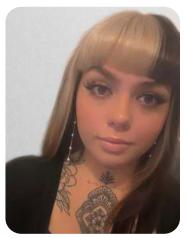
Navigating the Path: Career Perspectives from Industry Newcomers

A fresh perspective and experiences of those new to energy management and sustainability fields are crucial to the development of the profession. In this feature, four energy management professionals agreed to share their varied career paths into the industry, their enthusiasm and willingness to learn and work towards a common aim to make a difference and create impact at their organisations and wider communities.



Ebony Puttock, Graduate Energy and Sustainability Officer, **VIVID Homes**

What attracted you into energy management and sustainability in the first place?

I always believed that people should follow careers that align with

their value system and deliver the change they want to see in the world. To me, a thriving green world and a sustainable society is immensely important for us to live healthy lives. I wanted to take the opportunity to try and enter this area, even if I did not know where it was going to lead. It's important for me to choose a career that gives me a sense of purpose. VIVID gave me that opportunity and I'm thankful that they did.

How did you begin your career in the industry?

My start is not 'normal' by any sense of the word. I had been working as a Prison Officer for the last three years and made a sudden change to the energy and sustainability sector. I had to adapt to a whole new way of working, a completely different learning experience, and the quietness of an office environment. It continues to be an adjustment but it's exactly where I want to be, and, where I think I'm meant to be. With VIVID, I have spent my first year working in a multitude of teams to understand the business, and then applied to be within the Sustainability Team as the Graduate Energy and Sustainability Officer. VIVID's graduate scheme is unique and teaches you about the industry in a well-rounded way through working in each of these teams, reaffirming that sustainability and energy was the career path for me.

What does your current role entail?

My areas of activity span across VIVID's Sustainability Team, encompassing retrofit, biodiversity, and energy. Being in a graduate role means that often my focus is to learn as much as possible and to absorb the knowledge of people who have been in the sector far longer. Recently, I have been focused on supporting smart meter rollouts for our customers, applying for grant funding for heat network improvement and ensuring customers are aware of any changes in their heat tariff.

Can you describe your typical day?

It may be cliché, but I never have a typical day. My role is varied; however, I always start with admin, emails and checking the sustainability inbox. Then, I could be doing site visits along the south, working on planning a biodiversity project, answering customer queries, or attending personal development training. I also have time dedicated to my professional development for diplomas or courses I would like to complete, such as Prince 2, IEMA courses or a Chartered Institute of Housing diploma.

Which part of your job do you find most rewarding?

I live by the notion of celebrating every small win because every small win is a big reward. This could be from the simple act of receiving a "thank you" from a customer or the completion of a long-term project. Either way that acknowledgement of my work and the appreciation for both me and my team is massively rewarding. Similarly, being able to look back and see how far I've come and genuinely enjoying the process is exactly why I love my job.

What is the biggest achievement so far in your role?

I am awful at promoting my own success – always have been! However, I have been creating multiple biodiversity projects to regenerate our older sites with better, more biodiverse, green spaces. This

means adding over eighty trees to sites or replacing unused green space into a large wildflower meadow. Essentially, I am controlling the project and making decisions to ensure that we are acting in an ecological manner and doing what's best for our customers. It has pushed me far out of my comfort zone, but also allowed me to explore something that I have a strong interest in and creating long lasting change for our residents. Being allowed to lead on this and to see evidence of the work I have done is my biggest achievement.

Which part of your job do you find most challenging?

Communication with customers is a challenge, primarily because it was such a massive change from the communication style of the prison service. I have had to update my writing to a more professional style, and I now consider language far more than I ever had to. I am always learning how to manage expectations to mitigate problems in the future. I have realised, over the two years at VIVID, that my goal is always to bring our customers with us on our next steps. For me, this is to ensure I communicate properly about energy

bills and what could affect customers' costs in the future. However, that is a big change from when I was a prison officer, where I would have to keep a lot of the information about my job secret from everyone. I am still learning and adjusting every day.

How do you view the opportunities for career development in the industry?

In the last few months, I have seen an increase in roles for Energy Managers, Sustainability Managers and similar. To me, these will only increase as we move towards Future Building Standards, Net Zero

and more sustainable energy sources. Therefore, the opportunities for career development are endless. It is important, however, that graduates are given opportunities within the sector to allow new talent to grow with it.

What advice would you give to someone just starting their career in energy management?

The most important piece of advice I can give to someone starting their career in energy management is that they need to be patient with themselves. Learning

> takes time and no one is born with knowledge built in. They should ask questions, stay curious and give themselves time to develop the skills they need, especially if they are just starting a career in the corporate world. The worst thing anyone can do is to compare themselves to someone with twenty plus years of experience when they are still growing. Focus on learning as much as possible, getting involved in anything that is of interest and exploring their own personal growth: everything else will come with time, patience, and study.



