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MARKET UPDATE

Clean Energy Insights



INDUSTRY
INSIGHTS

Workforce & Hiring Trends
in the Renewables & Clean
Energy Industry

Global
Report



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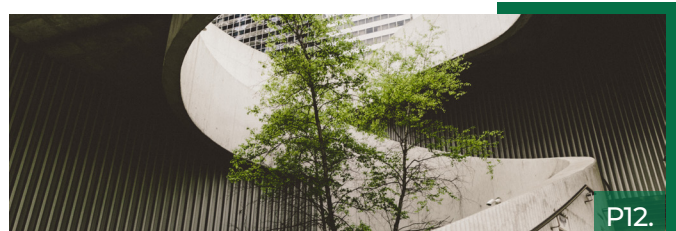
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Introduction

As a result of the energy crisis, nations have become increasingly aware of the need for more reliable and sustainable energy sources, but demand for green energy talent is far outstripping supply. Between 2020 and 2021, worldwide employment grew by 700,000 to reach 12.7 million jobs, and is expected to reach a colossal 38 million by 2030¹. This growth creates an exciting opportunity for professionals and a potential headache for hiring managers.

Clean energy professionals have gained better career choices and higher salaries. However, there are other draws, too. Due to changing social attitudes and substantial government and corporate investment², jobs in this space have cultural cachet. Clean energy has become synonymous with good values, radical innovation, technological advancement, and economic opportunity. In other words, there has never been a better time to work in renewables.

Employers can benefit greatly from this perception. While competition for talent remains strong, companies can create compelling narratives to attract a diverse workforce and draw the next generation into their pipeline. Most employees say their sense of purpose is defined by their work and, when that work feels meaningful, they perform better and are less likely to look for a new role.³

To meet the challenges ahead, companies must stay current with the factors affecting demand and worker satisfaction to attract, retain, and nurture talent.

In this report, we explore the trends shaping the United States, Europe, and Asia Pacific, so that you can keep one step ahead — whether you're planning your next hire or your next career move.





Global Trends

THE NEED FOR ENERGY AUTONOMY

The transition to renewables has been proposed as a path to energy autonomy and self-sufficiency—driven by desires for independence from energy markets, stability regarding energy prices and transmission costs, and energy security.⁴

The Ukraine crisis has made Europe's dependence on Russian fossil fuels painfully clear. Before the invasion, Russia supplied 29% and 43% of Europe's oil and gas imports. If the Nordstream pipelines had been activated, gas exports would have increased by a third. Since then, the EU has ramped up its transition plans; aiming for renewables to account for 45% of overall energy consumption by 2030.⁵

Japan, South Korea, and Taiwan are also heavily reliant on imported fossil fuels, including liquid natural gas. As part of their energy policies, all have created ambitious targets to reach net zero by 2050, and clean energy will play a large role in achieving this. Japan is aiming for 38% of its power to be generated by renewables by 2030.

UNLOCKING NEW SOLUTIONS

Renewables have become the cheapest source of power, but they incur the highest costs to build.⁶ Long-term fixed price contracts provide generators with long-term security to drive investments.

Storage plays an important part of the puzzle. As extreme weather increases due to climate breakdown, the switch to renewables is vital to mitigate further damage—but it's also raised concerns about their suitability in the short term, as some renewable energy systems struggle to cope with too much or too little sun and wind. Storage systems solve this problem by storing surplus energy and making it available when needed. This area is rapidly developing, with new technologies such as molten-sand and ice energy being trialed in municipal utilities across America and experimental solar towers in Germany.

Lithium-ion batteries are popular for their versatility, and several projects have demonstrated they can scale from EVs to grids. Hydrogen also shows much promise. In 2021 alone, Japan spent around \$800 million on investments in hydrogen power and fuel cells.





Global Trends

PLUGGING THE TALENT GAP

The transition to renewables will require an employment boom. Job postings for green skills have grown 8% annually for five years, but the number of qualified workers has only grown by 6%.⁷ Employers are competing fiercely for the same roles, made worse by a lack of people coming through the education system.⁸

Stakeholders will have to work together to plug this gap. The European Institute of Innovation and Technology plans to upskill 80,000 workers over the next three years,⁹ and likewise Workforce Singapore has created a career conversion program to prepare workers for green roles.¹⁰

Gender diversity is another key issue and solution. Women make up a larger share of jobs in renewable energy (32%) than in oil and gas (22%), but considerably less than the 48% that make up the global workforce.¹¹ The interest that women express in renewable energy could help address the shortage of professionals.





