SPE Review London February 2023

SPE Review London

The official e-magazine of the Society of Petroleum Engineers' London branch

London Section

Campus sustainability 101

Also in this issue:

- C-Level talks: Tony Renton
- Diversity in professional networking
- Sustainable careers: current recruitment trends
- Graduating SPE student members' offer
- Events – local and international

SPE SECTION EXCELLENCE *** AWARD *** 2020

50 YEARS

LETTER FROM THE EDITOR and SPE LONDON CHAIR

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SPE SECTION EXCELLENCE *** AWARD *** 2020

In this issue

FEATURES

Share your experiences and stories online https://www.spe-london.org/

Behind the Scenes: SPE Review Editorial Board

Elizaveta Poliakova, Editor in Chief

Elizaveta is a Reservoir Engineer at Trident Energy. She has an M.Sc in Petroleum Engineering from Imperial College London and a B.S. in Petroleum Engineering from the University of Leeds.

Elizaveta has been with SPE for more than seven years. She was the President of SPE Imperial College Chapter and the President of SPE Leeds Chapter. Previously, she was also on the committee of SPE YP.

Ffion Llwyd-Jones

Ffion is a business editor and writer. She has extensive experience in writing and editing (digital and print), with international experience in technology, health, automotive and the environment.

Mark Beleski

Mark is an experienced engineer, with deep understanding of industry practices, trends and challenges. He is an Energy Loss Adjuster with AqualisBraemar, in London.

Shalom Amakhabi, Editorial volunteer

Shalom is a graduate gas transmission engineer with National Grid Gas Transmission and metering. She has an MSc in Petroleum Engineering from Imperial College London and a BEng in Petroleum and gas engineering from the Nile University of Nigeria. She has been an SPE member for 5+ years.

A big Thank You! to all the organisations supporting the SPE London section

Letter from the Editor and SPE London Chair

Dear SPE London Members and colleagues,
Welcome to the first edition of SPE London Review in 2023, where we continue to explore the latest developments and trends in the field of energy and sustainability. This issue is dedicated to the topic of energy transition, which has become a pressing issue for many organizations around the world.

In this edition, we feature an insightful C-Level Talk with Tony Renton, Chair of OGL Geothermal, on **page 6**, where he shares his fascinating story and thoughts on the challenges and opportunities presented by the energy transition. The Campus Sustainability 101 article on **page 11** provides a comprehensive guide for educational institutions to develop and implement sustainable practices on campus.

We also highlighted the latest Energy on Draft social on **page 15** that took place in Belgravia on 2 February – stay tuned for our next networking event, it's coming soon! Energy on Draft is a social event organized by SPE, PESGB Young Professionals, iCheme, AAPG and EAGE – do not miss out an opportunity to expand your network and have fun! For those interested in pursuing sustainable careers, our article on **page 16** offers valuable advice and observations on current recruitment trends for energy transition.

Graduating students are in for a treat with our offer of a free 1-year membership, see **page 20** for more information.

Finally, our events summary on **page 21** features a list of upcoming local and international SPE events and conferences, which offer great opportunities to network and learn from experts in the field.

We hope you enjoy reading this edition of SPE London Review and we look forward to your feedback and comments.

Sincerely yours,
Elizaveta

NEWS DIGEST... NEWS DIGEST... NEWS DIGEST

More action needed

Offshore Energies UK (OEUK) recently warned that both government and industry need to take more action to support supply chain companies in playing a critical role in sustaining oil and gas activity, while helping to build the UK's low-carbon future energy systems.

OEUK's new Supply Chain report calls on government to provide a stable regulatory and fiscal framework that gives the supply chain a predictable and attractive business environment to continue investing in the UK's energy security. It also asks government to work closely with industry to inform decision-making and policies which ensure suppliers have better visibility and certainty of opportunity and improve their ability to invest in technology development, skills and innovative ways to deliver a net zero future.

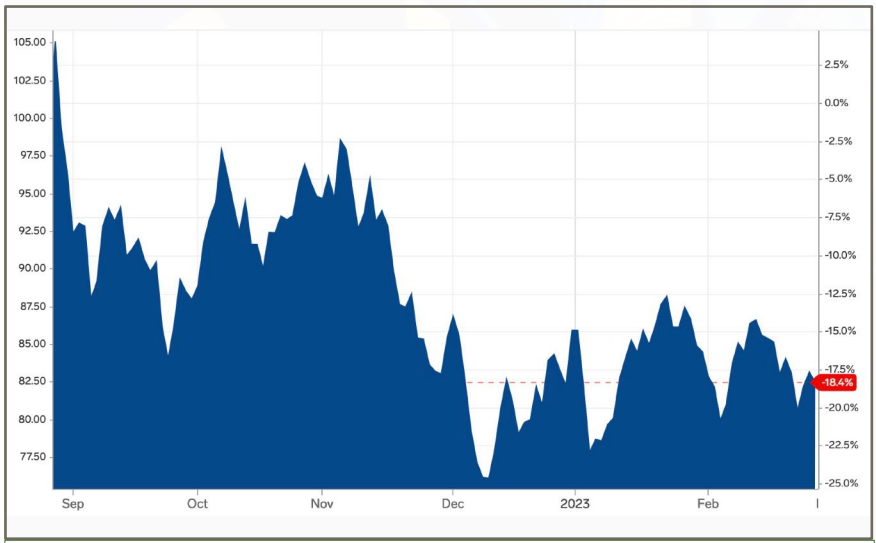
Read more

Decades of storage

UK-based Neptune Energy, together with Storegga and Sval Energi, has applied for a licence to store carbon dioxide at the Trudvang site in the Norwegian North Seastaring in 2029.

The Trudvang storage reservoir license (at a depth of about 850m in the Utsira formation) has the potential to store up to 225 million tonnes of CO_2 over 20-30 years according to statements by Neptune and Sval.

Read more



Oil (Brent) 83.89 +1.41 (+1.71%) – 28/02/2023 (**Credit: Market Insider**)

Longest legs in Scotland

The Port of Aberdeen has welcomed an oil rig with legs more than 200 metres in height – making it the largest vessel to visit the port. The *Noble Innovator* jack-up oil rig arrived at the South Harbour in early February.

The *Ocean GreatWhite* is also journeying to the west of Scotland; it is the world's largest semi-submersible rig.

Both rigs will work for bp.

Read more

Unprecedented returns

Shell shareholders can expect unprecedented returns following the energy giant's delivery of a record $39.9 billion profit in 2022. The record earnings are more than doubled from 2021. The British company also posted fourth-quarter profit of $9.8 billion; analysts had forecast a profit of $8 billion profit.

