technology and local skills improvement plans. Building on this, there may be scope to develop more regional hub-based or residential training models for energy apprenticeships, concentrating high-cost equipment and strengthening peer cohorts while maintaining employer integration.

Case study

SP Electricity North West was awarded ‘Best Apprentice Programme in Energy and Utilities’ at the Apprenticeship Guide awards 2025.

It has invested time and resources in local communities and has seen an increase in applications from women and ethnic minorities, with a continued commitment to represent the communities it serves.

ENW provides open days and career fairs for potential applicants to be able to ask questions about the roles, expectations and progression – all things on which our YEPs said it would be helpful to have more information.

It also sponsors visas, unlike many larger apprenticeship providers – potentially supporting a more diverse talent pool.

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How can different stakeholders support YEPs and YEAs?

The Young Energy Professionals (YEP) Forum

The most significant barrier identified by YEPs is a lack of knowledge about what jobs exist in the energy sector and how to access them. YEAs also reported that application processes can be confusing, expectations unclear and progression routes insufficiently explained. The YEP Forum can respond by building on its Guide to Jobs in Energy, mapping clearer career pathways into the energy sector, specifically amplifying apprenticeship success stories, and providing transparent explanations of routes, requirements and long-term outcomes. Ensuring that these communications reach people at an early stage of their career journey, whether through schools, colleges or careers advisors, is crucial.

Skills gaps vary systematically by pathway and background. The YEP Forum should tailor its programme of capability-building to distinct profiles, offering technical confidence and systems literacy for apprentices, commercial and regulatory fluency for graduates, and cross-cutting leadership and networking development for all.

Motivations also differ by region and role. Climate impact strongly motivates many graduates and policy entrants, while apprentices and operational entrants are more influenced by job security, progression and hands-on experience. London respondents are more likely to perceive other sectors as more exciting. The YEP Forum can strengthen sector identity and retention by showcasing innovation, system impact and real progression stories across pathways, ensuring that both mission-driven and security-driven entrants see a long-term future in energy.

Finally, apprenticeships represent a clear strategic lever. They are strongly linked to retention and social mobility yet remain overlooked by a majority of respondents. The YEP Forum can strengthen peer mentoring, build cross-employer apprentice networks, and make visible the progression of former apprentices into senior and strategic roles. Doing so would reinforce apprenticeships as a central leadership pathway within the energy transition rather than a peripheral entry route.

Energy sector employers

Employers ultimately determine whether early-career routes translate into long-term sector capability. The findings suggest that the core issue is not recruitment volume but programme quality and progression discipline. Apprentices in particular call for clearer expectations, stronger onboarding and more structured development, with technical apprentices and female YEAs reporting the most pronounced gaps. This points to a need for greater managerial consistency. Line managers should be explicitly trained to support apprentices and early-career entrants, progression frameworks should be formalised rather than implied, and degree apprenticeship workloads should be deliberately sequenced to avoid avoidable attrition.

Retention is closely linked to perceived momentum. While apprentices display strong long-term sector commitment, more senior YEAs increasingly prioritise meaningful responsibility and defined permanent pathways. Employers who clarify how and when apprentices transition into substantive roles, and who provide earlier ownership of impactful work, will be better positioned to retain high-potential talent.

There is also a strategic signalling role. Apprenticeships remain undervalued relative to graduate routes despite strong outcomes. Employers can reshape this perception by making outcomes visible: publishing completion and progression data, highlighting senior leaders who began as apprentices, and demonstrating that apprenticeship pathways lead to strategic and commercial roles as well as operational ones. In doing so, employers reinforce parity of esteem without requiring policy intervention.

As Energy UK highlighted in its recent work on the Growth and Skills Levy, the Government can do more to support employers to deliver more and higher quality apprenticeships, including:

- Greater, more certain and longer-term funding can allow employers and training providers to invest more in developing apprenticeship programmes.
- More flexibility, updated funding bands and facilitating employers to create bespoke apprenticeships would support the creation of apprenticeships better suited to the complex, specialised and advanced skills need for the energy sector.
- Allowing employers to use Growth and Skills Levy funding to cover indirect costs such as travel and accommodation would help solve issues identified in this report about the burden of travelling for apprenticeships.

