



ENERGY TRANSITION OUTLOOK

Brought to you by NES Fircroft and Energy JobLine

WWW.NESFIRCROFT.COM

energyjobline


 **NES**[™]
FIRCROFT



ABOUT US//

NES FIRCROFT

NES Fircroft is an award-winning staffing specialist that has been delivering compliant global workforce solutions for over 5 decades. We place candidates across the Oil & Gas, Power & Renewables, Infrastructure, Life Science, Chemical and Mining sectors. We have over 100 offices in 45 countries, meaning our discipline-specific teams have access to the best talent wherever it may be in the world.

We offer a full range of staffing solutions: Contract, Permanent (Direct) Hire, Managed Solutions, or a fully outsourced service. These services are complemented by an industry-leading support service and global mobility package to ensure our clients keep hold of the top talent in a compliant manner for as long as they need it.

www.nesfircroft.com

ENERGY JOBLINE

Energy Jobline is the online recruitment platform of choice for energy professionals and employers worldwide. We work with major energy companies globally, who use Energy Jobline as their key online resource for attracting and retaining talent. With a live job count of over 400,000 global roles from over 400 energy employers and agencies, Energy Jobline is the largest energy job board on a global spectrum.

Energy Jobline widens the typical talent pool with innovative products and marketing campaigns, constantly pushing the boundaries to acquire the world's top talent. We are more than just a job board to our clients - we are their recruitment strategy solution.

www.energyjobline.com

CEO WELCOME

TIG GILLIAM



NES Fircroft is dedicated to providing the skilled engineers and technical workforce needed to deliver the energy and scientific solutions of the future. Our vision is to lead the way – supporting our traditional and emerging clients as they transition themselves to operate as net zero emissions energy businesses.

As the energy sector transforms and innovates into a decarbonised, digitalised industry, it is crucial that we ensure the talent pools are available and we have the right balance of skills and experience to deliver the projects and operations needed for a brighter tomorrow.

NES Fircroft partnered with Energy Jobline (the largest global energy job board) to ensure that we reached out to as many employees and employers as possible to explore this exciting topic.

In this inaugural edition of the Energy Transition Survey, we investigate:

- Do workers feel they have the skills they need to transition to work in Clean Energy?
- Do they want to move sectors? Which sectors are the most attractive?
- What is making people move, but equally what is holding them back?

Over 6,000 people responded to our survey, many from the traditional Oil & Gas sector as well as people already working in Alternative Energy and Renewable solutions.

The topics of “projects” and “pay” were certainly central themes to the results and training was frequently highlighted. The survey unveiled a clear perception that whilst exciting opportunities and potential may lie in the Renewables space, the skills gap will hold back change.

With this report, we hope to offer employers a unique insight into the current temperature of the talent landscape and how they can attract, retain and develop the expertise they need now and in the future.

Thank you to everyone for their participation, we trust that you will find this research of value. We look forward to working with you and continuing to serve the Energy industry in the years ahead.

CONTENTS//

Methodology	(5)
Demographics	(6–7)
Oil & Gas	(8–9)
Navigating the Energy Transition	(10–11)
Clean Energy	(12–13)
Salary Insights	(14–15)
Conventional Power	(16–17)
A Global Outlook	(18–23)
Energy Transition Drivers	(24)
Conclusion	(25)

METHODOLOGY//

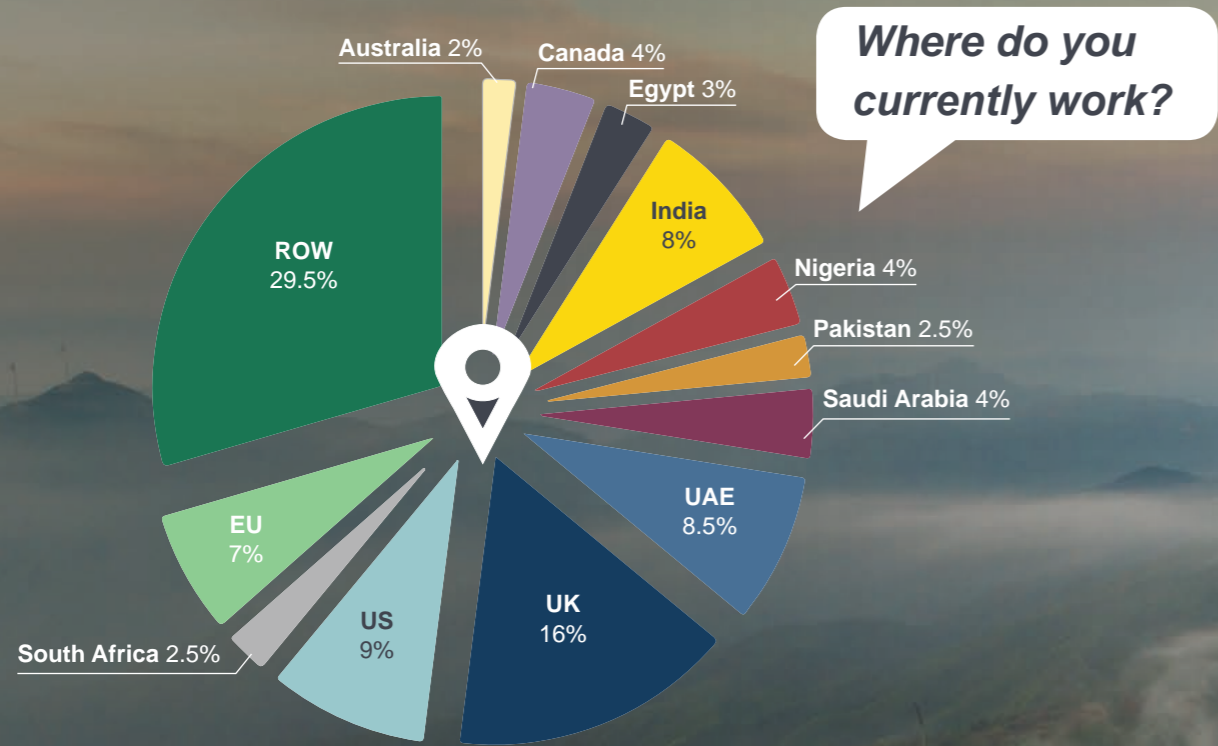
The Energy Transition Global Study is a global workforce analysis, focused on the entirety of the Energy sector. Over 6,000 professionals took the survey and respondents were asked a total of 25 questions.