United States **Deep Dive**



SOLAR

Solar is having its day in the sun, with American solar jobs increasing five times faster than the overall job-growth rate.¹² Employment will need to grow even faster to meet increasing demand, and to support domestic manufacturing, which lags far behind China.

In 2021, solar panel installation rose by a third¹³ and is likely to soar following the Inflation Reduction Act, which marked a vital step towards creating a clean energy economy. Among the \$368bn earmarked for climate spending, a 30% tax credit has been agreed until 2034 to encourage homeowners to install solar.¹⁴ Alongside state-driven legislation, such as California's help cities to implement automatic permitting,¹⁵ the solar industry is set to shine.



WIND

The race is on to build America's first large-scale producer of green hydrogen.¹⁶ Until recently, hydrogen has been largely produced using fossil fuels. Today, tax credits have made going green more economically viable. The North Texas project will build a 900-megawatt onshore wind farm to produce 200,000 kilograms of hydrogen a day—helping the US to play catch up with Europe.

Offshore wind farms are ever more popular, too. States with ageing energy infrastructures are updating their transmission lines to integrate renewable energy into their power grids. New York has five offshore wind projects in active development—totaling 4,300 megawatts—and Massachusetts has awarded two contracts, including the 800-megawatt Vineyard Project.



RENEWABLES

Bigger players are acquiring multiple smaller companies as part of a 'roll up' or 'build and buy strategy', enabling them to grow aggressively and diversify risk, according to **Corinna Frye, Head of LVI Associates USA:**

"This helps solve part of the talent problem. Companies can inherit an experienced team in the area they want to expand in, rather than building one from scratch."

Oil and gas majors are following suit to diversify their portfolios. In recent years, Chevron acquired the Renewable Energy Group and BP acquired the US solar developer 7X Energy.



United States **Deep Dive**



GREEN INVESTMENT

Renewable energy investments are gaining popularity, leading to a seller's market. However, the high volumes of capital are squeezing returns when private equity firms invest directly in operating assets. Many are investing in lean development and management teams to create a platform for future investments, either through the recruitment of experienced staff or the purchase of a development company.

Several big infrastructure companies are making a similar play. To keep the overheads low and reduce risk, they're investing in small project management teams who focus on acquiring sites and developing projects through to commercial operation and outsourcing construction and engineering.

According to Corinna:

"This has led to significant demand for third-party engineering and construction consultancies and their talent."



ATTRACT, RETAIN, RETRAIN

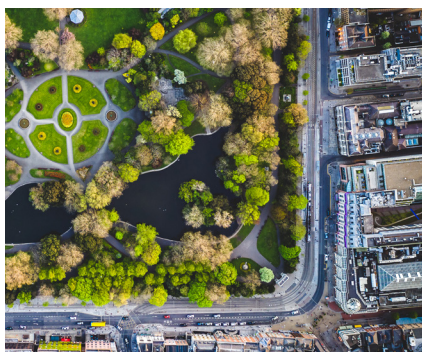
With potential candidates facing several pitches a day, recruitment fatigue may be setting in. Therefore hiring managers will need to use a thoughtful approach to stand out and make a winning offer.

While salaries continue to grow, it's not the whole picture. Companies are offering different incentives, including equity participation, unlimited paid holidays, long-term incentive plans, project milestones bonuses, and matching 401(k) contributions up to 8% of annual salary. Flexible working remains highly sought-after, but choice is key. Female employees, according to McKinsey, who can choose where to work are less burned out, happier, and less likely to leave their companies.¹⁷

Employers should also consider other talent pools. Oil and gas professionals can transfer their engineering skills to offshore wind farms or green hydrogen production. Employers who invest in retraining and upskilling will create a more resilient and loyal workforce.¹⁸



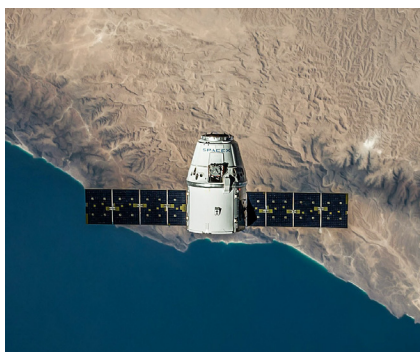
Europe **Deep Dive**



GOING THROUGH CHANGES

Europeans view climate change as the single most serious problem facing the world—and that the energy transition is an important solution to tackle it. According to a survey by the European Commission, 87% believe the EU should set ambitious targets to increase renewable energy and energy efficiency.¹⁹

In response to the recent energy crisis, the EU has speed up the permit-granting process for renewable energy projects, including a presumption of “overriding public interest”. Currently, a solar park can be developed, designed, and delivered within two years, while wind farms can take up to nine. With a streamlined process and clearer requirements, these timelines should significantly reduce.