Policy makers and the wider energy sector

Making the most of apprenticeships remains a government priority across the economy. The government has already undertaken substantial changes to standards, funding structures and technical education architecture – and by following the recommendations outlined above, it could do even more to support employers in the creation of better apprenticeships. There also needs to be a greater focus on strengthening coherence across the system to tackle gaps relating to implementation, alignment and perception.

First, careers guidance must consistently reflect the full range of energy pathways. Apprenticeships are under-considered despite strong retention outcomes. Ensuring that vocational routes are clearly presented alongside university pathways, particularly in regions and institutions where awareness is lowest, remains central to addressing the entry bottleneck identified in the report.

Second, parity between vocational and academic routes requires practical reinforcement. Although standards have been strengthened, mobility between apprenticeship and higher education pathways remains uneven in practice. Clearer articulation agreements, consistent recognition of apprenticeship qualifications within university admissions, and transparent progression data would strengthen confidence that vocational routes do not limit long-term optionality.

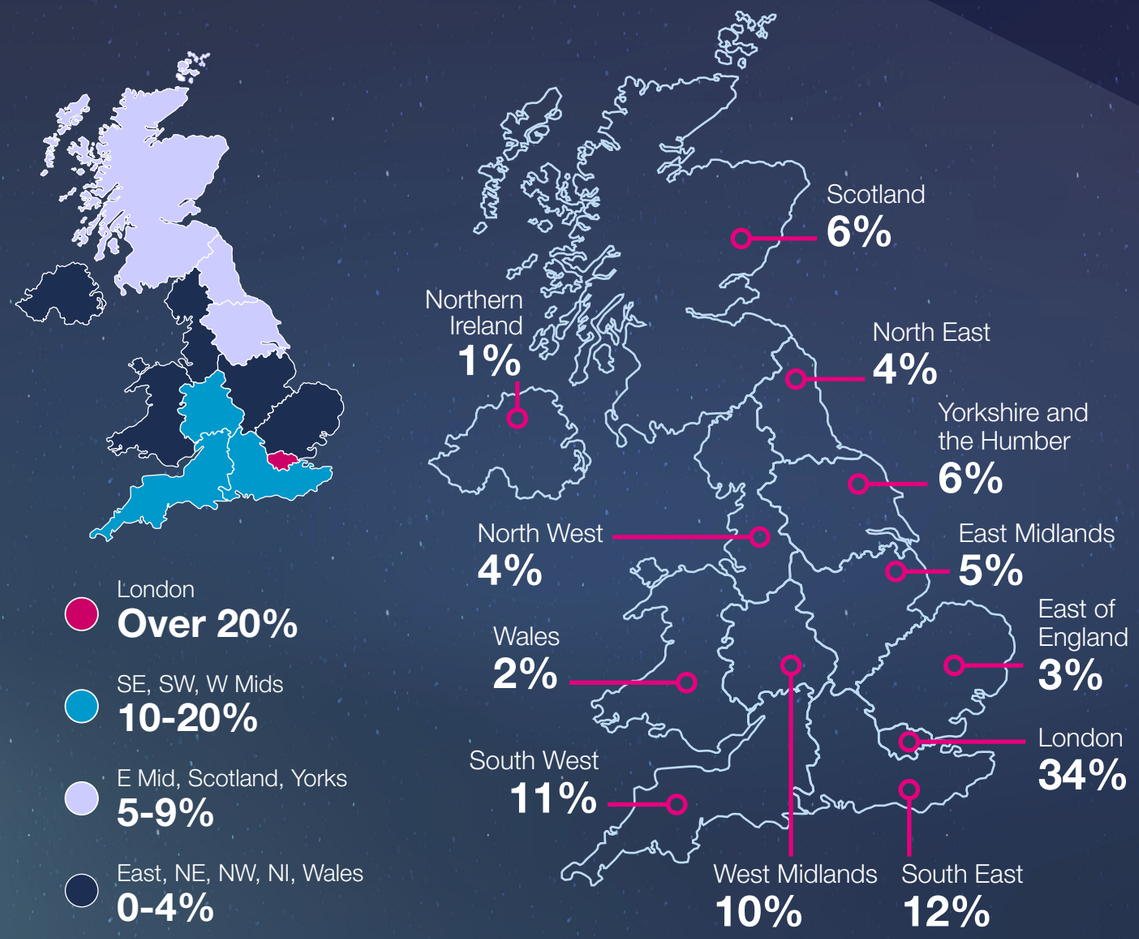
Third, quality signalling should become more transparent at sector level. Rather than introducing new regulatory layers, policymakers could encourage the development of a sector-led benchmarking framework for energy apprenticeships, aligned with existing oversight mechanisms. A scorecard approach focused on mentoring provision, completion rates, progression outcomes and diversity metrics would address variation without duplicating national standards.