The survey was live for three months from 15th March 2021. To gather respondents, Energy Jobline and NES Fircroft marketed the survey to their own respective audiences via a series of email and social campaigns.

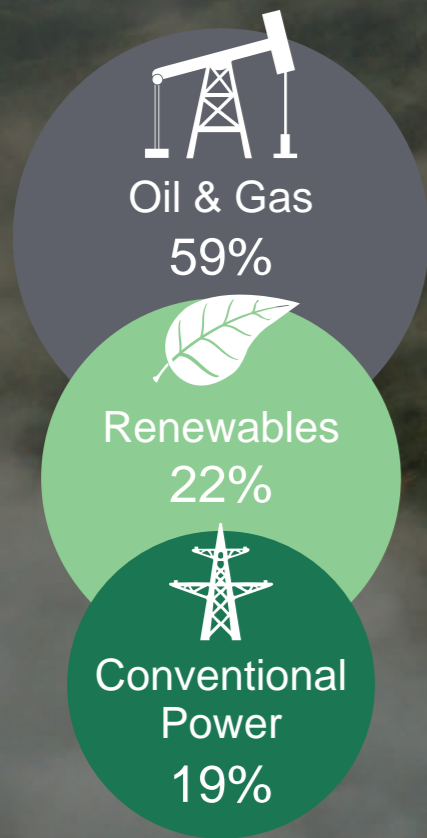
Once the survey closed, the data was analysed by the project team and conclusions were drawn out and discussed. The study provides data on the energy workforce's thoughts, needs and wants as the sector evolves, as well as data around trending subjects such as remuneration and project opportunities.

For more information or support around the findings in this report, please get in touch with Energy Jobline or NES Fircroft.

