Navigating Talent Challenges in the Energy Sector

The energy sector is undergoing a **profound transformation**, driven by technological advancements, policy shifts, and the global push towards sustainable practices. This evolving landscape encompasses a **wide range of industries**, from traditional oil and gas to renewables and emerging energy technologies. As the sector diversifies and adapts, the demand for talent at all levels has become more critical - and more challenging - than ever before.

Companies are navigating a **complex talent landscape** where the skills required are rapidly changing, and competition for top talent extends beyond traditional energy roles into new and dynamic fields. Attracting, developing, and retaining talent across various career stages—early, mid, and senior—requires a strategic approach that not only addresses the immediate needs of the workforce but also anticipates future demands.

Understanding these challenges and effectively managing talent across the energy sector is essential for driving innovation, sustaining growth, and achieving long-term success. In this article we look to explore the **unique talent dynamics within the energy sector**, with a focus on identifying and overcoming the hurdles faced by organisations when it comes to their talent needs.

Early Career Talent

Attracting early career talent in the energy sector presents a unique set of challenges, particularly as the industry competes with the allure of more sustainable and tech-driven fields. In recent years, there has been a notable **decline** in student enrolment in traditional oil and gas programmes. In the United States, for example, undergraduate enrolment in petroleum engineering programmes has plummeted by 60% since 2014, according to data from the American Society for Engineering Education (ASEE). In the United Kingdom, applications to

petroleum-related MSc courses have dropped by nearly 50% in the past five years, reflecting a growing **disinterest** among students in pursuing careers tied to fossil fuels. This shift reflects the **changing values** of young professionals who are more inclined towards careers that align with environmental and sustainable goals, making the traditional oil and gas sector less appealing.

To address this, energy companies must redefine their employer brand by showcasing their role in the energy transition, the innovative projects they are undertaking, and the broader impact they can have on a sustainable



future. Moreover, the skills required at entry level are **evolving rapidly**, with digital literacy, data analytics, and an understanding of emerging technologies becoming essential alongside



traditional engineering and geological skills. This shift necessitates a stronger focus on tailored development programmes that go beyond conventional training, including mentorship, cross-functional projects, and exposure to diverse aspects of the energy landscape. By investing in early career talent and providing clear, engaging career pathways, companies can not only **attract** the best and brightest but also **retain** them in a competitive market that is increasingly leaning towards sustainability.

This focus on early career talent is already transforming the energy sector. Historically, younger professionals gravitated towards fields perceived as more dynamic and financially rewarding. However, the **urgency of the energy transition** is reshaping this perception. Companies like Ørsted and BP are investing heavily in graduate recruitment and development programmes to build a robust pipeline of future leaders. Lars E. Sørensen, Ørsted's Chief Talent Officer, notes, "Investing in young talent with technical skills and a passion for sustainability is critical for driving our long-term energy transition goals." By nurturing early career professionals, these companies are ensuring a steady influx of skilled individuals who will drive future innovations and sustainability efforts.

Mid-Career Talent

Mid-career professionals in the energy sector are at a **pivotal stage**, where they must leverage their extensive experience while adapting to rapid industry changes. As the sector evolves towards renewables and integrates new technologies like AI, many mid-career individuals—particularly those rooted in traditional oil and gas roles—are finding the need to **upskill or reskill** to stay competitive. This highlights a growing **skills gap** within organisations that needs to be addressed.

Our work as headhunters reveals that the demand for skills in areas such as data analytics, engineering and geoscience for renewable initiatives is **outpacing the available talent**. Many mid-career professionals have yet to receive the exposure or training required to excel in these areas. Therefore, it's crucial for companies to invest in targeted development programmes, certifications, and on-the-job learning experiences that enable these professionals to pivot effectively into new roles or emerging sectors within energy.



Cross-sector hiring is another key strategy we advocate for, as it allows companies to bring in talent from adjacent industries—such as technology, aerospace, finance, or even consumer goods—infusing **fresh perspectives** and much-needed skills. This requires a more open-minded approach to hiring, valuing transferable skills and adaptability over a strictly traditional energy background. For example, a project manager from the tech sector could offer valuable expertise in agile methodologies, which are increasingly relevant to renewable energy projects.