What are your long-term motivations in the industry?

There is no set goal for me – which is exactly the way I like it. My current motivation is to continue to grow and learn within VIVID, otherwise I am comfortable with living in the unknown. The energy sector and the housing sector are both constantly changing and developing, who knows what jobs will be available in the future? What new technology will develop and what challenges will evolve from it? My future in energy is perfectly unwritten and that's exciting.



Sarah Bariga Abd Malek, **Energy Support** Officer, **NHS Lothian**

What attracted you into energy management and sustainability in the first place?

While growing up, I became increasingly aware

of the environmental challenges that our planet faces, including climate change and resource depletion. During my postgraduate studies in energy management, I had the opportunity to delve deeper into topics like energy conservation, renewable energy, and sustainable development and I began to see the vast potential for positive change within these fields. The opportunity to make a positive impact on a global level and witness the real impact these issues have on communities and ecosystems worldwide are what attracted me to energy management and sustainability. I believe that by optimising energy usage, promoting renewable resources, and implementing sustainable practices, we can mitigate environmental harm and build a more resilient future for generations to come. This idea deeply resonated with me, and I am committed to contributing to a better future.

How did you begin your career in the industry?

I began my professional journey as an intern in the Sustainability Department at NHS Lothian through the Graduate Career Advantage Scotland (GCAS) program. During my internship, I gained exposure to various aspects of energy management. This opportunity paved the way for exciting projects that furthered my career in the industry. Not only did this experience deepen my understanding of energy management, but it also sparked my passion for sustainable energy solutions. I later transitioned to the position of Energy Support Officer, with an increasing level of responsibility.

What does your current role entail?

My current role involves a wide range of responsibilities aimed at promoting energy efficiency, sustainability, and cost-effectiveness within our organisation. The primary aspect of my role is data analysis and monitoring. I analyse and interpret energy

consumption data regularly to identify patterns, trends, and areas of inefficiency. Along with data analysis, I work closely with internal stakeholders, including energy managers, to develop and implement energy conservation measures. This often involves conducting energy audits and identifying opportunities to save energy. In essence, my role as an Energy Support Officer is pivotal in advancing our commitment to responsible energy management and environmental sustainability.

Can you describe your typical day?

My daily routine involves a mix of analytical tasks, stakeholder interactions, and continuous learning. While each day is different, there are a few core activities that define my job, including data analysis, monitoring, documentation, and reporting. I usually start my day by reviewing energy consumption data from our facilities and buildings. This involves analysing utility bills, meter readings, and energy management system reports, which help me track trends, identify anomalies, and assess the effectiveness of our energy conservation measures. Throughout the day, I dedicate a significant amount of time to collaborating with internal stakeholders to discuss ongoing projects, address concerns, and gather feedback on proposed initiatives. Additionally, I generate periodic performance reports to measure progress toward energy goals and communicate outcomes to senior leadership. These reports help us stay on track and make informed decisions about future energy initiatives.

Which part of your job do you find most rewarding?

One of the most rewarding aspects of my job is witnessing the tangible impact of our energy management initiatives on both our organisation and the environment. I find great satisfaction in monitoring the results of our energy management initiatives and seeing measurable improvements in energy efficiency and resource utilisation. Knowing that our collective efforts are making a positive difference encourages me to continue striving for excellence in my job, whether it's reducing energy consumption, lowering utility costs, or minimising our carbon footprint.

Which part of your job do you find most challenging?

Measuring and communicating the impact of our energy management initiatives can be significantly challenging. Although we aim to measure our progress with key performance indicators and determine the

impact of energy-saving measures, it can be quite challenging to attribute specific energy savings to certain interventions and demonstrate the return on investment. To address this challenge, it is essential to have reliable data analytics and a transparent reporting mechanism that can accurately assess the effectiveness of sustainability initiatives and clearly convey the benefits of our efforts.

How do you view the opportunities for career development in the industry?

The industry offers endless opportunities for career growth, professional development, and significant impact. I believe there are various options available to expand my knowledge base, build expertise, and keep up with industry best practices, including industry-specific certifications, energy management certifications, and professional workshops. For instance, the EMA provides an excellent platform for professionals like me to connect with peers, industry experts, and leaders in their respective fields.

What advice would you give to someone just starting their career in energy management?

My advice would be to start by developing a solid understanding of the fundamentals of energy management and keeping up with the latest developments in the field, as the energy management landscape is constantly changing. Additionally, I would recommend developing proficiency in data analysis tools, energy modelling software, and statistical techniques. This will help in effectively interpreting data, identifying trends, and making data-driven decisions. Lastly, connecting with experienced professionals in the industry can offer guidance, mentorship, and career advice, which can be beneficial as they navigate their career path in energy management.

