



2017

Energy UK Young Energy Professionals Forum

A guide to jobs in energy

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CGI

What is the Young Energy Professionals Forum?

Energy UK's Young Energy Professionals Forum, sponsored by CGI, drives the development of young people across the whole industry. The network provides opportunities to collaborate, improve and recognise success through topical events, access to industry leaders and site visits. Our membership has grown beyond 1450, spanning 270 different companies.

This prospectus brings together just a small snapshot of the huge breadth of jobs that are available in the energy industry today. There are of course many more jobs out there across the supply chain, with a huge selection of exciting opportunities! The possibilities across the energy industry are vast, so do your research and be amazed by the variety of companies and roles you can go into.

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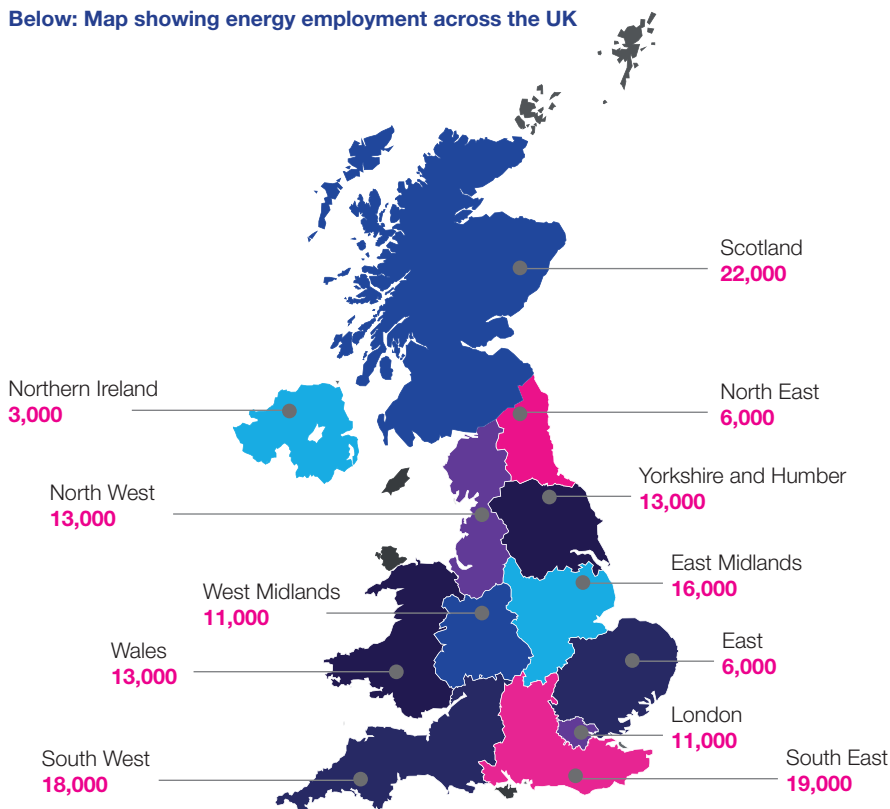
Where can I work in the energy industry?

Finding the right job and the right career path can be a daunting prospect. Whilst career seminars and workshops will have shown the very broad scope of jobs on offer, we know there are many roles in this vibrant, innovative industry, which you may be unaware of.

So if you are just graduating from University, leaving school or simply on the lookout for a new career, this prospectus showcases the breadth of jobs available across this dynamic and ever changing industry.

You can read first-hand from representatives across the YEP Forum, giving an insight into their working life, roles and responsibilities.