Read more

The importance of taking control, having fun and being brave

Tony Renton, chair – OGL Geothermal, explains how taking risk is a good thing, and why most oil&gas professionals have far more transferable skills than they think.

After leaving BP in 2006, he set up Oil Experience, a networked consultancy that was sold to RPS Energy in 2007. Since that time, Tony co-founded White Rose Energy Ventures, a private equity backed oil company, EPEX training (epexworld.com), Oil and Gas London (oilandgas.london) and has taken role as Chair of Sub-Salt Solutions Ltd (s-cube.com), OGL Geothermal (ogl-geothermal.com), Airponix Ltd (airponix.com) and co-founded a conservation initiative 'Saving India's Tigers' (savingindiastigers.org). He has also taken a minority shareholding in ISS Aerospace (issaeropsace.com).

Who is Tony Renton? Please tell us about yourself.

I was born in Norway, in 1954, although my parents emmigrated soon after and my early years were spent in Kenya. My time in Africa had quite a bearing on my outlook in my developing years. Both my parents had a sense of adventure and we had some amazing family experiences, such as the time we drove across Africa to visit indigenous tribes in West Africa. It was my parents 'can do' approach that's influenced many of my life choices, along with inheriting their love of travel.

I met my wife in 1986 in a ski-bus queue and we were engaged within two weeks. Thirty-six years later, we have three grown children, two of whom are data scientists, with the third in music management.

You were 34 years with bp in various roles, including Commercial Director with responsibility for business development across the Middle East. Tell us about your time with bp and the changes you saw during those years.

I joined bp as a sponsored student when I was 17 years old.

My passion for travelling and doing interesting things was what took me to bp. I loved the work, working on every continent other than Antarctica. The work was so varied. I started on the rigs as a roustabout and then a roughneck after which I was involved in petroleum engineering, drilling, well testing, commercial and business development. Before I got married I was living out of a suitcase and was prepared to travel at the drop of a hat; I had my passport in the office but I didn't mind that at all; it was what I wanted to do. I was fascinated by the meshing of technology, finance and politics with measured risk taking. It was a great time.

After I'd been in Australia doing some due diligence about a possible business acquisition I realised I would very much like to live in the country for a while. So, I asked my boss if I could get transferred there and, about a year later, he told me a job had come up; naturally, I took it!

I don't think those kinds of travel opportunities are so readily available now as the whole industry is more is much better at employing and bringing on local people.

Change and (calculated risk) opportunities

The Yom Kippur War began in 1973, the year after I joined bp. It changed the world in the oil&gas sector, and even though I was at university, I realised things were never going to be quite the same. Although many oil companies were expropriated from various Middle East countries, bp was rescued by discoveries in Prudhoe Bay in Alaska and the Forties field off the coast of Scotland, which resulted in exciting opportunities in new areas. It was an era of calculated risk taking.

During that time, I also met and was inspired by John Browne, who was bp's chief executive between 1995 and 2007. He was responsible for significant changes and for developing a clear strategy. The organisational model gave teams a lot of freedom to succeed and live with the consequences of their decisions. It felt very much unique to bp, and I relished that environment; it had a sense of excitement. I left Australia in 1991 and was lucky enough to study at INSEAD after which I worked in strategy development.

Importance of taking control ... continued

"We are well advanced on raising finance for some new European geothermal projects."

John's recognition of the link between fossil fuels and climate change fed through in the early nineties and deepened my belief that things were going to change. At the time, his public endorsement of the science of climate change and the need to develop a portfolio of energy products was clearly ahead of its time. During the '90s companies were defined by exploration, bp certainly was, but it was clear that change was coming – there are now very few geologists/geophysicists at those top levels now despite gas being a key transitional fuel.

After leaving bp in 2006, you founded Oil Experience and co-founded White Rose Energy Ventures, and you are now chair of Sub-Salt Solutions, OGL Geothermal, EPEX Training and Airponix, and have a conservation initiative 'Saving India's Tigers' – could you please share your learnings and motivations?

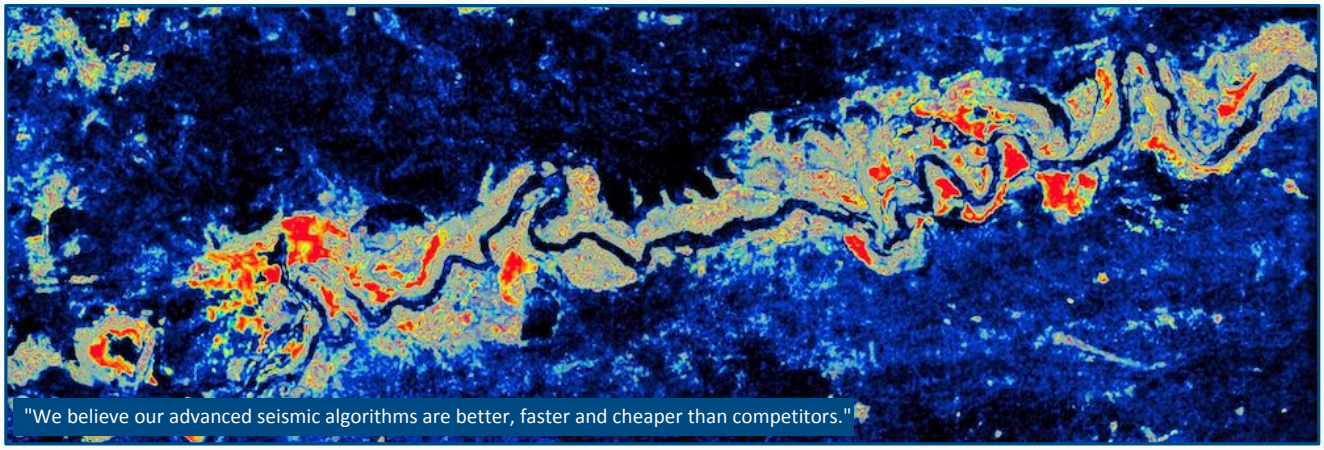
After working in more business development roles with bp, I realised I wanted to do something more entrepreneurial. I was looking for an opportunity for several years and came up with the idea for Oil Experience while on a flight back from Kuwait. I thought there was a business model there and wrote a very basic business plan on a napkin. I framed that little one-page business plan.

We launched Oil Experience in 2006. bp gave me my first contract. However, we grew rather too rapidly and I learned a lot about how important managing cash flow is for small companies. We had a very good front-end generating business, but a disaster backend in the accounts because our clients were paying in 60 to 90 days, but I had to pay my consultants in 30 days. I had an understanding bank manager, but I realised that accounts and book-keeping were not my forte; I was much better at generating business. Anyway, just nine months after starting the company, I got two offers to buy the company, and sold it. The company is still going today, in one form or another, and that pleases me.