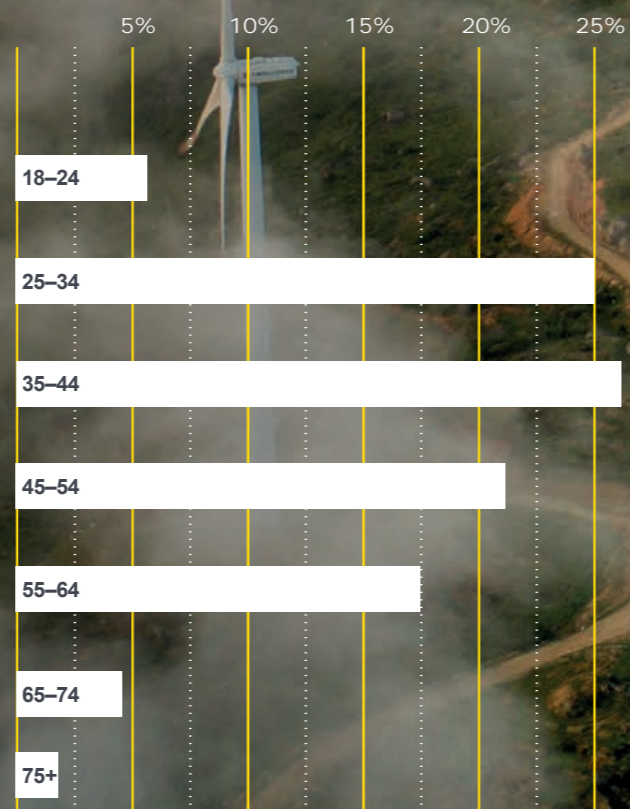
DEMOGRAPHICS



SECTOR SPLIT



AGE



GENDER SPLIT

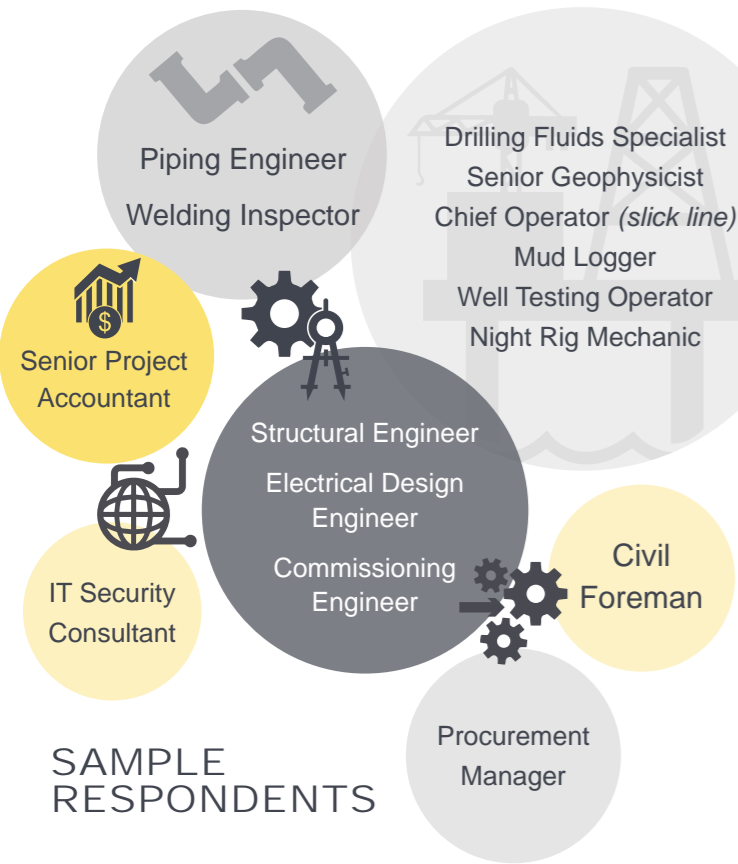


OIL & GAS

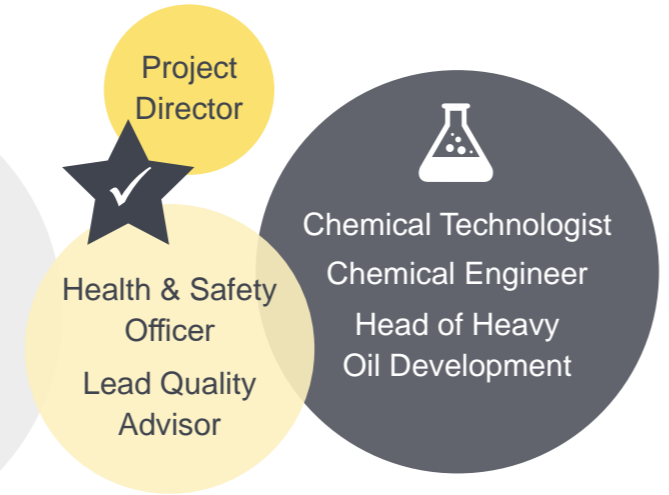
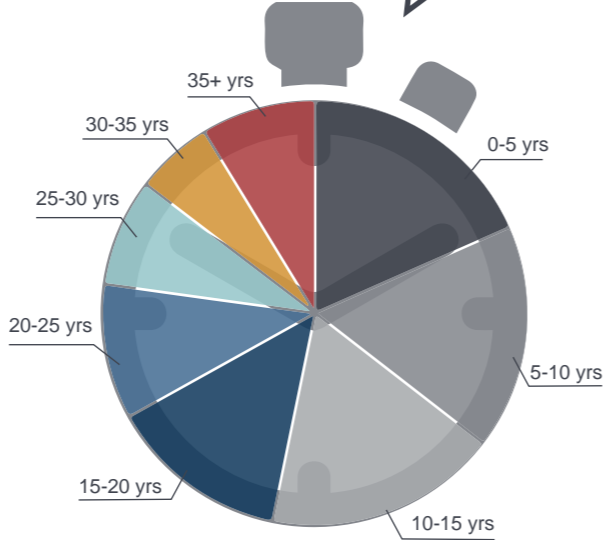
NES Fircroft have been workforce leaders in the Oil & Gas market for over 50 years. In that time we have seen fluctuations in the oil price and have supported clients through both good times and bad.

The sector as a whole has always demonstrated an outstanding ability to adapt to the demands of the changing energy landscape and has attracted 'best in class' engineers who have delivered the world's energy needs for decades.

When we last surveyed the Oil & Gas market in 2019 it showed this global industry was looking to adopt a more "local" approach to building talent pools to ensure projects could be resourced with less logistical hurdles and that skills gaps could be filled in country. The outbreak of Covid-19 has meant companies have had to trial split location or complete remote working for some engineering jobs and where this has been successful, it may become a preferred solution moving forward.



How long have you worked in Oil & Gas?



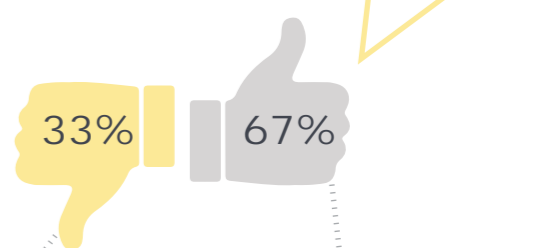
Our 2021 research shows that as the Oil & Gas market begins to bounce back from the challenges of 2020, the skills gap is still a pressing issue, with a concerning 67% stating they are considering a move to another sector. The dominant factor driving people to leave appears to be the **opportunities** available and future potential of other sectors.