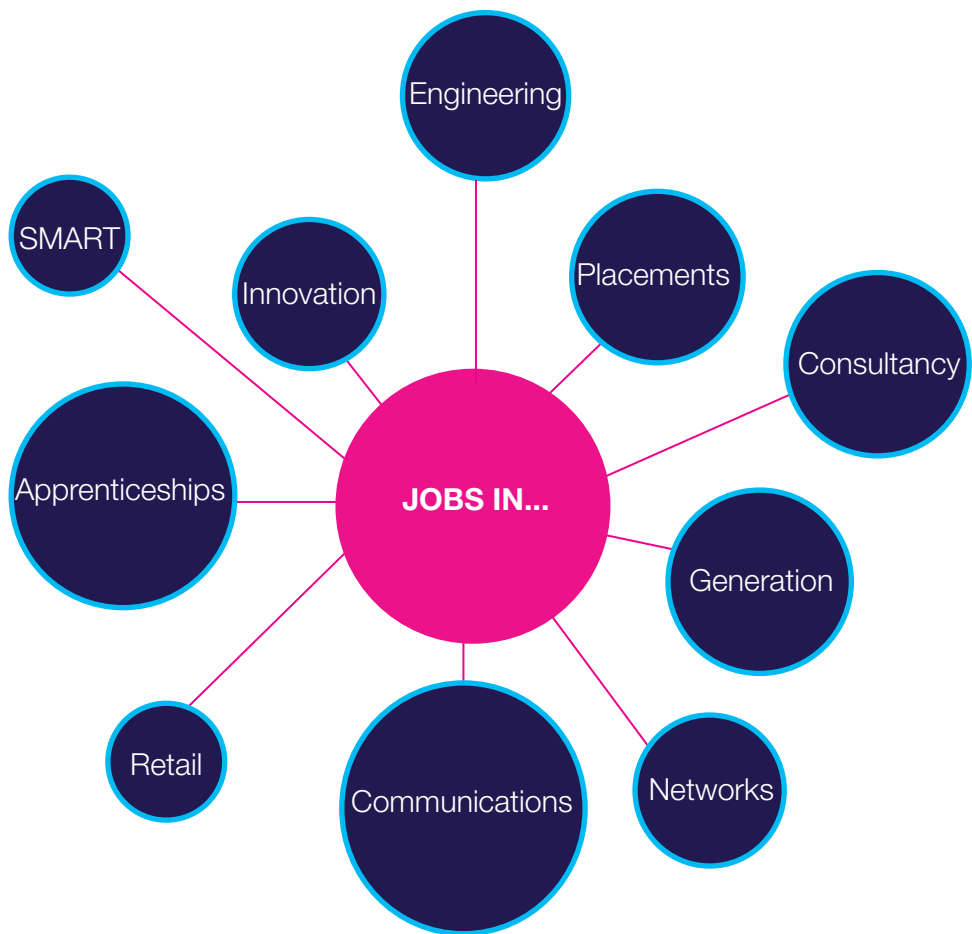
Below: Map showing energy employment across the UK



Source: ONS 2016

What opportunities are there in the energy industry?

There is lots you can do at any stage in your career. There are apprenticeships available ranging from; customer services to engineering to placements and graduate schemes that span the breadth of the industry, it is up to you where you want to go!



Where do I **START**?

If you are reading this prospectus it is a good start. Within this booklet you will find a range of experiences from people who have been in the same position as you and are now in the energy industry.

We have five tips for those looking for a new job: **START**

1 Search

Finding your perfect job isn't easy, spend time searching across roles, departments and even sectors.

3 Ask

Ask questions to find out if the role is right for you. It is as important for you to understand the company and the role as it is for the company.

2 Talk

Talking to those in the role or the recruiter cannot be underestimated. They can advise from their own experience.

Careers in the energy industry

4 Research

Research the skills and qualifications you need for the role. Knowing the skills needed, as well as the company is important in your job search.

5 Tell

Tell your family & careers advisers. They know you, what you are good at and can help or advise you in your job search.

Geophysicist
Consultant Security
Power system engineer
Policy manager
Student Graduate
Energy & resources audit
Systems designer
Communications Smart data analyst
Business modelling analyst
Finance Public affairs
Legal Environment Principal planner
Gas turbine engineer
Patent attorney Customer service manager
Metering services
Risk Planning Power networks policy
analyst
Creative strategist Consumer insight
Policy advisor
Operational excellence navigator
Nuclear Liaison
nuclear engineer
Apprentice
Forecasting analyst
Plant manager



New Energy Services

Name: Andrew Crossland
Job title: Energy Storage Engineer

What did you study at University?