THE SMART REVOLUTION

Artificial intelligence (AI) will revolutionize the clean energy sector by making it a more cost-effective alternative to traditional energy sources. Companies are already implementing AI to optimize renewable energy resources - software by Norwegian company Glint, for example, can analyze large data sets from various sources, including satellite imagery and sensor networks, to help solar developers with site selection. Meanwhile, Danish company Ørsted is developing a machine learning algorithm that analyzes historical data to predict wind energy output and energy demand.



LANGUAGE BARRIERS

Due to the international nature of many renewable energy developments, demand for workers with language skills has grown. While 64% of Europe’s working population can speak at least one additional language, only 25% report being proficient.²⁰ Across all levels and subsectors of the clean energy sector, foreign language skills are weaker than required.²¹

As Europe turns to foreign workers to fill the talent shortage, concerns about language skills will increase. Germany, for example, has reformed its immigration laws to help fill tens of thousands of vacant clean energy jobs.²² Language skills are a key priority for the new job searcher permit, the Opportunity Card. Using a points-based system, the highest award will be for those with a confident (B2) level of German.²³



Europe Deep Dive



SHARED VALUES

Employee motivations are changing. A 2019 survey found that 77% of adults would consider a company's purpose before applying for a job.²⁴ Following the pandemic, some employees are looking for more meaning in their work. Covid-19 caused them to reflect on their purpose in life, and this search for greater meaning and purpose has contributed to the Great Resignation.

Renewables has a head start over other sectors, including oil and gas. Creating direct solutions to climate change attracts those looking for a shared sense of identity and purpose-driven work. However, this strong sense of purpose can make recruitment more challenging. If professionals are nearing the final stages of a project, they want to see it through to fruition. Thus, timing is key.



IN THE SHADOWS

By default, clean energy companies often have a well-defined brand purpose, but they can suffer from poor brand recognition, as **Harry Morgan, Associate Vice President, LVI Associates Europe** explains:

“One big issue in the clean energy space is visibility. Many of the biggest players are completely unknown to candidates”.

Sometimes, companies can fall into “build it and they will come” thinking—resulting in a lack of marketing spend and the failure to create employee ambassador programs. This is where a trusted talent partner becomes invaluable, as companies can leverage their resources, networks, and stronger brand recognition to raise their profile and attract a wider pool of qualified candidates.



COMPENSATION & APPRECIATION

If employees feel they are not being appreciated by their employer, they are more likely to leave. **Harry says:**

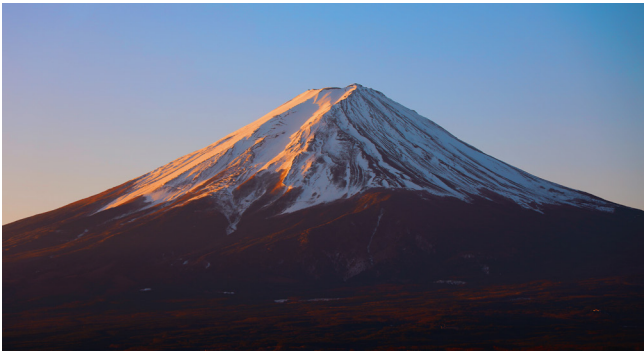
“While money itself is not always a significant factor, feeling fairly valued is.”

“Counteroffers are common and regularly backfire. Candidates will question why they're only offered a pay rise when half way out the door”.

Companies must regularly review their offering to stay competitive with the clean energy sector, and this is especially true to retain hard-won talent. Bonuses are becoming more popular, alongside benefits such as a company car.