I co-founded White Rose Energy Ventures with a friend and colleague. We raised over $400 million in private equity from four different institutions. John Browne was our chairman; he was excellent. We decided to run with frontier exploration and were involved alongside Statoil in the first pre-salt well in the deepwater offshore Angola. We recognised the risk and took it but unfortunately the prospectivity was not the mirror image of Brazil and the reservoir was full of volcanics. I enjoyed the experience of working with private equity companies and I'm still in touch with some of them.

The next venture developed from my certainty that pre-salt prospectivity assessment could be enhanced from better use of the seismic data. We just didn't have the technology to unravel it. So I looked around for where the technology might exist and discovered that the best technology development in terms of seismic algorithms was happening in the UK, at

Importance of taking control ... continued

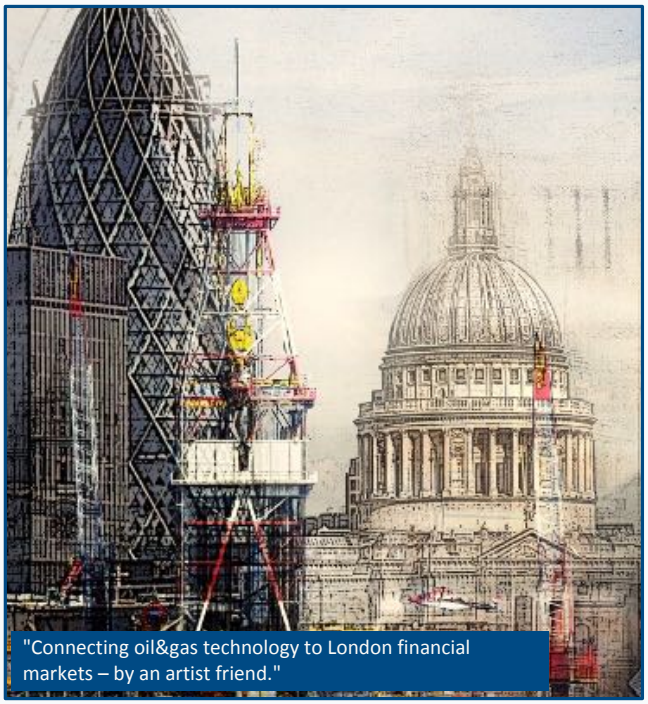


"We believe our advanced seismic algorithms are better, faster and cheaper than competitors."

Imperial College London. So, we wrapped a small business around its technology development and span out the S-Cube company from Imperial.
We're now at a very interesting time as we're getting much better sub-surface imagery and can cut the processing time down from six months down to six days. It's a massive change and we're at a very exciting juncture. Looking back at the original business plan, it's taken three or four times as long as we originally thought – but we've got there.

Conservation initiative

I loved watching the wildlife in my early days in Africa, although I was maybe too young to fully appreciate it. In 2004, bp asked me to look the gap in bp's portfolio, which was India. While it would take some time to develop a proper business plan I was looking for something which we could engage in in India. I had the idea of tiger conservation, they are an icon of some of the environmental problems the world is facing and at the time were in decline. I set up the outline of a concept with a professor from the Wildlife Conservation and Research Unit at Oxford University as he'd done something similar in South America linking local NGO's together. bp confirmed I could take the initiative with me when I left the company in 2006. Over the years it has grown and we now have more than 250 people working across our NGO partners. Our tiger numbers have doubled since started but with this success we now have new problems with young tigers dispersing into local villages with an increase in human/wildlife conflict. We've got a great team doing positive things on the ground and working closely with the government, sometimes holding government to account and sometimes working alongside them. The model seems to be working and it's now the largest tiger partnership initiative in India.



"Connecting oil&gas technology to London financial markets – by an artist friend."

OGL Geothermal is committed to expanding the use of geothermal energy. Why is this important for the energy transition?

Solar and Wind are likely to drive the energy transition at least until, hopefully, fusion becomes a reality. However, the sun doesn't shine at night, and there are those days when the sun doesn't appear and the wind doesn't blow. So, we need to add power generation from some other means, and there's a premium for reliability. Geothermal energy is 24/7, renewable, climate friendly and has been used as an energy source for thousands of years. At OGL-Geothermal we use our technical knowledge to locate suitable areas for geothermal energy in Europe. We are well advanced on raising the finance for the projects we have identified and obtaining the

Importance of taking control ... continued

necessary licences and the next couple of years we should see real progress. While geothermal is not the cheapest form of power – there are still significant drilling costs – it's a key ingredient in the energy transition and has its place in a portfolio mix.

Two key challenges for geothermal energy are surface exploration and drilling operations. How does experience in traditional oil and gas industry help meet these challenges?

"EPEX World business simulation helps make better decisions in difficult situations."

It's all about skills transfer. The hard skills of geology, geophysics, drilling, reservoir engineering, facilities engineering, project management are all mostly transferrable and certainly applicable to our geothermal projects. I think we underestimate soft skills that are also transferable to all forms of renewable projects such as negotiation, government relations, understanding regulations, finance raising and working internationally; so both hard and soft skills can be used in the energy transition.

What career advice would you give to young and more senior oil&gas professionals about navigating the energy transition?

Be brave.

We're just at the beginning of a revolution in energy. At EPEX training we've developed a business simulation energy transition course that seems to be going down very well. The energy transition is a journey – it's not all or nothing, oil and gas is will be needed for a long time yet with operations getting cleaner all the time.

Where there is pressure there is opportunity. I think most people have more transferable skills than they imagine.

Sometimes, you may find that as one door closes, another will open. You've got to use your networks, keep curious, and keep learning. Enjoy working and be open to new opportunities. And, definitely, take control, have fun and be brave.


"Our tiger numbers have doubled since we started in 2004 – but this brings new challenges."

In these challenging times it is more important than ever that SPE members continue to inspire and support each other locally, regionally, and globally.

SPE has evolved to provide unparalleled insights, shared expertise, life-long learning and community strength to fuel the success of our members and the future of the industry. As a member, you are part of that!

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Campus Sustainability 101

The carbon-emission savings by transitioning from fossil-fuel energy production to renewable energy systems evaluates the carbon footprint throughout the generation life cycle. Petmal/Getty Images/iStockphoto

This article by Hitisha Dadlani examines the shift towards renewable energy sources in universities – and what individuals can do to help achieve the university's energy goals.