However on a brighter note the industry remains attractive to workers looking for strong salaries and exciting engineering projects. Indeed 35% of our respondents are relatively new to the industry with under 10 years' experience. Whilst some have made the move to new sectors, many still see their future in Oil & Gas as salaries are perceived as stronger and the projects are still enticing.

Why are you committed to staying in the sector?

REASON	%
Happy in Oil & Gas	59
Nearing retirement	17
Salaries too low in other sectors	25
Skills not transferable	11
Better projects	32
No opportunities in other sectors	12
No experience of other sectors	21
Economic factors	11

Are you considering a move to another sector?



YES Why?

- More opportunities (49%)
- Future sector potential (44%)
- Interesting projects (31%)
- Want a change (23%)
- Out of work (22%)
- Better pay (21%)
- Other sectors are more aligned with my values (16%)



NAVIGATING THE ENERGY TRANSITION

Many of the big companies in the Oil & Gas sector are balancing the difficult equation of trying to transition their businesses to a more sustainable model, whilst still ensuring the world's energy needs can be met in the short term. Aker Solutions are a fantastic example of an organisation who are pro-actively applying their long experience and capabilities in Oil & Gas, together with their strong platform for project execution, to pursue clean energy opportunities and transform their business for the future.

CASE STUDY//

NES Advantage and Aker Solutions work together to build the talent pools of the future



NES Advantage (part of NES Fircroft) has had a long-standing partnership with Aker Solutions and is their staffing partner of choice. Working with NES enables Aker Solutions to achieve its strategic objectives, by supplying highly skilled engineering and technical personnel across all parts of the business.

In 2020 Aker Solutions tasked NES Advantage with sourcing staff that could support their newly established Renewables division. Building on the capabilities and know-how from project execution in the Oil and Gas industry, Aker Solutions is now positioning for Renewable industries including offshore wind projects.

As an example, in Norway the company is already in the execution phase on the world's first renewable energy source for Oil & Gas production at sea, Hywind Tampen. The scope for this project encapsulates designing and building floating concrete hulls which will carry the wind turbines. In addition, it also includes assembly, site management and installation of the floating wind turbine units offshore.

Aker Solutions' pedigree and decades of experience in project management of large oil and gas projects, combined with NES Advantage's recruitment expertise, meant they were quickly able to build a talent pool of suitable candidates, with skillsets in project management, process engineering and planning, which could be applied to new projects.

This, coupled with the skilled workforce they already have, ensures that they are positioned well to deliver on their promise to accelerate the transition to sustainable energy production.

Kjetil Kristiansen, EVP People & Organisation, Aker Solutions commented:

“Powered by our unique expertise from Oil & Gas, digital technology and nearly 200 years of transformation experience, we solve the most complex challenges in the smartest way. Building on our solid track record and capabilities, coupled with new knowledge and expertise, enables us to play a crucial role in the energy transition. That's how we will deliver spectacular projects in a safe, sustainable and cost-effective way.”

Jens Mellbye, Managing Director of NES Advantage Solutions adds:

*“We've been delighted to support Aker Solutions through this period of transition and have used our recruitment expertise in the Renewables sector, combined with our global reach to ensure we continue to provide the best people in new geographies, supporting Aker Solutions' vision to **Power the change** to sustainable energy production.”*



#PowerTheChange

CLEAN ENERGY

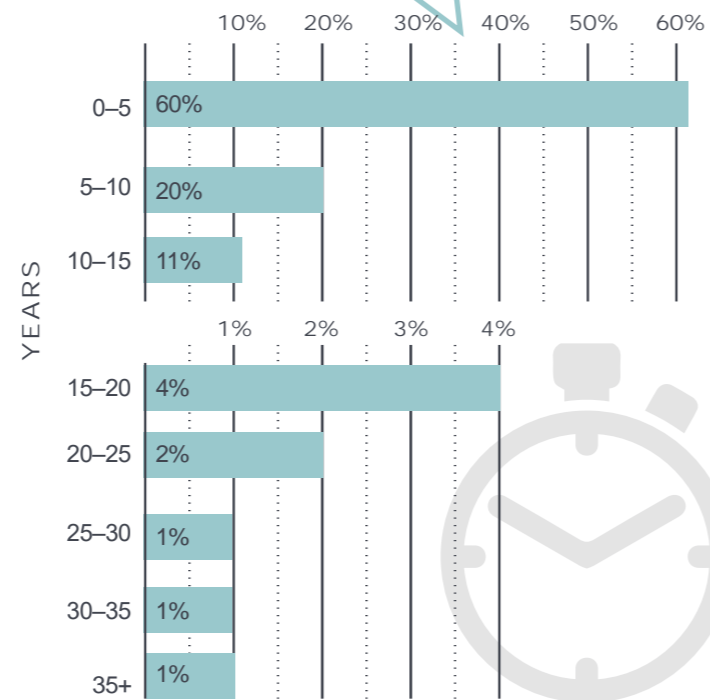
As more and more pressure is put on companies to decarbonise by governments, consumer groups and investors, the outlook for the Clean Energy market is bright.

It is certainly an exciting time to enter this sector which is reflected by the fact that 80% of our respondents only joined the industry in the last decade. 60% have moved from other sectors but 40% are choosing to start their career in this industry.