Finally, infrastructure should be considered in terms of system efficiency rather than expansion alone. Apprentices report fragmented delivery and travel burdens alongside the benefits of high-quality technical equipment. As existing investments in institutes of technology and local skills plans mature, policymakers should examine whether more coordinated regional delivery models could reduce duplication, improve access to specialist facilities and strengthen peer cohorts. The aim would not be to redesign apprenticeships, but to optimise how and where high-cost training capacity is concentrated.

Who took the survey?

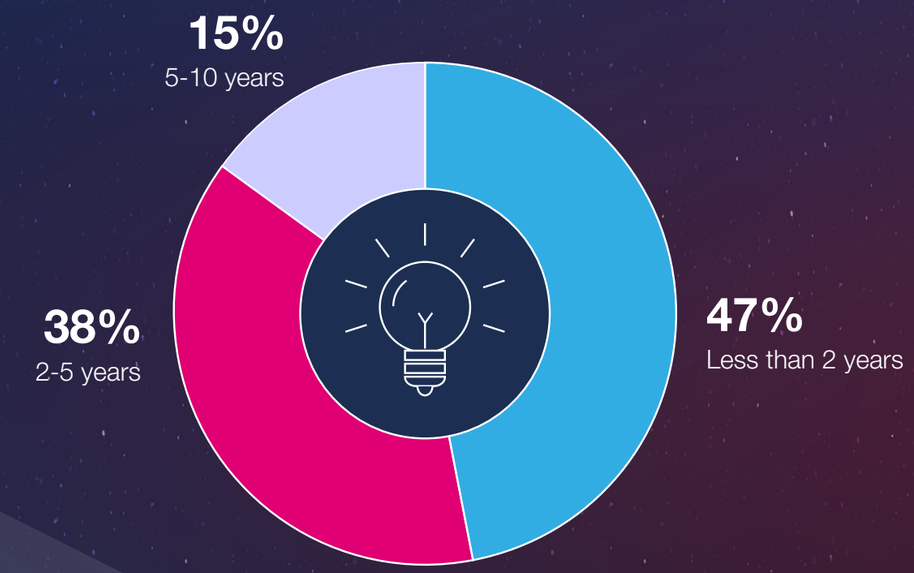
This year, the survey was completed by 341 Young Energy Professionals with fewer than 10 years of experience in the energy sector, and was then complemented with 10 further interviews, with a particular focus on understanding the apprenticeship experience.

Where are the respondents located?