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A sustainable university is defined by Velazquez et al. as ''A higher educational institution, as a whole or as a part, that addresses, involves and promotes, on a regional or a global level, the minimization of negative environmental, economic, societal, and health effects generated in the use of their resources to fulfill its functions of teaching, research, outreach and partnership, and stewardship in ways to help society make the transition to sustainable lifestyles.'' In this article, we will understand how a campus can go in the direction of sustainable development in regards to energy consumption (Alshuwaikhat and Abubakar).

Why a University Campus?

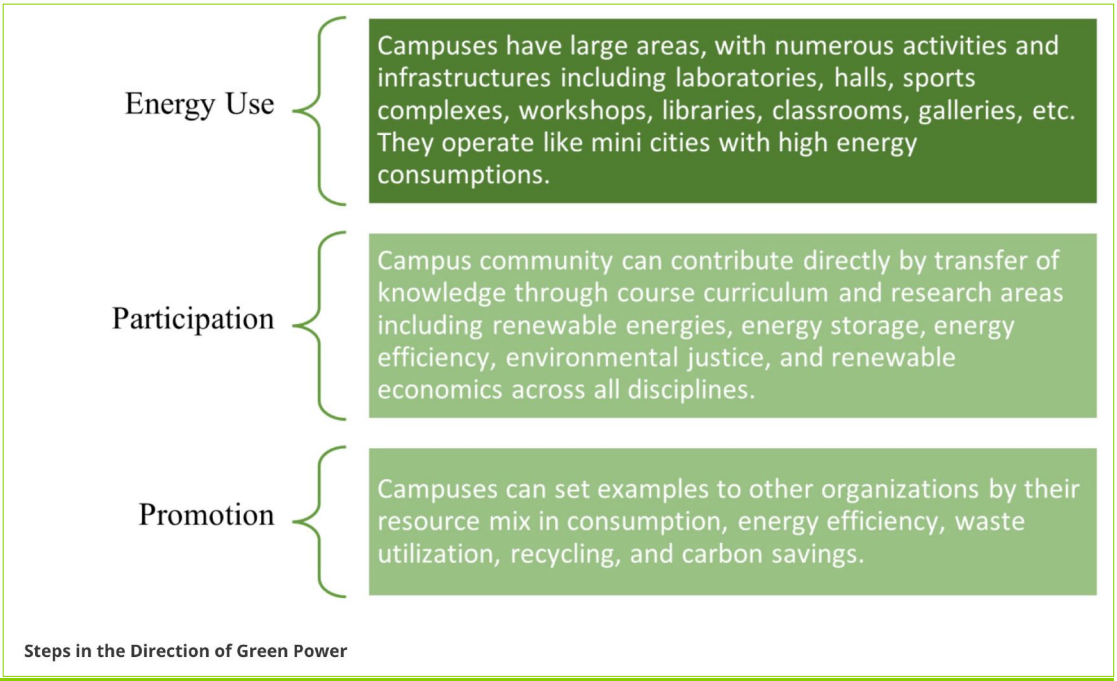


Figure1. University chart. Source: Hitisha Dadlani

Scoping of Resources

The utilization of green energy is location specific. The system design for renewable resources depends on the abundance of resources in the chosen area.

Campus sustainability 101... continued

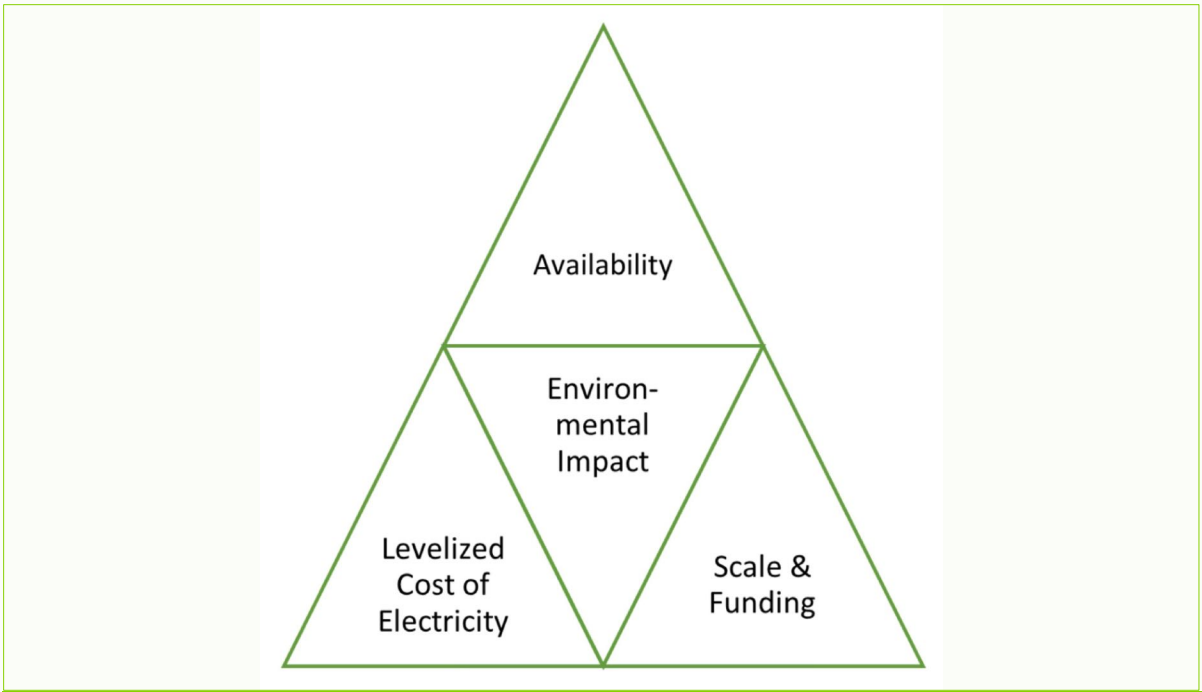


Figure2. Renewable sources pyramid. Source: Hitisha Dadlani

This is demonstrated in how universities in Western Australia have abundant solar energy while universities in Scotland are windy, which drives turbines for electricity.