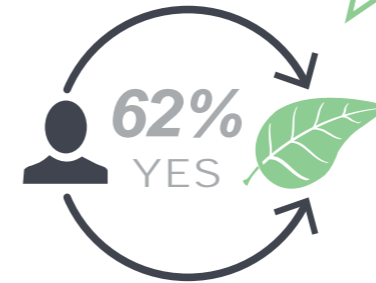
A BUOYANT TALENT POOL//

92% of respondents have less than 15 years of experience in Clean Energy; 60% have less than 5 years.

How long have you worked in the industry?



Have you moved from another sector?

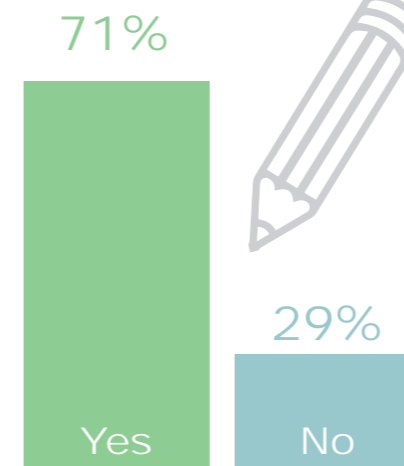


What made you switch sectors?

- More opportunities (37%)
- Future potential of sector (36%)
- Interesting projects (29%)
- Aligned with my values (22%)
- Wanted a change (21%)
- Necessity (out of work) (21%)
- Better pay (20%)

The future potential and opportunities in the industry stood out as the key reasons making it an attractive career choice; many respondents also highlighted that it aligned with their values – which will be helpful for companies recruiting the next generation of engineers who in recent years have been attracted to the technology sector rather than choosing a career in energy.

Did you require further training in order to effectively transition your skills?



One point to note is that those who have moved from another sector **did not find the transition an easy one**:



Companies may need to look to offer tailored training and development programmes to ensure candidates feel confident to make the move and can apply their skillsets easily without the risk of project delays.



SALARY INSIGHTS

Interestingly many Oil & Gas workers stated they did not wish to make the move in to the realm of Clean Energy as they perceived salaries to be lower. However, our research shows that this is not necessarily the case.

COMPARABLE PAY// Of those respondents who **have** transitioned, over 75% said their salary was in fact higher or about the same.

Why did you choose a career in Renewables?

More opportunities (32%)

Future potential of sector (51%)

Increasing projects (45%)

Aligned with my values (37%)

Better pay (16%)

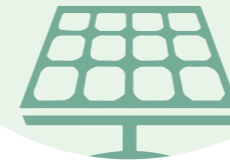


MIDDLE EAST

POWER
DCS Commissioning Engineers
\$600-900 per day

HYDROGEN
Engineering Manager
AED 40k-70k per month

RENEWABLES
Contracts / Claims Managers
AED 30-70k per month



RENEWABLES// USA

DIESEL CONVERSION PROJECTS
Construction Manager (\$80-\$95/hr)
Field Construction Coordinator (\$70-\$75/hr)
Project Cost Lead (\$75-\$85/hr)

UTILITY SCALE SOLAR
Director of Development (\$180k)
Director of Engineering (\$190k)



BATTERY STORAGE
SR Software Engineer
\$120-150K USD

RENEWABLES// CANADA
Sr Project Development Manager, Wind & Solar
\$120-140K
Construction Director
\$150K-175K
Financial Analyst
\$95-120K

AMERICAS

HOT JOBS



CHEMICALS
Production Manager (Northamptonshire, UK)
£75,000

RENEWABLES
CEO, Private Equity (London)
£140,000

Construction Director, Asset Management (London) **£80,000**

Project Director, Utility, Offshore Wind (UK) **£100,000**

Senior Process Specialist (Copenhagen)
700,000-950,000 Kr.



ALTERNATIVE ENERGY

Project Manager (Hydrogen) **€80,000**
Procurement & Supply Chain Specialist (CCS Technology - UK) **£65,000**

ASIA PACIFIC

OFFSHORE WIND
Construction Manager, China
CNHY 50,000 (average local rate)

POWER
Project Manager, China
Local rate: **CNY35,000**



LNG
Quality Manager, China. Expat, 1,000 USD/day

CONVENTIONAL POWER

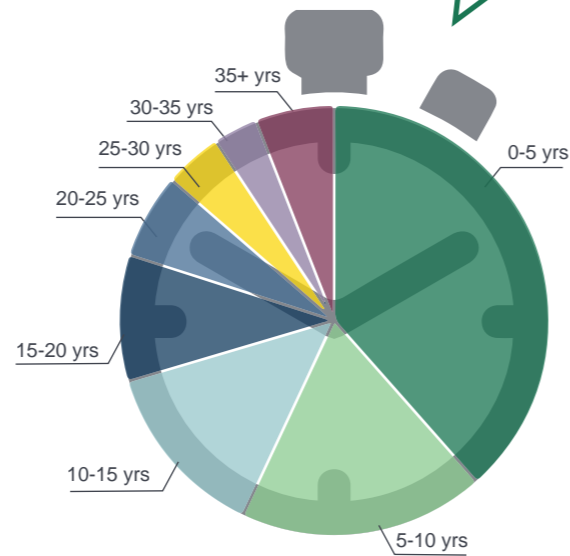
The Conventional Power industry is facing many of the same challenges as its compatriots in Oil & Gas, however it is perceived to be a stable industry where employees stay for many years and is one of the few sectors where “jobs for life” are still a reality.