General Engineering with New and Renewable Energy, Durham University
PhD in Energy Storage in Electricity Distribution Networks, Durham University

How did you reach the role you are currently in?

I tried to gain a combination of academic qualifications, industrial experience and work to help me stand out. My PhD gave me clear and unique experience in the evolving field of flexibility/energy storage. To support my PhD, I had organized new research projects in East Africa which looked at energy storage. Outside of academia, I set up my own electricity tracking service (MyGridGB).

What does your current role involve?

The main skill I have learned is in simplifying complex engineering/technical models for all parts of the business to use them. A great example of this is my work on “Archetypes” in the IKEA solar / solar + energy storage calculator to help recommend the right battery to consumers.

What is the most interesting part of your job?

- Assisting with commissioning of hybrid energy systems in the UK and East Africa.
- Developing new business models for battery energy storage, electric vehicles, thermal energy storage and flexibility technologies.
- Engaging with marketing, sales, finance, procurement, customer, residential, commercial, legal and engineering teams all in the same day and often at the same meeting. Variety is the spice of life.



Innovation

Name: Alana Johnson

Job title: Senior Asset Business Developer

What did you study at University?

Masters in Mechanical Engineering, Imperial College London.

How did you reach the role you are currently in?

After completing my degree in Mechanical Engineering, I joined the Rolls-Royce Leadership graduate scheme. From this I learnt how to work across different teams in a range of global locations to quickly deliver results. I then progressed into the field of product development and moved into the energy sector, where I combined my engineering skills with development of a commercial focus. This has led me to where I am today driving forward business development activities for Ørsted Wind Power.

What does your current role involve?

My current role involves identifying and developing new business and commercial models for Ørsted Wind Power. The role involves working with people from across the organisation to bring together solutions that can advance the business and enable the company to continue to deliver a sustainable energy future.

What skills have you developed in your role?

My roles at Ørsted have helped me to develop my communication and commercial skills. My current role requires me to bring together a range of different capabilities including, project management, analytical and commercial thinking, product development and customer management, to deliver innovative market propositions.

What is the most interesting part of your job?

- Variety of work and opportunity to continually work with new concepts and challenges
- Contribution to an important cause – driving forward renewable energy generation
- Team work and interacting with a dynamic and passionate group of people.



Smart

Name: Aimee Betts-Charalambous
Job title: Programme Manager

What did you study at University?

English & European Law LLB, Queen Mary University of London & Universiteit Utrecht, Energy and Natural Resources Law LLM, Queen Mary University of London

How did you reach the role you are currently in?

During University, I developed a passion for policy and regulation issues. My interest in energy and climate change led to a masters in energy and natural resources. My first industry position was looking at policy and market challenges for district heating. That role taught me a lot about the sector and how innovation at system and user level was disrupting the status quo. From there I knew I wanted to work in 'smart' and help shape our energy future.

What does your current role involve?

I work with industry and Government to explore how we can do things differently in energy. I often find myself meeting with government and key stakeholders to explore the challenges and new opportunities posed by our digital future. I organise events; monitor political activities, keep members updated with key industry insights; and write consultation responses.

What skills have you developed in your role?

Multi-tasking and organisational skills are a must, as is adaptability and communication skills. My projects and audiences vary greatly and I need to be switched on to meet different needs. Currently I am leading a report looking at the Connected Home. It's been a great opportunity to gain new skills in data analysis and visual design.

What is the most interesting part of your job?

- Variety - one moment I could be working on a big policy piece such as the transition to DSO, the next I am looking at the Internet of Things or new models for technologies like blockchain.
- I am a social person and enjoy being in job where you're constantly meeting new people and talking about new ideas.
- Having a unique perspective across the innovation, digital and energy space allows me a bigger picture view on the future of our energy system.



Retail

Name: Louise Porter
Job title: Major Projects Manager

What did you study at University?