Asia Pacific **Deep Dive**



LEGAL MATTERS

Japan is a global leader in solar and home to the world's leading companies by solar patents held, Panasonic and Mitsubishi, ranking only behind the US and China in installed solar capacity.²⁵ Recent legislation is set to lead fresh growth—and more employment opportunities. In 2021, the Tokyo metropolitan assembly adopted an ordinance that requires solar panels on new detached homes, which will come into force from April 2025.²⁶

Other Asian countries are following suit. With ambitious renewables goals, Taiwan is primarily focusing on the expansion of solar energy. In January, the Executive Yuan passed an amendment to the Renewable Energy Development Act that all newly constructed or altered structures should have rooftop panels installed.²⁷

Korea has created similar legislation, such as requiring public buildings to power a third of their energy usage from renewables. Following the 9th Basic Plan, the government expects renewables to make up a third of total energy by 2030, largely driven by wind. However, only 2% of all offshore wind projects from the past decade made it to completion due to the cumbersome permitting system²⁸—renewing calls for a 'one-stop-shop' permitting process.²⁹

COMMUNICATION IS KEY

Japan's plans to use nuclear energy as part of their decarbonization policy is not without controversy. Following the 2011 Fukushima accident, “*not-in-my-backyard*” syndrome could lead citizens to oppose nuclear powerplants in their neighborhoods. However, recent research has found these concerns are overplayed and, in fact, residents are supportive when they are given information about the potential health and economic benefits.³⁰ In these cases, and during site selection for other clean energy projects, native Japanese language skills are imperative to negotiate with local stakeholders—as well as strong English skills for liaising with international partners.

In Taiwan, professionals who can speak several languages, including the many dialects of the Formosan languages, are in high demand. Indigenous peoples must be consulted over the use of their land because of their right to self-determination, as enshrined in law. In 2017, the Taitung County launched the bidding process for a 226-hectare solar farm on the Zhiben Wetlands, which would have been the largest in the country. Following protests from the Puyuma people, who said they were not involved in the planning process, the project has been suspended until final adjudication by the Supreme Administrative Court. Better communication may have helped avoid this escalation.³¹



Asia Pacific **Deep Dive**

TALENT CHANGES

In parts of Asia, recruitment can be a long process that involves a delicate balance of patience, persistence, and understanding. Lifetime employment, which was very common until 1980s in Japan for example, may have contributed to a feeling of loyalty to companies. Under this system, many companies focused on the mass hiring of graduates and ‘mid-career’ workers are only brought in during a talent shortage.

As such, convincing an employee to move companies can be challenging—though this mentality is changing for a younger generation of workers, who want the freedom to move and find new career opportunities, as **Kayleigh Regan, Head of LVI Associates APAC,** summarizes:

“While attitudes are changing slowly, companies will have to create a compelling offer to attract talent. Beyond salary, learning and personal development is key. Many want the opportunity to manage their own team. Others want to work abroad for an international company and return home with much more experience.”





The Next **Steps**

TOP TAKEAWAYS FOR HIRING MANAGERS

Be supportive.

As your organization helps create a better future, you should show the same consideration to your people. In a highly competitive market, you must create a culture that values learning and offers opportunities to grow and develop—whether in technical ability or people management. As skills shortages increase, invest in upskilling and retraining professionals from other sectors. By doing so, you'll gain a more resilient and loyal workforce.

Be visible.

Every day, clean energy professionals get headhunted for bigger and better opportunities. For companies without a strong reputation, standing out in this environment is even more challenging. Increase your visibility by creating a strong online presence through social media, job boards, and company career pages, as well as by attending job fairs, hosting recruitment events, and engaging with industry influencers and thought leaders. Leverage your talent partner to raise your profile.

Be flexible.

90% of workers say work-life balance is an important aspect of their job, but that the lines have become blurred since the pandemic.³² There is no one-size-fits-all solution, so offer flexible arrangements that enable employees to vary the timing, amount, or location of their work. This is especially important for senior staff who need to balance work and familial commitments. While for the most part, albeit not always, women remain the primary caregivers globally, flexible working can help attract, retain, and nurture female talent.





The Next **Steps**

TOP TAKEAWAYS FOR PROFESSIONALS

Be mindful.

In a market where your skills are in high demand, money will always be on the table. Salary aside, what will make you feel valued and excited to go to work each day? What will make you want to stay?

Research shows that meaning is one of the most significant factors for workers when considering a move, including job fulfillment and the ability to be one's true self at work.³³ Take time to understand the company's culture and career development opportunities and evaluate whether your needs and values align.