It has had a good influx of new talent with 38% stating they have been in the industry for under 5 years, but over 43% have been working in Power for more than 10 years, so the balance of experience is well distributed.

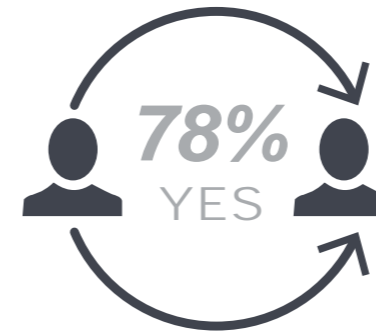
Our results show that this sector cannot be complacent however as nearly 80% of respondents stated that they are considering a move. Again, the future potential of the sector was cited as candidates perceive there are more opportunities elsewhere.



How long have you worked in Conventional Power?



Are you considering a move to another sector?



Those that are happy in the sector pointed to the strong projects that are on offer in Conventional Power but nearly 20% also said their reason to stay was due to them approaching retirement. This is a warning for the sector that their skills gap issue will only widen in the years to come unless they can attract a younger generation of engineers to Conventional Power projects.

YES
Why?



NO
Why are you committed to staying in the sector?

LOOMING SKILLS GAP// 19% of personnel happy to stay in the sector are approaching retirement age.

REASON	% OF RESPONDENTS
Happy in Conventional Power	44
Nearing retirement	19
Salaries too low in other sectors	11
Skills not transferable	13
Better projects	21
No opportunities in other sectors	11
No experience of other sectors	20
Economic factors	14



A GLOBAL OUTLOOK

EUROPE//

Data released by two think tanks on 25th January showed that in 2020 electricity generated by renewables in the EU (38%) for the first time overtook electricity generated by fossil fuels (34%).

The EU's ambition to reduce greenhouse gas emissions by at least 55% by 2030 will continue to accelerate the growth of the Renewable Energy sector in all member states.

Both the EU and the UK governments have made huge commitments to the green agenda in recent years with the EU pledging to invest 430 billion USD in green hydrogen by 2030 to support the goals outlined in its Green Deal, and the UK committing 12bn GBP investment into net zero projects. This will ensure a buoyant job market and we are seeing particular high demand for chemical engineers for carbon capture projects with exciting decarbonisation projects underway across the UK, Netherlands and Belgium.

The net zero Humber project is just one example where steel manufacturing, power generation, chemical manufacturers, engineering firms and infrastructure providers are coming together to decarbonise the largest industrial region in the UK.

This initiative will encompass a suite of new technologies, development of infrastructure to facilitate both blue and green hydrogen production as well as carbon capture for storage and conversion. The project cluster aims to become net zero by 2040 and will create 20,000 new jobs.

The Wind Power market also looks strong across the continent with the Netherlands installing the most offshore wind power in 2020 and the UK looking to lead the way in this area with the Offshore Wind Leasing Round 4 projects creating the opportunity for at least 7 GW of new offshore wind projects in the waters around England and Wales by the end of the decade.

The outlook for solar power looks positive with installations increasing by 11% in 2020. Spain, Germany, the Netherlands, France and Poland have all committed to significantly increasing their installation capacity to ensure they meet their renewable energy targets. This means engineers with a background in mechanical engineering are in demand to design and build the solar energy systems of the future.



NORWAY//

Over 95% of all electricity production in Norway comes from renewable sources, with hydropower, wind and thermal energy contributing to the Norwegian energy economy.

This means Norway is a country rapidly transitioning away from fossil fuels, creating a huge amount of renewable energy opportunities for candidates and clients looking to move into this space.

Hydropower has always dominated the electricity market in Norway, with over 1,100 hydroelectric generating stations making Norway the largest hydropower nation in Europe and meaning it can support around 60% of its energy needs through hydropower production. However, Norwegian companies are also pioneering technologies in other areas, including carbon capture, solar power, floating offshore wind and energy storage.

Offshore Wind is becoming even more attractive as efficiency increases and costs come down. This is particularly true for floating offshore wind, as floating foundations allow access to deep waters, where an estimated 80% of the potential is found.

Equinor is the world's leading floating offshore wind developer. In October 2017, the company opened Hywind Scotland, the world's first floating offshore wind farm, which now supplies electricity to around 36,000 British households. Equinor will also be building Hywind Tampen, the world's first floating offshore wind farm to power oil and gas platforms.

Offshore Wind is an industry built on the shoulders of the Oil & Gas industry, using many of the same technologies and skills, therefore we are seeing a lot of skills transition in this area. Clients are seizing the opportunity to diversify their traditional portfolios to meet the demand for more sustainable solutions.

Large power transmission and wind projects are under development, which means we are seeing demand for electrical and electrification roles as well as engineers for power systems, cables and energy storage projects.

The Norwegian market is buoyant and wages remain strong as the country aims to achieve a reduction of at least 50% of its GHG emissions by 2030 and to be carbon neutral by 2050.

AMERICAS//

The US Renewable Energy market is growing rapidly, with the US already operating the world's 2nd biggest Wind Power market and Solar Energy driving the Renewables agenda with ambitious projects like the Gemini Solar Project.