- **Availability of Resource:** This evaluation is based on location-specific details for understanding the abundance of renewable resources. This includescwind-speed maps for wind energy, solar irradiance maps for solar energy, subsurface temperature logs for geothermal energy, flow rate and head for hydropower, wave height and tidal range for ocean energies, and organic waste generation for biomass/biofuels.
- **Funding:** Renewable energy agencies have accessible funds to assist the shift from a fossil to green power-based economy. Such funds are available to resource and scale specific investment commitments by clean energy initiatives. The total investment commitment by Australia's Clean Energy Finance Corporation for solar resources is over $1 billion, and for wind resources is nearly $720 million (Australian Renewable Energy Agency).
- **Levelized cost of electricity:** Technology developments like high-efficiency solar panels, smart rotors, floating turbines, improved forecasting for grid reliability and resilience, etc. are reducing the cost of electricity generation by renewable resources and thereby promoting the transition. The most cost-effective resources are ranked higher in this scoping analysis by the International Energy Agency
- **Environmental Impact**: The aim of green energy is to reduce carbon emissions. Approximate life-cycle carbon emissions with social and ecological barriers are accounted in ranking the environmental benefits of the resources.
- **Scale**: The scale of development depends on the demand analysis and area required by the resource for exploitation. This is often based on the stipulated size of the renewable installation vis-à-vis the requirement. The installation size is governed by the effective cost benefit from the project too; for instance a small hydropower wind project wouldn't be as economical as a large-scale installation in the project lifetime (US Office of Energy Efficiency & Renewable Energy).

Campus sustainability 101... continued

Demand Analysis

The next step in green power development is demand analysis, i.e. the consumption data on a daily, monthly, and yearly basis. It is required to comprehend the maximum power to be delivered by renewable systems. And, as campuses have to supply not only the power, but also the heating and cooling requirements in the buildings, these resources need to be exploited both for electricity and thermal energy. It is also important to know the power distribution aerially across the campus as electricity generated in one part of the campus (example: parking spaces) is transmitted to the demand areas (example: laboratories) (The University of Western Australia).

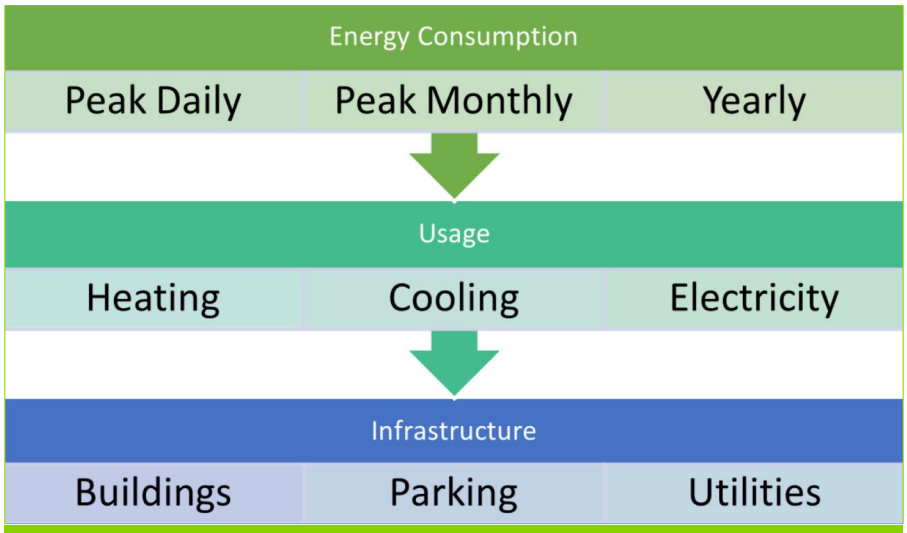


Figure3. Energy consumption. Source: Hitisha Dadlani

System Design and Performance Analysis

A renewable system is designed for self-sufficiency in light of peak-load management and grid stability. System design is a complex process with many permutations and combinations in terms of component options, storage solutions, and plant layout choices for efficient and sustainable power generation. The design process is as follows:

- **Components of the renewable system**: For solar, photovoltaics (PV) modules/solar thermal, inverters, and transformer options exist in the market. For wind, turbine types (rotor diameter, hub height) and configuration possibilities are plentiful. For biomass, feedstocks, gasifier, and generator selection are varied. These selections are generally based on project types, compact sizes, high efficiency, and low installation costs (Albadia et al.).

- **Energy Storage**: The energy production varies seasonally/daily as per flowing currents of renewable energies (solar irradiance, wind speeds, wave heights). Therefore, the excess generated in peak hours needs to be stored for future utilization, such as in times of nonavailability of the resources. This governs the system's performance. The system performance is assessed by the energy flexibility and security supplied by the hybrid energy mix. A consistent energy resource/storage integrated with a variable resource – such as a combination of biomass, solar, hydro, wind, geothermal, or wave energy – leads to the enhanced reliability of the overall system and an optimum energy balance in peak-load scenarios. The system performance can be further boosted by metering the excess to the grid, supplying additional energy during peak demand. This metering system requires maintenance of grid stability.

Campus sustainability 101... continued

- **Layout**: Utilization of available campus areas for energy generation is the best go-to strategy. Solar PV on roofs and parking spaces, solar trees in parks and gardens, solar street lighting, rooftop wind turbines, windmills in open ground on campus, small-scale biomass gasifiers near food courts for utilization of organic wastes, and hydraulic turbines near surface runoffs/small rivers near campus are some examples of campus space energy generation (Alshuwaikhat and Abubakar).

Cost-Benefit Analysis and Carbon Savings

The preliminary cost-benefit analysis can be carried out using basic tools like net present value, discounted payback period, and levelized cost of electricity (LCOE). The capital expenditure should consider renewable energy system components and energy storage devices. There will be additional operating expenditures throughout the entire life of the system for maintenance and operations.

Revenues will have cost savings calculated based on the discounted rates as per renewable energy system guidelines and the cost of electricity from the grid (this electricity will instead be generated by the renewable system on the campus). The system results are profitable if the LCOE of the renewable energy system estimates to be lower than the LCOE of the fossil-fuel-based system. The system can further benefit from the exemption of emission taxes and funding obtained under clean energy initiatives of various countries (Asad et al.).

The carbon-emission savings by transitioning from fossil-fuel energy production to renewable energy systems evaluates the carbon footprint throughout the generation life cycle. On average, renewable energy systems have a carbon saving of approximately 75% over fossil-fuel-based systems. The university can participate in government's carbon-crediting scheme and earn carbon credit units per ton of saved CO2 emissions. Universities can later sell these credits to the government or businesses and generate supplementary incomes (Australian Government).

The Way Ahead

Each one of us is part of the global campus communities as a student, an alumnus, a researcher, or an academic. It is only right for us to understand and propagate the values of environmental sustainability and green campus initiatives. Such implementations can have consequences that go beyond the university campus: spillover effects take place in the totality of the region hosting the university. Thus, in the words of Emily Dickinson: "One step at a time is all it takes to get there."

Hitisha Dadlani

Hitisha Dadlani is a senior reservoir engineer at Oil and Natural Gas Corp. She is also a graduate student pursuing a master of science degree in energy engineering at Heriot-Watt University, UK.