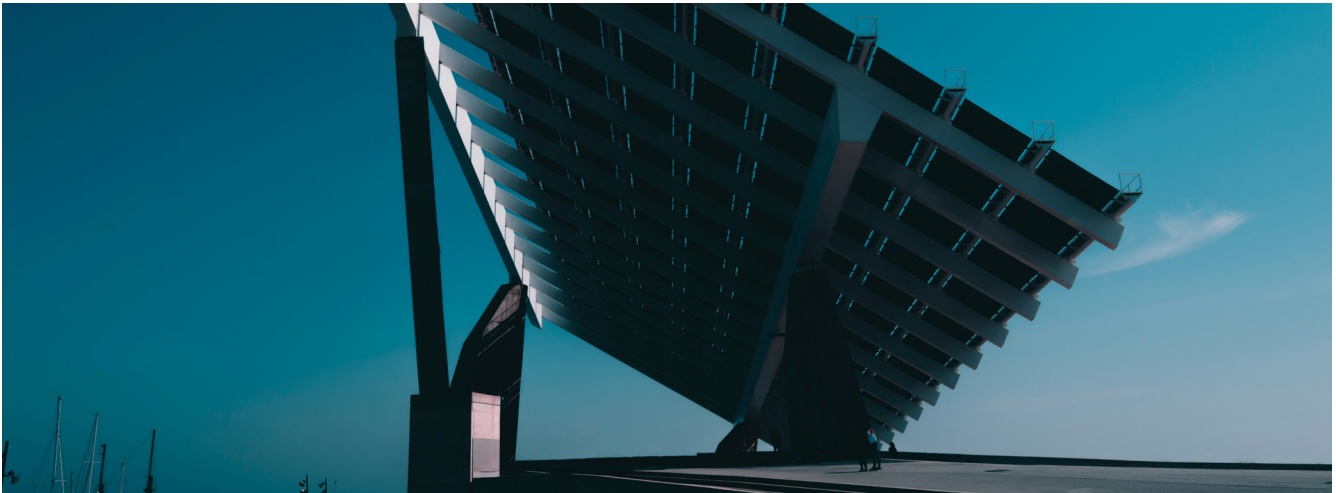
Be open.

Many companies that play a vital role in the energy transition are not household names. Instead, start-ups and small companies are a significant driver of innovation in the clean energy sector,³⁴ and their size enables them to thrive in a fast-paced environment and embrace risk to quickly develop new technologies, products, and services. In turn, this fosters a more collaborative, diverse, and dynamic working environment that encourages career progression and a more competitive industry at large.

Be forward-thinking.

Where do you see yourself in five years' time? It's a perennial question in job interviews, but one that can be difficult to answer honestly. Who can predict the factors that may impact your future career decisions, such as the shape and health of your family, finances, and economy? Lead with what you know right now: what are you *good* at and what do you *like*? Ask, does the company support growth in these areas and, looking at its trajectory, will it be able to do so in the long-term?





Conclusion

It is an exciting time to be working in clean energy as the sector grows rapidly and provides a wealth of opportunities for those looking to change the world for the better.

As the industry continues to evolve, companies must offer meaningful work, learning opportunities, and flexibility to attract and retain top talent. Professionals have the luxury of being able to decide where they work. However, this freedom of choice can result in paralysis.

It is important to consider the entire package an employer offers, and whether they can support long-term career growth. Being open to less well-known companies can provide exciting opportunities to grow and innovate in a dynamic workplace.

As the world transitions to a low-carbon economy, the clean energy sector will continue to play a critical role in shaping our future. By working together, hiring managers and professionals can help drive innovation and progress, while building sustainable and fulfilling careers in the process.



About LVI Associates

LVI Associates is a leading talent partner in the Energy & Infrastructure industries across the US, Europe and APAC.

Energy & Infrastructure plays a critical role in creating a future that works for everyone, which is why it is essential to work with the right talent partner who can source and deliver extraordinary people that make a difference.

Providing bespoke talent solutions from our hubs all over the world, we cover the full life cycle of Energy & Infrastructure projects, across Architecture, Engineering, Construction, and Post-Construction.

As a strategic advisor with a proven track record in helping businesses scale through our services, we are integral to the Energy & Infrastructure ecosystem, focusing on the talent solutions needed to let organizations get back to what matters – building a better world.

Our Specialisms

- Architecture
- Automation & Controls
- Building Diagnostics
- Building Services
- Civil
- Construction
- Environmental
- Investigations & Disputes
- Power Delivery
- Renewable Energy
- Technology





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UPLOAD YOUR RESUME

SUBMIT A VACANCY

NEW OPPORTUNITIES



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