Factors such as supportive government policies and the declining costs of renewable technologies are ensuring the Renewable Energy market is expanding rapidly across the continent.

Candidates with full project life-cycle experience (from greenfield through construction to operations) are particularly in demand on wind projects and we are also seeing high demand for energy storage expertise across multiple disciplines as well as EV infrastructure engineers. As these markets emerge, application, systems and software engineers will all be required and there will be huge opportunity for smart grid engineers. Digitalisation expertise will be crucial to help connect it all together and create an efficient and reliable solution.

Pre-pandemic, the sector would turn to expatriate workers to increase the availability of talent, however we have seen this evolve throughout 2020 due to travel restrictions with domestic candidates from other sectors being more readily engaged, working remotely, with travel or full relocation.

This is a trend that is set to continue post pandemic, the sector turning to skilled domestic workers and professionals from conventional energy sectors to meet growing demand.

CANADA: Despite considerable challenges posed by the global pandemic, Canada increased both wind and solar capacity in 2020, with significant growth in energy storage, and a positive forecast for 2021. 17% of Canada's energy comes from Renewables and that number is set to grow over the coming years. Commitment from the Canadian Government, consumer demand and an increase in investment of at least 46% will ensure that number increases, meaning new projects and job opportunities. The Clean Energy sector in Canada is set to create at least 110,000 jobs over the next decade.



MIDDLE EAST//

Rapid population growth coupled with ambitious government targets across the region for industrial and economic expansion mean the market will be buoyant for years to come.

The Clean Energy market in the Middle East has largely been focused on solar, with onshore wind a developing energy source and we expect this activity to grow rapidly over the next 5 years, particularly in the UAE where major projects such as the Mohammed Bin Rashid solar park are already well established.

Forthcoming onshore wind projects in Oman and solar projects in Saudi Arabia will also provide exciting opportunities for engineers in the future. Whilst we have largely seen design and engineering work performed overseas to date, project-based positions are now coming online as we enter the commissioning phase in many projects.

We are also seeing local demand for research and business development skills as large organisations have set up in the region.

Companies are looking to recruit local teams and expertise to meet strict nationalisation targets, however there are still opportunities for experienced expatriate workers, particularly in construction and commissioning.

CSP (concentrated solar power) experience is particularly in demand as the region has some of the world's biggest existing and upcoming CSP plants.

We are also excited to see the first hydropower project in region, with the construction of the Hatta Pumped Storage Hydropower Plant in Dubai. The HPP is a major component to achieve the targets of Dubai's Clean Energy Strategy 2050.

We expect green hydrogen to be the next hot topic in region and to present some fantastic opportunities for engineers and technical workers of all skillsets.

ASIA PACIFIC//

Both the Oil & Gas and Renewables markets are busy across the continent with the region set to become a leader in the deployment of renewables in the next decade.

Oil & Gas companies are investing heavily in hydrogen projects and are attempting to retrain and redeploy employees with transferable skills. Engineers in subsea, fabrication and installation are finding it easier to move between sectors but it is not possible in all roles.

Offshore wind is still in its infancy, but a lot of projects have now been sanctioned and expatriate skills are in demand with companies looking to Europe to fill the skills gap. Countries such as Vietnam, China, Japan, South Korea and Taiwan are leading the way in wind opportunities and NES Fircroft has established offices on the ground in these countries to ensure we can support our clients as they invest heavily in emerging and alternative energy sources.

Fabrication of European windfarms is driving the wind industry forward and once we move into the installation phase salaries will see a significant boost.

Indonesia and the Philippines are looking to geothermal and solar energy to help them meet their energy targets, whilst South Korea, Japan and China continue to expand capacity and lead the way with government funding and subsidies driving the sector forward.

Australia has a strong onshore wind, solar and emerging green hydrogen industry which will provide excellent opportunities as we emerge from Covid-19 travel restrictions and see a return to growth and a strengthening of salaries in the region.



CIS//

In the CIS region the Ukraine is leading the way with 2 major wind projects located in the south of the country.

The Zophia Wind Farm (located in Zaporizhia region) is in the final stages of development with Phase I expected to be commissioned in the first half of 2022. Once completed it will be one of the largest wind farms in Europe, providing sustainable electricity to more than 343,000 households.

The Syvash Windfarm is also under construction in the Kherson region and will be largest windfarm in the Ukraine once connected to the grid, with the facilities capable of producing over 850,000MW hours of clean, renewable energy each year.

The wind conditions in Ukraine are among the best in the world for clean energy generation.

About 40% of the landscape is suitable for wind power generation and the Ukrainian Government has developed a strategy to bring the share of renewable energy in the country's energy mix up from 5% currently to 25% by 2035, meaning clean energy job opportunities in the region will be buoyant.

The recent "Memorandum of Understanding" between the Ministry of Energy of the Republic of Azerbaijan and Ministry of Energy of the Ukraine will also generate new job openings in the Oil & Gas sector.

The Ukraine has committed to investing in Azerbaijani energy companies, enabling oil and gas products to be supplied to European markets through the Ukraine, creating positive energy cooperation and opportunities for all.

WHAT IS DRIVING ENERGY TRANSITION?