French and Spanish Applied Languages, University of Portsmouth.

How did you reach the role you are currently in?

I have not always worked within the energy industry! After leaving university I worked in numerous roles within various industries from bulk liquid logistics to smart card manufacturing. However, my previous project management experience (and Prince 2 qualification) has assisted me in reaching my current role, and along the way I have had to rapidly learn the intricacies of the energy industry and smart metering technology.

What does your current role involve?

I am a project manager, responsible for two teams of project managers. Both teams focus on very different areas of project and change management within our business one is currently integrating the SMETS2 smart meter technology into our current business processes. Both teams focus on very different areas of project and change management within our business, one is currently integrating the SMETS2 smart meter technology into our current business processes.

What skills have you developed in your role?

I have developed adaptability in my written and spoken presentation styles, depending on the audience or forum I am feeding into. This has been brought about by attendance at industry meetings, in addition to the range of consultation responses and other documentation that I have written.

What is the most interesting part of your job?

- I love the interaction with internal and external parties in order to bring about project delivery or change to the business.
- I enjoy being a manager, and working with my teams – they all work very hard to deliver to our deadlines.
- Representing our business at various fora can also be interesting, as we have a unique smart offering and customer portfolio (98 – 99% prepayment customers).

60 SECONDS WITH A.....

Chief Executive

Nick Ellins, Chief Executive Officer, Energy & Utility Skills

Does a degree dictate a person's career?

No. Depending on the profession you choose and your personal circumstances allowing you to undertake one, a degree would always add valuable disciplines, knowledge and skills sets. However, no qualification – or lack of a qualification – should dictate a person's career or work ambitions, and attitude, behavior, emotional intelligence (the ability to identify and manage your own emotions and the emotions of others), enthusiasm, customer skills and commercial awareness are currently some of the most demanded competencies by UK business. A degree can be one useful component of a successful professional, but it is not THE route to a successful career.

What advice would you give to someone looking for a career in the energy industry?

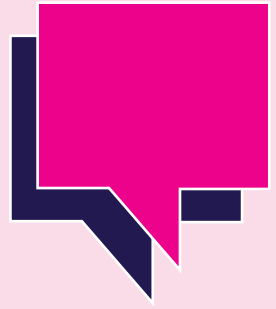
Don't feel constrained by outdated images of high visibility vests and hard hats, as the breadth and diversity of careers in energy is endless. Energy powers the UK economy and society each and every day, and virtually every major new innovation we see announced ultimately looks to energy to create or enable it. Your eventual career options are vast, and my advice is to just get started and come and join us – one option is to sign up on the new Talent Source Network initiative

www.talentsourcenetwork.co.uk, where you can raise your interest and get directly in touch with the UK's top energy companies.

What is the most exciting element of working in the energy industry?

The most exciting element of working in the energy industry is the tangible value you can put back in to our communities and nation – it's rewarding and satisfying. Choosing a career in the energy industry means being part of a force for good in people's daily lives all day every day and all year round and you would be among a skilled and committed team that enables virtually every aspect of modern life and its essential services. Just think for a moment about everything around you that is impacted by the need for energy – it's a sector that is critical to our nation and has huge pride in its role and responsibilities.

DID YOU KNOW?



The UK's gas pipes stretch approximately...



169,000 miles

enough to wrap around our coast 15 times!

Some **wind turbines** in operation across the UK are now taller than the Gherkin with **blades longer than 9 double decker buses!**



The first **coal-free** day since the Industrial Revolution took place in April 2017



New technologies will shape our energy future from batteries, energy storage, demand side response, floating wind farms, tidal lagoon technology and many more!



Generation

Name: Declan Conley
Job title: Environmental Officer

What did you study at University?

MA Geography and Environmental Studies, University of Edinburgh.

How did you reach the role you are currently in?

I gained work experience at the Environment Agency whilst at school, before implementing an environmental management system at a local agricultural firm whilst studying at university.