Footnote: There is a significant difference for apprentices, of whom only 9% were based in London

Years of experience in the energy sector



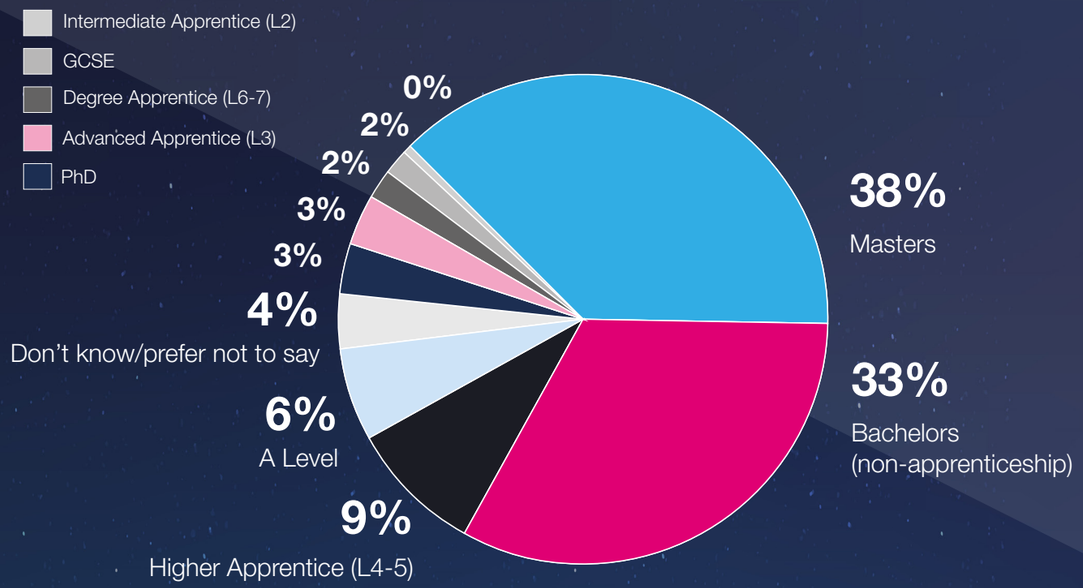
10+ sectors represented

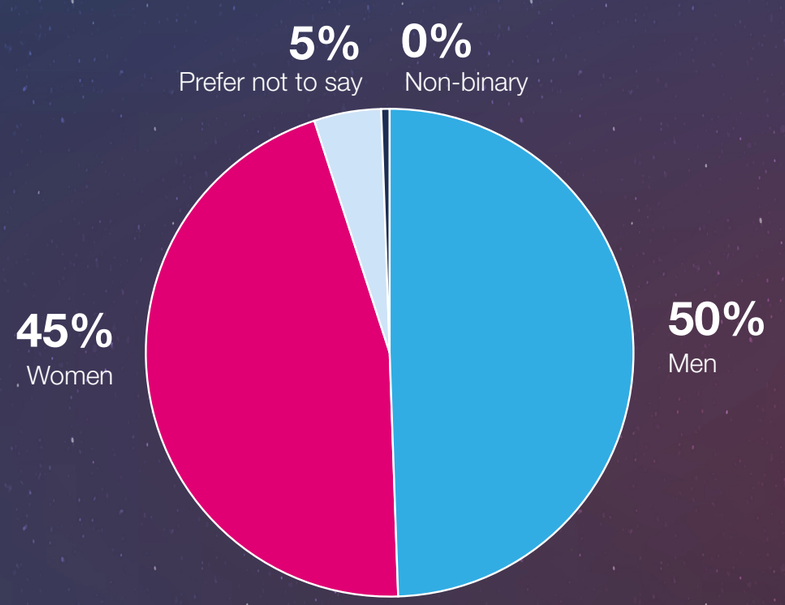
Energy networks and storage	Renewable energy	Policy/ regulation	Energy management	Nuclear energy	Professional services (e.g. finance, legal)
24.6%	22.6%	9.8%	6.9%	5.9%	5.9%