What are your long-term motivations in the industry?

My primary long-term motivation is to contribute to the transition to a low-carbon economy and promote the use of renewable energy sources. Pursuing a career as an energy manager perfectly aligns with my aspirations, as it would allow me to play a key role in shaping energy policies, implementing energy-efficient measures, and optimising resource utilisation. I see myself working with a wide range of stakeholders, from executives and department heads to frontline staff, to create and execute comprehensive energy

management strategies that are in line with the organisation's goals and values. I strive to expand my knowledge and expertise to address evolving challenges and opportunities in the energy landscape. Ultimately, my long-term ambition as an aspiring energy manager is to leave a positive, long-lasting impact on the organisations I serve, the communities I work in, and the environment as a whole.



Jackie Jobes, Sustainability Director, Hartpury University and Hartpury College

What attracted you into energy management and sustainability in the first place?

My background is in

ecology and environment, having expanded the remit of my role slowly over the last 10 years to encompass the breadth that the sustainability sector covers, including energy.

How did you begin your career in the industry?

I undertook a degree in Zoology at Swansea University but graduated at the peak of the recession when ecological jobs were scarce. This led to a somewhat 'squiggly' career to get me back on track, eventually working for the global infrastructure firm, AECOM, in their environment team.

What does your current role entail?

I am responsible for overseeing and managing the sustainability of the entire institution, providing integrated support to all services in understanding sustainability obligations (including higher standards of sustainability that go beyond compliance), planning and implementing initiatives, monitoring, and reporting results. This includes all matters relating to utilities, energy, carbon reduction, waste and sustainable environments.

Can you describe your typical day?

I am just coming up to 6 months in the role, so most of this time has been spent engaging with staff across all departments to find out what sustainability means to them, how I can support them in their role and ways to improve their practices. As you can imagine, energy is a key priority area in any sustainability journey, so on any given day I may be having conversations with energy consultancies and procurement specialists, talking with other colleges and universities about their energy management, understanding our current billing and consumption data for carbon reporting, to exploring renewable energy options. The next day I may hold a sustainability training workshop for our staff and

students, run a tour of the campus for local council officers and councillors, or present a draft of our sustainability strategy and pathway to our senior management team.

Which part of your job do you find most rewarding?

This job is all about making a difference and creating an impact. Albeit on a small scale, I am trying to change things for the better for future generations and ensure the institution is resilient to the impacts of climate change. What could be more rewarding than that? I love the variety of the role. It means every day is different, I am always learning new things and meeting new people.

Which part of your job do you find most challenging?

Whilst the variety is great, there is so much to do which can be overwhelming and get in

the way of progress. It takes a lot of effort and focus to see the wood for the trees, not get too distracted by the small stuff and ensure you are making a tangible difference and moving in the right direction.

How do you view the opportunities for career development in the industry?

The sustainability sector has boomed in recent years so there is a huge amount of opportunity. According to a

2023 Hiring Trends Index report, the demand for green jobs such as sustainability management, engineering and consulting has increased by 667% in the last four years. I think that says it all about the opportunities for career development in the industry.

What advice would you give to someone just starting their career in energy management?

Firstly, any experience is good experience – never

underestimate the value of transferable skills. A useful step would be simply understanding energy bills, how the energy sector works, and how energy procurement works. This will likely put you in good stead to help any organisation manage their energy bills better and simply help them pay less. The EMA offers a range of courses to increase your knowledge. Their 1-2-1 skills surgery could be a useful starting point to help identify areas to begin or where to build on.



What are your longterm motivations in the industry?

For the campus, my aim is for it to be self-generating through a range of renewables including solar, ground source and wind. As a land-based institution, we have a lot of animal muck – so I am keen for

us to explore ways to utilise this as an energy source. More personally, having recently had a 1-2-1 skills surgery session through the EMA, I am looking forward to developing my technical skills and knowledge in energy as this is such a big part of reaching net zero. In the longer term, I hope to achieve the professional status of an EMA Recognised Energy Manager whilst also upskilling other people within the organisation to support its net zero journey.



Weiwei Song, Sustainability and Net Zero Consultant, Property and Programme Services, AtkinsRéalis

What attracted you to energy management and sustainability in the first place?

I studied Built Environment and Facilities Engineering in China and have a decade of experience in building services engineering, design and energy facilities manufacturing. Energy management and sustainability are a perfect career fit for me. This field requires you to continuously update your knowledge of policy, economics, project process planning, and to stay up to date in your understanding of the latest energy technologies and efficiency techniques. My interest is not limited to engineering design thinking, I am a curious person, and I am interested in the commercial sense related to energy management and sustainability in built environment, and how I can contribute and be part of a sustainable future.