After graduating, I worked as an Environmental and Sustainable Business Advisor at the Crichton Carbon Centre. Whilst at the Crichton Carbon Centre I became an Associated member of IEMA and self-funded my Lead Environmental (ISO 14001) Auditor training course.

What does your current role involve?

My role as an Environmental Officer involves: ensuring compliance with environmental legislation, environmental emissions monitoring and reporting, implementing and developing energy management standards, waste management, managing on-site landfill operations and engaging with the Environment Agency.

What skills have you developed in your role?

Being a part of Lynemouth Power Station's conversion from coal to biomass fired generation has been a great experience! I've gained skills in liaising with regulators and managing on-site contractor works across the full spectrum of environmental aspects, including: air emissions, water emissions, waste management, habitat surveys, land remediation and landfill operations.

What is the most interesting part of your job?

- Being part of the coal to biomass conversion project;
- Managing a multitude of environmental aspects;
- Working within a heavily regulated industry and dealing with a diverse range of environmental regulations.



Communications

Name: Catherine Hunter
Job title: Communications and Regulatory Coordinator

What did you study at University?

British Politics and Legislative studies, University of Hull

How did you reach the role you are currently in?

As part of my degree, I undertook a year long placement at the Industry and Parliament Trust (IPT), where I focused on facilitating Fellowship visits for Parliamentarians and writing blog posts for the website following IPT run events. They recommended me for the position at UK Power Reserve (UKPR) and I started in the role a few days after graduating.

What does your current role involve?

I am responsible for coordinating UKPR's communications strategy and public affairs programme. This includes drafting press releases, managing relationships with a wide range of stakeholders, and sourcing events and conferences which may be of interest to the wider company. Like the company, the role is dynamic and I'm enjoying the breadth of tasks.

What skills have you developed in your role?

I've hugely improved my written communication skills in particular, as well as the ability to prioritise a busy workload. I'm also better able to pull out and summarise key information from a range of sources and am developing an increasingly detailed understanding of the energy industry.

What is the most interesting part of your job?

- Variety of work and stakeholders.
- Working on projects at the forefront of the energy industry.
- Working in a fast-moving company that is growing and changing rapidly.



Consultancy

Name: Jake Tudge

Job title: Consultant

What did you study at University?

BEng (Hons) Aerospace Engineering, University of the West of England
MSc (DIC) Environmental Technology, Imperial College London

How did you reach the role you are currently in?

I joined E.ON as a result of winning the TARGETjobs Engineering Undergraduate of the Year and my placement year (as well as being great fun!) demonstrated the sector's commitment to a more sustainable future. I subsequently studied environmental economics at Imperial and applied this knowledge of carbon trading at Euroheat & Power in Brussels. I always enjoyed solving problems and hence I was intrigued by management consulting. I met a Partner from EY at a conference and, after hearing about their impact in the sector, I was motivated to apply.

What does your current role involve?

I'm a Consultant on our graduate scheme in EY's Advisory practice. I've had the opportunity to work in incredibly diverse teams on some of our global clients' most complex business problems. It is a fast-paced environment, but extremely rewarding when you present your insights to the client.

What skills have you developed in your role?

The nature of management consulting means that no client projects or EY engagement teams are the same. I have learnt how to manage uncertainty and effectively approach a complex problem, all whilst being supported to develop my inter-personal skills and take responsibility for initiatives at EY.

What is the most interesting part of your job?

- Meeting new people – whether they are our clients or my colleagues at EY, I love hearing their views on the future challenges, and solutions, in the sector.
- Exploring industries – our clients span the energy system, from transmission operators to nuclear generators, which allows us to support their shared challenges.
- Being part of the EY network – we have over 250,000 employees and Partners; it's incredible to engage with this network and leverage international experience.



Networks

Name: Taran Heir
Job title: Code Administrator

What did you study at University?

Law LLB, Birmingham City University

How did you reach the role you are currently in?