Shell exemplifies this evolving strategy by recruiting from technology and manufacturing sectors, bringing in leaders with experience in digital projects and data analytics—crucial for advancing their renewable energy goals. Similarly, BP is realigning its talent strategy to support its ambitious goal of achieving net-zero emissions by 2050, focusing on attracting experts in sustainability and



carbon markets. This trend towards specialised knowledge highlights the industry's shift towards managing evolving regulatory landscapes and integrating low-carbon technologies.

Our recent work with a leading mining company underscores the benefits of cross-sector hiring. We **successfully recruited** from the Formula 1 and the aviation sector, each renowned for their advanced skills in maintenance, repairs, and operational efficiency. For instance, Formula 1 professionals excel under high pressure with great precision, while the aviation's emphasis on reliability, has significantly enhanced operational efficiency and innovation within the organisation.

In our role as an executive search agency, we encourage clients to **broaden their criteria** for what constitutes valuable experience. By embracing **diverse** talent pools and prioritising adaptability and innovative thinking, energy companies can build a more agile and forward-looking workforce. Additionally, retention strategies like flexible working arrangements, a commitment to continuous learning, and clear pathways for career progression are known to have a significant impact. Supporting mid-career talent through these changes ensures that organisations not only retain their valuable experience but also position themselves to thrive in a rapidly evolving energy landscape.

Senior Talent

Senior talent in the energy sector plays a crucial role in **steering** these organisations through a period of significant transformation. However, this group faces its own unique challenges as the industry shifts towards new energy sources, digitalisation, and increased regulatory scrutiny. Senior leaders are expected to not only bring a wealth of experience and strategic insight but also to champion change, foster innovation, and lead diverse teams in navigating the complexities of the evolving energy landscape.

One of the key challenges is that many senior leaders have built their careers in traditional energy, such as oil and gas, where the emphasis was historically on operational efficiency and technical expertise. As the sector moves towards renewables and sustainability-focused initiatives, there is a growing need for leaders who are not only familiar with the technical aspects of new energy



but also possess the strategic foresight to **drive the transition**. This shift demands a broader set of skills, including digital acumen, a deep understanding of ESG principles and the ability to manage stakeholder expectations in a rapidly changing regulatory environment.

TotalEnergies exemplifies this shift at the senior leadership level with its ambitious strategy to invest \$10 billion annually in renewable energy and energy transition projects by 2025. The company's leadership is actively recruited from technology and engineering sectors to enhance capabilities in digitalisation and innovative energy solutions. This focus on integrating advanced technical and strategic skills at the senior level underscores



TotalEnergies' commitment to driving its energy transition goals and addressing the evolving market demands.

Similarly, Chevron's senior leadership strategy highlights the integration of project management skills with renewable energy expertise. Chevron has increased the team specialising in clean energy technologies by 50% over the past two years, reflecting a strategic emphasis on combining seasoned project management experience with new clean energy knowledge. This approach is essential for Chevron's senior leaders to navigate and execute complex renewable projects effectively, aligning with the company's sustainability objectives.

In our work, we see a critical need for senior leaders who can **blend** their extensive industry experience with a forward-thinking approach. This includes being open to cross-sector ideas, adopting more flexible leadership styles, and embracing continuous learning to keep pace with industry changes. Senior leaders who demonstrate adaptability, an innovative mindset, and a commitment to sustainability are highly sought after, as they are best positioned to lead organisations through the challenges and opportunities of the energy transition.



Additionally, succession planning and knowledge transfer are vital components in managing senior talent within the sector. As many experienced leaders approach **retirement**, there is a risk of **losing critical knowledge**. Organisations need to prioritise the development of robust succession pipelines, ensuring that future leaders are wellprepared to step into these roles. Mentorship programmes, leadership development initiatives, and cross-functional exposure are essential tools for cultivating the next generation of senior talent.