She has experience in chemical and thermal enhanced oil recovery techniques and reservoir simulation. She is one of her organization's youngest members of the New Technology Scouting committee.

Dadlani's SPE journey dates back to her university days, when she served as head of research and development for Pandit Deendayal Petroleum University SPE student chapter and organized the first SPE Fest in 2017.

She has participated as discussion leader/presenter in numerous SPE conferences and workshops. In her spare time, she loves to travel and do monologues, street plays, and dance performances.

Diversity in professional networking

On 2 February, the PESGB Young Professionals, SPE, EAGE, AAPG and iChemE London societies hosted their fourth social networking event in the Energy on Draft Series… the first in 2023!

It was great to see so many people at the quarterly event at The Paxton's Head, Belgravia, and we extend a warm welcome to the next one! Head to the PESGB Young Professionals LinkedIn page for more information. Come out, enjoy drinks, make new connections or catch up with old friends!

Whether you are starting off in the industry or an experienced professional, this event is a chance to network with a diverse group of professionals in engineering, geoscience, finance, and business development.

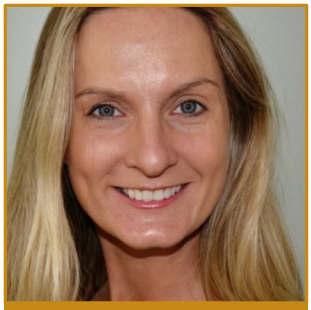
Sustainable careers: current recruitment trends

One of the main goals of the London SPE Net Zero Gaia committee is to help the membership adapt to a changing energy industry. With this in mind, the committee has launched an initiative called 'Sustainable Careers'. Useful information, insights and advice are being gathered from knowledgeable individuals across the industry and beyond, on topics such as evolving education opportunities, recruitment trends, energy transition business models, and career pathways. Short interviews based on the gathered insights will be available as a growing resource on the *SPE London Sustainable Careers* webpage.

Instalment three: Current recruitment trends

How is recruitment activity changing across O&G and the wider energy industry? What skillsets are in demand? Are more O&G workers finding roles in other energy sectors? What are the barriers to this? How can O&G candidates maximise their employability and ability to land an energy transition role if that is what they are looking for?

Tim Dartnall
Director
Gaia Resourcing



Zoe Suren
Founder and MD
EnergiLink

Tim has 12 years of recruitment experience in the Energy Sector.

Tim initially specialised in Subsurface for the O&G sector before expanding his recruitment offering into a wide variety of disciplines e.g. well engineering and production, discipline engineering, commercials & business development on a global scale. In addition, he has also worked within, and led renewable teams focused on wind, solar and power.

In 2021, Tim founded Gaia Resourcing, predominantly driven by a desire to focus on more sustainable energy sources and help influence recruitment in Energy Transition and New Energies.

Gaia Resourcing currently works with numerous partners on various exciting Energy Transition projects in the UK and globally. Its offerings range from C-Suite/Executive to entry-level positions.

What sub sectors of the Energy Industry do you work with? How have you seen levels of recruitment activity change in each sub sector over the last couple of years?

Energy Transition (Green/Blue Hydrogen and CCS), Geothermal, Minerals and O&G.

From an Energy Transition and a New Energies recruitment perspective, many companies have been working towards NetZero and have started to address becoming more sustainable.

Typically, companies with hydrocarbons as their main energy source have started to action this by internally re-organising and re-training existing employees. When these companies have externally hired, it has generally been to backfill the vacated O&G spaces for those that have transitioned. The other approach has been to hire relatively small teams, tasked with evaluating new projects and longer-term strategies within New Energies.

Sustainable careers: current recruitment trends... continued

In parallel, New Energy and Renewable focused companies have also continued to grow conservatively, in anticipation of the gradual transition away from traditional hydrocarbon sources.

The current geopolitical situation has significantly impacted global energy policy and strategy. There has been a noticeable re-focus and investment increase for hydrocarbon projects which in turn, has seen a surge in O&G recruitment. It's also apparent that the emerging energy sectors have received more attention and accelerated investment. The need to move away from reliance on gas imports has become much more evident.

In terms of employers, have you seen any changes in what skillsets (soft or technical) or experience they are looking for? Do you see more flexibility or openness to consider a wider range of candidates and then train specifics on the job?

There haven't been any ground-breaking changes in 'soft skill' requests in the last 12 years. Most employers tend to look for similar characteristics when hiring. That said, Energy Transition is usually better suited to people who have a collaborative, dynamic, open-minded and resilient approach. This is because projects are fast-paced and unpredictable, and outcomes are often unknown.

From a technical perspective, it's very subjective to the exact skillset that is needed. Of course, it helps if you have existing knowledge of the sector but there aren't many candidates with existing New Energy/ Energy Transition experience. Usually, companies are happy to draw on candidates' transferable skills that are similar to previous or current disciplines. It's then a matter of learning or refining the specifics of the job as quickly as possible.

Have you placed any O&G workers in other energy sectors and is this trend increasing? Can you give any examples? Have they needed to upskill for these moves? What are the barriers you see to this happening more?

Yes, to date a high percentage of Gaia Resourcing's placed candidates have an O&G background.

There are numerous disciplines across the New Energy and Renewable sectors in which there are extremely similar transferable skills from O&G. It's likely that demand for O&G skillsets will increase within New Energies. These sub-sectors have a shortage of existing knowledge and highly skilled people. There should be a steady increase within recruitment as the technologies and project phases evolve. It's worth remembering that there is often competition from candidates in the Renewable sectors that also have relevant transferable skills.

It's not a prerequisite to upskill and acquire additional qualifications to transition into a New Energy sector. One of the commonalities of Gaia Resourcing's placed O&G candidates is their historical exposure to a variety of different projects. This, combined with a desire to keep improving and learning, should help to achieve success in any new sector.

There are a few barriers that have come up in the last two years for people moving from O&G into New Energies. The most common barrier is the difference in salary bandings between O&G and the other Energy sectors. Companies whose main revenue income is from New Energies, have much lower margins and this is usually reflected in salaries which struggle to compete with O&G bandings. In time, this should come to a natural consolidation.

Location and travel may also be potential issues to consider for O&G professionals looking to make the transition. A lot of the New Energy projects (particularly if you are required to be onsite) are located outside the main energy hubs/cities in the UK and Europe.

Hybrid and flexible working arrangements have changed work-life balances, but most employers still like to see people in office. This is very applicable if you are entering a new sector where there is lots to learn! It's yet to be seen whether O&G style rotations might be a possibility in the future, but this might be an option.