I reached my current role by building experience through seeking and pursuing a breadth of different opportunities from a young age. Voluntary work in my local community equipped me with a network of people. I then found myself in a privileged enough position to secure a job as a Paralegal. Once I had graduated, I had a change of mind and decided against pursuing a legal career. I then began to search for other roles and came across the role I am currently in. I was apprehensive at first seeing as I did not have a technical background however due to a combination of my experience and ability to show my skills were transferable to my surprise I was the type of candidate National Grid were looking for!

What does your current role involve?

To support the management of the electricity regulatory codes administered by National Grid in order fulfil our licence obligations. To develop the implementation phases of specific code change proposals and to act as a primary interface with internal and external stakeholders.

What skills have you developed in your role?

Effective customer and stakeholder management, negotiating and influencing, conflict management communicative interpersonal skills, efficient meeting management and prioritisation.

What is the most interesting part of your job?

- Challenges of working within an ever changing industry
- Networking and building relationships
- Variety of career development opportunities more specifically National Grid fully supports internal movement to progress and shape your career.



Analyst Placement

Name: John Ho

Job title: Data and Insight Graduate

What did you study at University?

MSc in Management of Information Systems, London School of Economics and Political Science

BBA in Business Administration, Chinese University of Hong Kong

What does your current role involve?

In my current placement as a decisioning and modelling analyst, I liaise with stakeholders, such as the marketing and product management teams, to understand business requirements for different campaigns. I then translate these requirements to technical specification and employ various analytical methods to optimise and deliver marketing sales campaigns.

What advice would you give someone looking for an apprenticeship or placement in energy?

I am still amazed by the vast range of opportunities and challenges in this industry, even after working at Centrica for six months. Whilst many think energy industry is predominantly for STEM students, we are keen to recruit talents from all kinds of academic backgrounds. So do your research, attend career events and talk to us – you can certainly find a role that fits your skill set and offers you long term development opportunity.

What is the most interesting part of the scheme?

- Rotational structure.
- Mentoring and training resources offered by the scheme.
- Challenging and dynamic work environment.

60 SECONDS WITH AN.... Entrepreneur

Hayden Wood, Bulb co-founder, Bulb Energy

Why the energy industry?

It's an incredibly exciting time for thinking about the future of energy. We have new technologies that measure people's use and save them money, new ways of supplying homes and businesses, and – with welcome investment in renewables – new forms of energy generation.

That's why we started Bulb; to make energy simpler, cheaper and greener.

What does being a start-up involve?

Being a startup is great because it means we can do things our way. Keeping things simple for our members by offering everyone just one tariff. Saving them money by using the latest technology to reduce costs. And of course only supplying 100% renewable electricity.

It also means we really can put our members first, with an amazing team who deliver outstanding customer service. Which is why we're rated as the number one energy supplier on Trustpilot.

Being a startup also means we can move quickly, make decisions and change things faster. We're constantly listening to our members, and our team, so that we can not only make Bulb better but the whole energy industry too.

What is the best advice you have ever received or given?

One of the best bits of advice I've received is that doing something and getting it wrong is better than not doing anything at all. The key is to learn and improve next time. This might sound a bit glib at first but it's a key part of the culture at Bulb.



Engineering

Name: Hamza Haroon

Job title: Control and Instrumentation Engineer

What did you study at University?

Electronic Engineering, University of Surrey

How did you reach the role you are currently in?

I joined EDF Energy as an Industrial Placement student in 2010, working for the Data Processing and Control Systems Group. Following this, I was sponsored by EDF Energy for my final year at University and was also offered a place on the 2012 Nuclear Engineering Graduate Scheme. As part of the year long Graduate Scheme, I worked at various nuclear power stations across the UK which helped me identify the breadth of opportunities available across the company. I joined the Control & Instrumentation Services Branch in 2013 as a C&I Engineer.

What does your current role involve?

I am currently the Lead C&I Engineer for Heysham A (HYA)/Hartlepool (HAR) Gas Turbine (GT) Control System Replacement Project. I am responsible for delivering a fit-for-purpose engineering solution for both HYA/HAR and hence maintaining nuclear safety up to end of station life. The aim of the project is to replace the obsolete GT Control System to improve system reliability, mitigate ageing & obsolescence risks and reduce high maintenance-burden.