In recent years, carbon reduction and sustainability have become hot topics due to climate change and extreme weather. Last year was the warmest year on record replacing 2016. According to the ERA5 dataset, the global average temperature for 2023 was 14.98°C, 0.17°C higher than what was recorded for 2016 (The 2023 Annual Climate Summary, COP 2023). Extreme events are increasing in frequency and variability. There has never been a more valuable time to work in the sustainability and net zero fields.

In the UK, a quarter of homes, 6.2m properties were built before 1919 and almost a third of commercial properties are historic sites. They are responsible for about 15% of the nation's greenhouse gas emissions. Approximately 88% of homes in the UK use natural gas for heating. Improving energy efficiency and switching to low-carbon heating sources is crucial for the UK's transition to a secure and sustainable energy system.

How did you begin your career in the industry?

As previously mentioned, my educational background and years of experience align with this field. I moved to

the UK three years ago and it felt like the ideal moment to re-evaluate my career path and change industry. I did this when I joined AtkinsRéalis' Project and Programme Services division (PPS) in 2022. I am grateful to our sustainability and asset management advisory team, especially my line manager, an experienced building services engineer, for his patience, guidance and support, which has aided my career development and personal growth in this industry.

Having a supportive team around you is key to success in any industry, my path as an employee was enhanced by those around me and has enabled me to deliver more effectively in line with my organisational outcomes.

What does your current role entail?

I specialise in energy efficiency retrofit measures and heat decarbonisation strategies for commercial and public sector organisations, including heritage sites. My responsibilities include conducting MEP site surveys, existing HVAC system analysis, energy and carbon baseline analysis, low carbon technical option appraisals and the development of decarbonisation plans. The plans I create lead to sustainable improvements in my clients' properties and transition the sites to high energy efficiency and net zero carbon emissions.

Can you describe your typical day?

When I begin a project, I start by organising my tasks for the day. I liaise with clients, conduct site surveys, review progress and carry out work. I regularly attend in-house technical webinars and external training workshops in the field of energy management and sustainability to improve my knowledge.

Outside of work, I always enjoy spending time with family and friends and playing tennis with my colleagues. Maintaining a work-life balance is something that is important to me. I find the key to this is effective time management and regular communication with my manager about my work demands, and how I am progressing with specific jobs.

Which part of your job do you find most rewarding?

I find the technical advisory aspect of my job most rewarding. My experience in building service engineering design and energy facility manufacturing, specifically with heat pumps, chillers and air handling units, has contributed to my current advisory work. I have a background in design so I understand how feasibility studies and design risks should be considered at each stage. As a result of my experience in sales advisory for an energy facility manufacturer, I have developed a good knowledge of low-carbon heating technologies to advise my clients appropriately.

Which part of your job do you find most challenging?

The most challenging aspect of my job is considering not only one discipline, but also maintaining a good understanding of interdisciplinary knowledge. This includes engineering consultancy, energy auditing, programme planning, project management, asset management, policy and governance, environmental impact, funding schemes, retrofit measurement investment and payback. To provide continued comprehensive advice, I must balance my work and daily study effectively.

How do you view the opportunities for career development in the industry?

There are many opportunities for career development in the industry. The energy management and sustainability fields encompass many roles, you do not have to be an engineer to work in this field. For example, the opportunities include project management for retrofit programmes, sustainability certification advisory, energy analysis, green policy research, and advising on the sale of energy efficient, renewable energy and low-carbon equipment.

The culture at AtkinsRéalis supports me in many positive ways, my work culture is supportive and encourages continuous learning, professional development and growth. My team is inclusive, and we all share a mutual respect and our individual progression. It is refreshing to work for a company where the organisation's culture enhances my job satisfaction, motivation and is so supportive of my individual goals and aspirations.

What advice would you give to someone just starting their career in energy management?

For individuals beginning their careers, it is important to remember two key principles. Firstly, continuously seek opportunities to learn and grow. There are several platforms that provide excellent learning resources, such as EMA (Energy Managers Association), CIBSE, Historic England and Retrofit Academy. The more you learn, the better you will understand this field if it interests you. Secondly, identify your strengths and focus on excelling in areas that align with them.

What are your long-term motivations in the industry?

In the long term, I want to enhance the strategy for achieving net zero retrofitting in the commercial and public sectors. I am motivated to work towards heat decarbonisation in industrial fields, such as factories, and I am passionate about leading sustainability and excited about the opportunities to be involved in net zero projects that help the world achieve net zero.