In terms of candidates, are preferences changing in terms of what kind of roles/T&Cs they want? Any advice on how O&G candidates can maximise their potential to land an energy transition role if that's what they're looking for?

People who have transitioned into New Energies are often motivated by the impact they can have towards a more sustainable future. They tend to

Sustainable careers: current recruitment trends... continued

look for projects that are technically challenging, future proofing employment/skillsets, offer career progression while doing something new and exciting!

As mentioned above, salaries and packages are nearly always a factor. It can be challenging to find candidates willing to take a financial reduction. This is very current as the strong oil price has resulted in a high number of opportunities within O&G. Gaia Resourcing has placed people who have taken a financial reduction to join different sectors, but it does limit the candidate pool available. These days, hybrid working is nearly always a candidate's preference and most employers do offer some form of flexibility.

In terms of advice for candidates:
Research the relevant sector that you are interested in entering. If you don't have existing experience, it's best to try and obtain as much knowledge and understanding as possible
Follow people on social media in the sectors who write about subjects of relevance and interest. It's also important to try and find people who are critical. This is useful for a balanced and varied perspective.
Collaborate – ask existing contacts who have experience within New Energies. People are usually very open to discussing topics and sharing knowledge. Some people's current companies have existing New Energy teams so reach out to them and you might even be able to get some direct experience!
Ensure social media profiles and CV's are detailed with any direct experience in desired sector/ locations. If people lack direct experience, then elaborate on transferable skills so that capabilities are clearly visible.

For employers and candidates, it's best to approach the New Energy sector with pace and urgency. It's always beneficial to revert to recruiters and companies quickly. The market is extremely competitive from every sub-sector and moves at a fast pace.

Don't be afraid to try something new and take a risk. Find a good recruitment company that is knowledgeable and has a proven track record of delivering results within the New Energy sector!

Zoe is the founder of recruitment companies that operate across various energy sectors

Zoe's recruitment companies focus on oil and gas, and energy transition – hydrogen/CCUS and geothermal.
Her companies specialise in placing staff and contractors into senior positions on a global basis.

What sub sectors of the Energy Industry do you work with? How have you seen levels of recruitment activity change in each sub sector over the last couple of years?

The focus areas within the energy sector for us are the subsurface technical sectors and then also technical people into H_2, CCUS and geothermal industries.
Levels of activity have picked up over the last year. The subsurface sector is beginning, slowly to rebuild their teams with an equal upturn against contract and staff positions. This is what we refer to as the 'first stage' hiring within an upturn, second stage will cover replacement positions too.

Within the energy transition the biggest growth areas that we see is for technology companies looking to build technical teams in order to push forward CCUS, H_2 and geothermal.

In terms of employers, have you seen any changes in what skillsets (soft or technical) or experience they are looking for? Do you see more flexibility or openness to consider a wider range of candidates and then train specifics on the job?

Again, I will break this down over the O&G focus and Energy Transition:

In terms of subsurface hiring one thing that has been more evident in the last year has been the focus on diversity within regrowth. There seems to be a greater recognition that different backgrounds and ideas create a more successful team

Sustainable careers: current recruitment trends... continued

environment.

Following the downturn, jobs within this sector still tend to be aimed at finding the 'perfect' candidate who ticks all the technical boxes. But we do find that the market is rebuilding with a more 'generalist' skillset – specialist positions have not returned as much just now.

Development is also leading the hiring charge before exploration, although we are seeing a push to regrow in both.

In terms of 'soft skills' this is greatly dependent on the type of company that we are hiring for – however, the commitment to the industry over the last few very tough years tends to speak for itself – enthusiasm for the sector in general tends to help when interviewing for a job.

Within the energy-transition sectors, I would say the same – the natural enthusiasm for the sector is a huge selling point, if transitioning from O&G, either some courses or experience within CCUS, geothermal or H_2. The transition at these early stages is easier done through management consultancies, service providers and consultancies who can utilise both backgrounds and have access to more projects.

The main skillsets required mainly transition easier from the project management, process engineering and specialist backgrounds – however, as the industry matures, we see a greater value in the subsurface skillset within certain energy transition sectors.

Have you placed any O&G workers in other energy sectors and is this trend increasing? Can you give any examples? Have they needed to upskill for these moves? What are the barriers you see to this happening more?

Currently, the subsurface transition moves that we have facilitated have been for the consultancy side of the business.

To give an example: we placed a very senior, very impressive geoscientist into a management consultancy where they were able to utilize the knowledge of the oil and gas space to advise on Energy Transition and becoming more carbon aware. The main things that we were looking for in this placement was the ability to be client facing from the candidate, the understanding of both sectors and progressive thinking. Current barriers really are the number of these positions available right now versus the number of people looking to make this transition.

In terms of candidates, are their preferences changing in terms of what kind of roles/T&Cs they want? Any advice on how O&G candidates can maximise their potential to land an energy transition role if that is what they are looking for?

Candidate preferences right now are to look to the future and diversify skillsets to ensure that future downturns are not so detrimental to careers.

My advice would be to consider what you enjoy as well as where your skillset can expand. Although, right now, the pace of hiring in the energy sectors is still slow, the industry has growth plans which far outweigh the skillset available. The flexibility around the technical experience needed will open.

Credit Ian Schneidr

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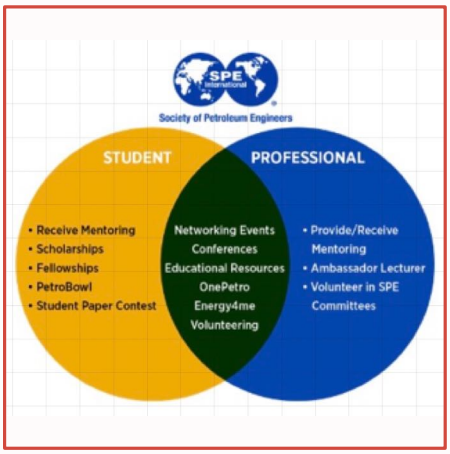

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SPE events calendar – local and international

LOCAL – in the UK

April 25-27 (virtual)
SPE Virtual Career Pathways Fair 2023
This is an on-demand event organised to connect students and young professionals to experienced oil and gas professionals from all over the world. As virtual networking event, it allows attendees to take part in quick-fire mentoring sessions via chat or one-to-one video calls to talk about the future of specific roles and how best to prepare for them. There will be live and recorded sessions with live webinars and discussion forums.
More information: **spe.org/events/en/2023/symposium/05vcpf/career-pathwayfair.html**