Ultimately, the success of senior leaders in today's energy sector hinges on their ability to balance the legacy of traditional energy practices with the demands of a future-focused, sustainable approach. By **identifying** and **empowering** the right leaders, energy companies can ensure they have the strategic direction and resilience needed to thrive in an increasingly complex and competitive market.

Technical Talent

For technical professionals, the challenge lies in **bridging the gap** between established practices and emerging technologies. Skills in areas like data science, machine learning, and automation are becoming just as critical as mechanical and electrical engineering expertise. For example, wind and solar energy projects rely heavily on **datadriven decision-making**, requiring technical staff who can interpret complex data sets to optimise performance and efficiency. Similarly, the growing focus on energy storage, carbon capture, and hydrogen technologies demands a new blend of skills that are not traditionally found within the legacy energy workforce.





ExxonMobil's strategy underscores this industry-wide shift. With a commitment to investing \$15 billion in low-carbon technologies over the next decade, ExxonMobil is prioritising the recruitment of technical professionals skilled in **advanced energy solutions and sustainability practices**. Darren W. Woods, ExxonMobil's President, highlights this direction, noting, "The energy transition reshapes our industry, requiring a blend of new competencies and perspectives to drive forward our sustainability goals." This reflects a broader trend where diverse technical competencies are essential to meet the evolving demands of the energy transition.

A crucial part of addressing this need is integrating more technical expertise at the Board level. Organisations are increasingly recognising the value of Consultants with advanced technical

backgrounds as Non-Executive Directors. These NEDs provide strategic oversight and mentor Senior Executives, helping them navigate the complexities of emerging technologies and innovation. By embedding technical considerations into high-level decision-making, they play a vital role in steering companies through the energy transition.

Understanding the importance of sourcing talent with a **versatile skill set** that can thrive in both traditional and emerging energy environments is vital. Companies that are proactive in their approach to technical talent acquisition



will need to look beyond conventional backgrounds and consider candidates from tech, manufacturing, and other industries. Cross-disciplinary training and professional development opportunities are essential for equipping technical staff with the competencies needed for the future of energy.

Additionally, fostering a culture of continuous innovation is crucial for retaining top technical talent. Encouraging technical professionals to pursue certifications, engage in collaborative projects, and contribute to R&D initiatives can help maintain their engagement and commitment to the company. In a market that is increasingly competitive for technical skills, organisations that offer a clear pathway for professional growth and opportunities to work on cutting-edge projects will have a distinct advantage.

Where Does That Leave Us?

The energy sector is at a **critical juncture**, with the need to adapt to a rapidly changing landscape affecting talent needs at all levels. From early career graduates eager to make a difference, to mid-career professionals navigating the transition, to senior leaders guiding the strategic direction, and highly specialised technical roles underpinning the industry's evolution, each segment faces **unique challenges and opportunities**.

As a Search Firm deeply embedded in this sector, we see a **clear mandate** for energy companies to be agile, open-minded, and forward-thinking in their approach to talent. This means redefining traditional career paths, embracing cross-sector expertise, and prioritising continuous learning and development. By doing so, companies can build a diverse and resilient workforce capable of driving the energy transition and meeting the demands of a more sustainable future.

In an industry where the **pace of change** is accelerating, having the right talent is not just a competitive advantage—it is essential for survival. By investing in the right strategies to attract, develop, and retain talent across all career stages, energy companies can position themselves as leaders in the next era of energy innovation.



At Moloney Search we are **deeply experienced** at talent attraction within the energy and infrastructure sectors. We have worked with a wide range of businesses both within our Early Careers technical practice and our Senior Executive practice.

We have detailed a number of our clients below:



Moloney Search

As our 30th Anniversary approaches, we have invested in a dedicated team that sources, tracks, and engages with the best talent across the UK and International energy sector. With technology and policy evolving at an unprecedented pace, the talent market is also shifting rapidly. Having access to an extensive network of professionals is an invaluable asset for bringing in the right individuals who are not only flexible and innovative but also eager to embrace and drive change within organisations.

For more information or to follow up on this article please email

ap@moloneysearch.com