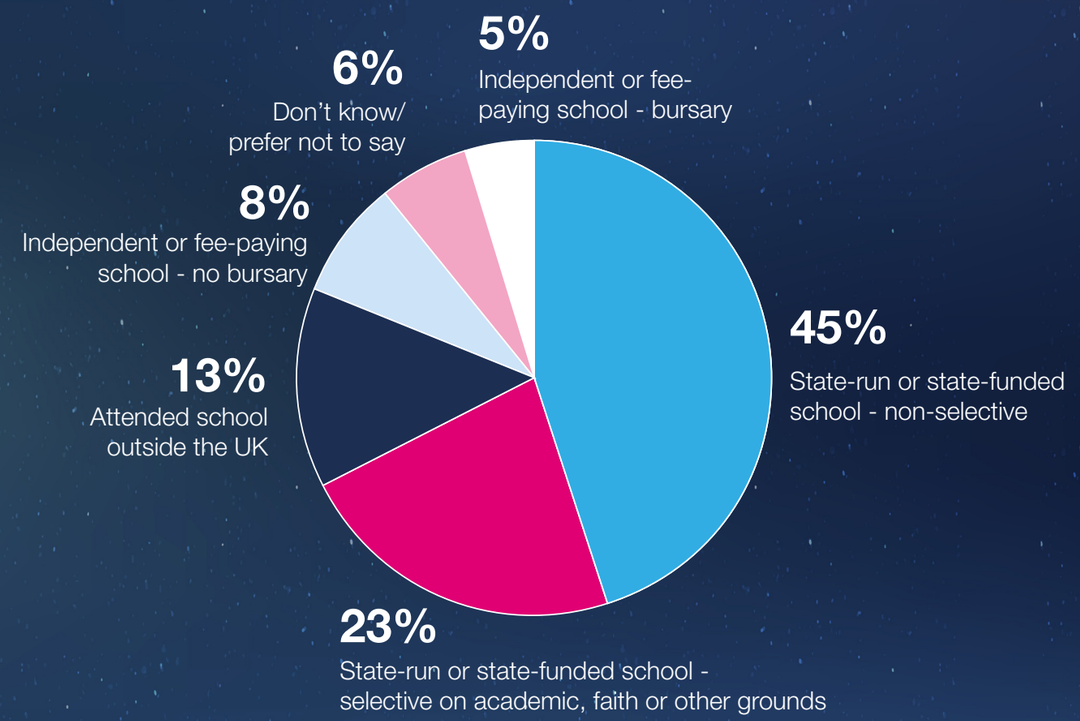
Oil and gas	Transport	Communications	Energy retail	Research and development	Heat	IT
4.9%	3.6%	3.0%	3.0%	3.0%	3.0%	2.3%

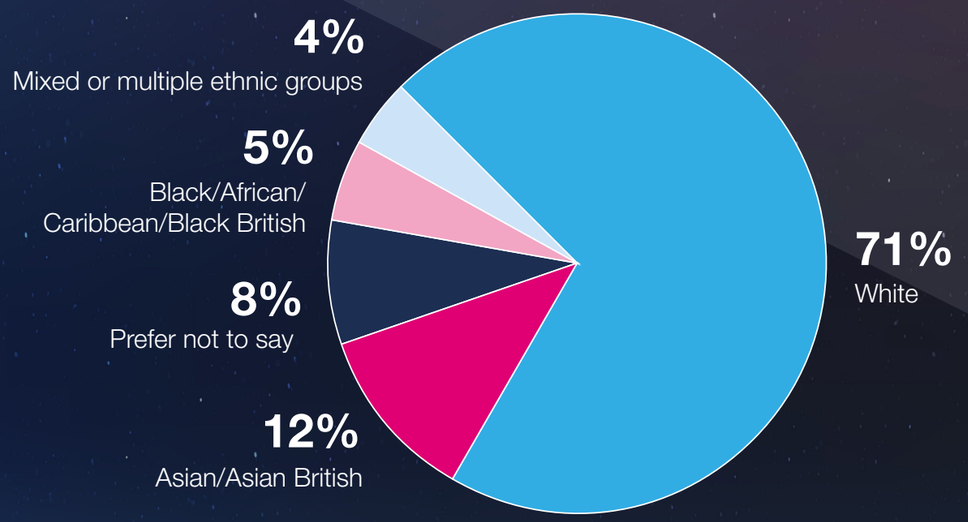
2.3% Prefer not to say

Representation









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Thank you to all YEPs who took part in this survey and report.

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Publications - Energy UK

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