What skills have you developed in your role?

- Stakeholder Management
- Leadership and Resilience
- Negotiating and Influencing
- Project Management and Commercial Acumen
- Communications

What is the most interesting part of your job?

- Technical Challenges and Opportunities.
- Engagement with a diverse group of stakeholders.
- Travelling.



Renewable Energy Placement

Name: Claire Canning
Job title: Student

What did you study at University or which apprenticeship scheme are you undertaking?

BSc Marine & Environmental Biology, University of St Andrews
MSc Conservation & Biodiversity, University of Exeter

EngD Offshore Renewable Energy (Industrial Doctoral Training Centre for Offshore Renewable Energy – IDCORE). IDCORE is a partnership between the University of Edinburgh, University of Strathclyde and University of Exeter (Edinburgh is my lead institution).

What does your current role involve?

I am a Research Engineer at EDF Energy R&D UK Centre in London working towards the completion of an EngD in Offshore Renewable Energy. My research project specifically focuses on corrosion and marine growth issues on offshore wind turbine monopile foundations.

What advice would you give someone looking for a placement in the energy industry?

I would say there are many opportunities to get involved with the energy industry, whether it is an industrial placement, an internship, an apprenticeship or a graduate scheme. I would think about the energy companies and areas of the business that are of interest and then researching the company websites to see the available opportunities. For example, EDF Energy offer a wide variety of placements all over the UK ranging from Finance and HR to Engineering and R&D.

What is the most interesting part of your job?

- Designing, developing and implementing my own laboratory experiments at EDF facilities in France.
- Supporting activities at Teesside Offshore Wind Farm.
- Travelling and presenting my research at international conferences.

60 SECONDS WITH A.....

Start-up

Archie Wilkinson, Head of Pavegen LIVE, Pavegen

Who are PaveGen?

Pavegen, founded in 2009, is the global leader in harvesting energy and data from footfall. Our vision is for smarter, more sustainable built environments which empower and connect people.

How did you reach the role you are currently in?

I started off in events and PR for M&C Saatchi and set up Coffee, Croissants & Curiosity to get speakers to speak to the 750 London employees. From there I met Laurence, the founder of Pavegen and three months later received a phone call to launch the events arm of the company - Pavegen LIVE.

What does your current role involve?

Working with purpose driven brands to put the customers at the heart of their experience and drive sustained engagement. Developing ideas, problem solving, driving revenue & investment and speaking across the globe about our Pavegen technology. The Pavegen technology is a multifunctional custom flooring system. As people step on the tiles, their weight causes electromagnetic induction generators to vertically displace, which results in a rotatory motion that generates off-grid electricity.

What is the most interesting part of your job?

- Speaking to brands across the globe on a daily basis.
- Developing ideas to solve problems.
- Seeing an idea come to life.

What about apprenticeships?

Based near Nottingham, Uniper's Engineering Academy has been delivering highly regarded, funded apprenticeships for many years. It offers purpose-built facilities and bespoke training programmes designed to fit energy business needs anywhere in the world.

Training ranges from gas turbine maintenance to smart meter installation, with many of the courses leading to recognised engineering, power plant and apprenticeship qualifications. In 2016 alone, more than 600 courses were delivered to 4,000 delegates, representing 160+ companies.

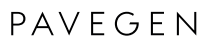
The Academy was one of the first organisations in the UK to win Education and Skills Funding Agency (ESFA) accreditation, enabling it to offer new apprenticeships training as part of the new Apprenticeship Levy, introduced in 2017. It is now an accredited member of the Register of Apprenticeship Training Providers (RoATP).

The Academy welcomes highly-motivated candidates who demonstrate a keen interest in engineering along with a curiosity for how mechanical and electrical things work, combined with existing academic achievements.

Find out more about the apprenticeships available from across the industry and further afield at [**www.getingofar.gov.uk**](http://www.getingofar.gov.uk)



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