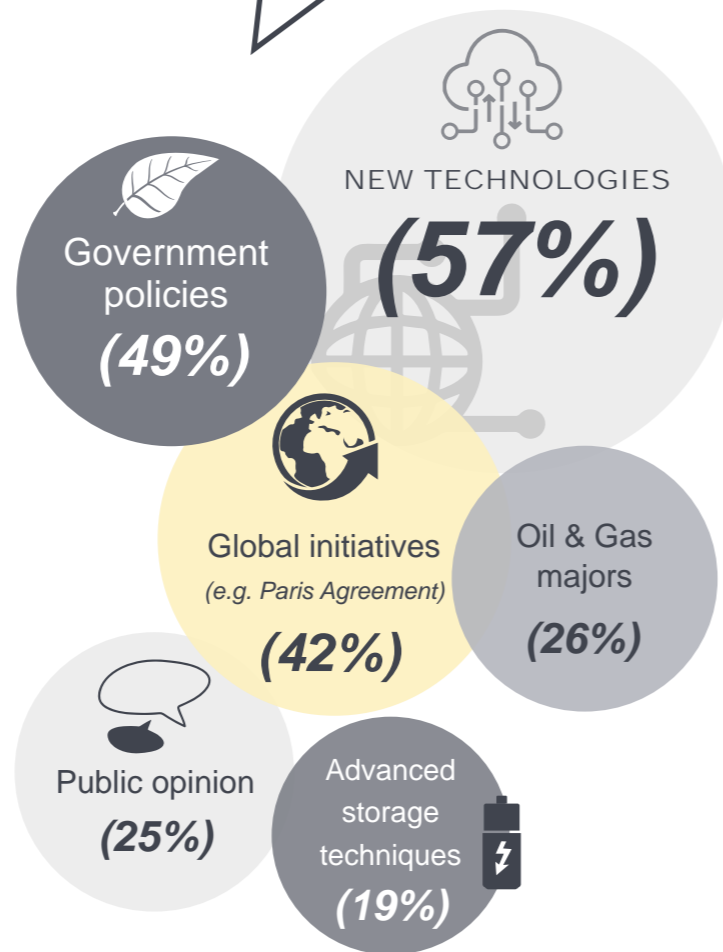
It is clear that in the last decade there has been a shared global push from the public towards a sustainable future, backed by government initiatives and accelerated by the Coronavirus and its impact on oil prices. However, our respondents pointed to technology as the crucial enabler and it is clear that the large oil and gas companies themselves have been a driving force in accelerating change.

Our results show that there are 3 major issues that the energy sector now needs to tackle together:

- 1 Reduce the costs of Renewables solutions through technology innovation**
- 2 Accelerate the transition from traditional oil to renewable energy sources**
- 3 Tackle the skills gap**

Both the Oil & Gas and Conventional Power sectors have a significant pool of talent which could transition into new energy solutions and resolve the top two challenges, given the right training and opportunities to do so. However, the ageing workforce remains an issue and the Clean Energy industry still needs to tackle this talent gap issue to move forward at pace and meet the tough targets that governments around the world are setting.

What are the key factors driving energy transition?



CONCLUSION//

The Energy industry has always been exciting and challenging and one which is constantly evolving.

As we move into an age of new clean energy solutions it is clear that technology will play a vital role to reduce costs and accelerate change; however people working together from across the energy spectrum will always be the key to turning the vision of a net zero future into a reality.

We must not lose sight of the fact that the traditional Oil & Gas companies will play a vital part in the successful transition of the industry and that skills training will be needed to give engineers the confidence to move into new areas.

Our results show that many candidates feel positive about the energy transition and the exciting projects it offers. Alignment with their personal values is a key driver for many and organisations should bear this in mind when they are considering their recruitment strategies of the future.

Whilst our research shows that salaries are not playing a huge part in tempting talent to make the move, they are in line with other sectors and the rates will only improve as the pace of change and need for talent increases.

The future energy landscape will be driven by leveraging technology innovations and digitalisation to continually reduce the environmental impact of oil and gas for years to come, as we move to cleaner solutions and more reliance on renewable sources. NES Fircroft looks forward to working with our clients across the globe, supplying the skilled talent to drive the cleaner energy agenda forward.

If you need guidance on your next career move, are looking for a new role or want to find the talent for your next project, we can offer support across the energy spectrum.

Please email enquiries@nesfircroft.com for more information. Thank you.

NES FIRCCROFT IS AN INTERNATIONAL WORKFORCE SOLUTIONS SPECIALIST//

We are proud to be part of an evolving energy industry.

Now, traditional energy production and ground-breaking renewable energy ventures are working together for a more environmentally sustainable future that can meet the world's growing energy demands, and we are excited to see engineering talent across the globe embrace new technological opportunities to reduce the world's carbon footprint.



20,000+

contractors supported by experienced compliance, payroll and assignment support teams.



80+

offices worldwide, operating in your timezone and local language.



1,300+

specialist staff including discipline-specific consultants and a dedicated in-house mobility team.

CLIENTS

Get in touch for workforce solutions support:

www.nesfircroft.com/workforce-solutions-for-clients

CANDIDATES

Search our latest job vacancies:

www.nesfircroft.com/jobs

WWW.NESFIRCROFT.COM