September 5-8 (Aberdeen, Scotland)
SPE Offshore Europe Conference and Exhibition
Theme: *Accelerating the transition to a better energy future – securing sustainable and equitable energy for the next 50 years and beyond*
Celebration of 50 years of innovation within the energy industry. This event will bring together the energy sector's value chain to drive forward the oil & gas sector, with an exhibition that showcases the industry's innovative solutions. The theme ties in four key themes: energy security, energy transition, innovative technology, and future talent.
More information: **offshore-europe.co.uk/en-gb.html**

INTERNATIONAL

March 13-15 (Dubai, UAE)
Gas & Oil Technology Showcase and Conference
This is a great opportunity to connect the global oil & gas industry to discuss challenges and best practices across the oil & gas industry. Focus will be on the use of technologies and innovative solutions to address key technical topics such as well designs & completion, R&D in EOR, role of analytics and AI solutions for field development, production enhancement, new concepts in geoscience & reservoir characterisation, and polymer flooding and low salinity technologies.
More information: **gotech-dxb.com/**

15-16 March (Muscat, Oman)
SPE Gaia Summit
The 2023 Gaia conference (the third since 2019) will be international in scope, with thought leaders from around the globe, including operational and startegic oil & gas decisions makers and future makers. The interactive program is based on key Gaia themes: Energy System Transformation – People & Technology; Measuring What Matters; Natural Capital & Regeneration; and, Listening & Engaging.
More information: **spe.org/events/en/2023/summit/23gaia/spe-gaia-summit.html**

April 25-27 (Houston, Texas, USA)
SPE/AAPG/SEG Carbon Capture, Utilization, and Storage (CCUS) Workshop
Theme: *An emerging field for energy professionals*
This is an event that unites AAPG, SPE and SEG to highlight CCUS work and address related challenges. Topics will include: subsurface geologic storage; CO_2 enhanced hydrocarbon recovery; reservoir monitoring and risk assessment, case studies, industry applications, economic, incentives, and policy; and, infrastructure and non-technical considerations.
More information: **ccusevent.org/**

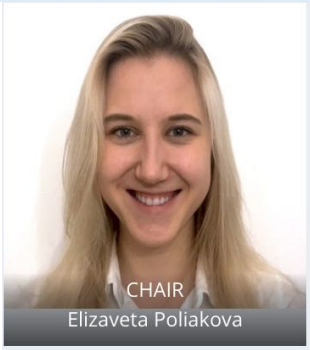
June 5-8 (Vienna, Austria)
SPE EuropeEC – Europe Energy Conference featured at the 84th EAGE Annual Conference & Exhibition
Multidisciplinary geoscience and engineering event. Topics include capture, utilisation, and storage of fluids in the subsurface; extraction of heat and materials from the subsurface fluids; carbon efficient reservoir management; machine learning, AI and digitisation for more efficient operations; sustainability in the energy industry; Net Zero energy economics.
More information: **spe.org/events/en/2023conference/23euro/spe-europec-europe-energy-conference-at-the-84th-eage-annual-conference-exhibition.html**

For a complete listing of all events on the SPE Global Events Calendar: spe.org/en/events/calendar/
And, for more information about SPE training courses, calls for papers, and opportunities for sponsorship: sponsorship.spe.org/en/events/about-events/

Meet the SPE London Board

SPE is a non-profit professional society with more than 156,000 members in 154 countries, who participate in 203 sections and 383 student chapters. SPE's membership includes 72,000 student members. The SPE London Section, with an average 2,000 members and seven associated student chapters, is an active section with an aim to connect, engage and promote the exchange of knowledge within the London energy community of technical and commercial professionals. The SPE London board is the governing body for the SPE London section. The different committees oversee the chapters various activities including the evening programme, various SPE events, Young Professionals, Women in Energy and associated student chapters.

SPE SECTION EXCELLENCE *** AWARD *** 2020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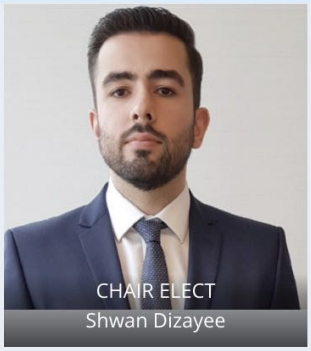
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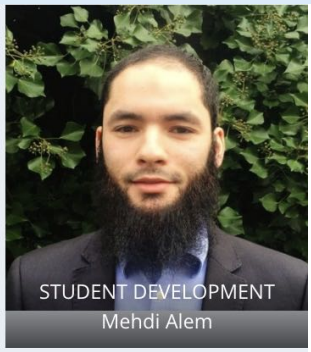
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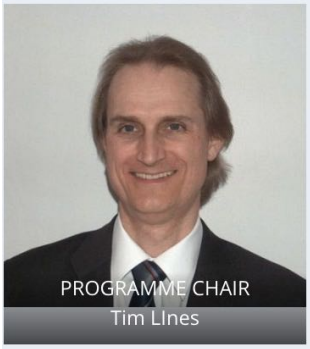
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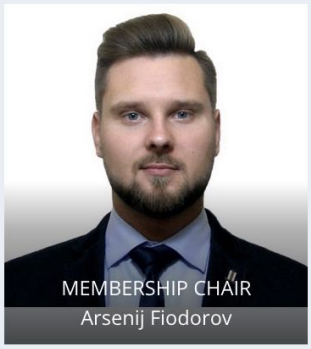
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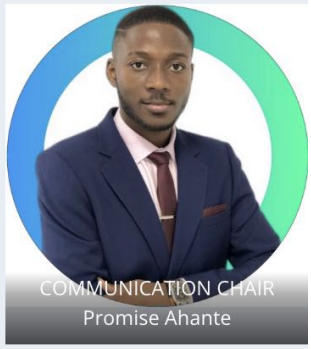
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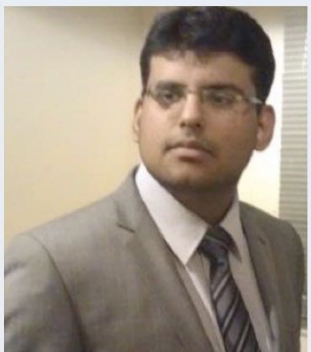
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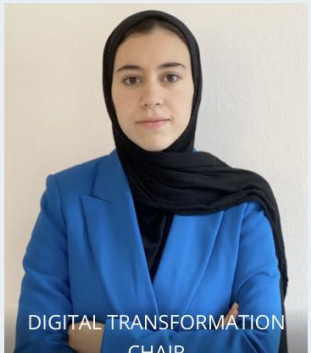
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