

From Passion to Profession: My Career Journey



William Begg
Energy Manager
Kingston University

An interview with William Begg, the recipient of the 2019 Young Energy Management Professional of the Year award in the Energy Management Awards.

What inspired you to pursue a career in energy management and sustainability?

I studied Environmental Science at undergraduate level with a research focus on the potential release of heavy metal contamination of brownfield developments. I have always had an interest in climate cycles and the anthropogenic impacts on the environment. Shortly after graduating in 2016, I began my professional career interning at my local council's Climate Change and Planning Services department. During this time, I was introduced to energy management and wider sustainability issues in the built environment. I worked on their Local Enterprise Partnership which further introduced me to the Low Carbon Economy sector. I was immediately drawn to the diverse nature of energy management, its innovative methods and the technologies that could be used to drive efficiency and reduce CO₂ across the built environment. Shortly after interning, I joined Kingston University as a Graduate Energy Assistant, where I supported the Energy Manager and wider estate functions in achieving the

organisation's 2020 operational carbon target. During this role, I became more motivated and passionate about energy management and sustainability in the built environment. Coming from a scientific background, I have always been data driven; seeing carbon emissions reduce as a result of an energy conservation project has and still motivates me. Whilst in the role, my employer and direct management continuously supported my professional development. I completed technical courses, shadowed senior colleagues and undertook a part-time MSc. Throughout my career, the sector has evolved but my motivation for the field has only increased. Fast forward to 2024 and I'm the Energy Manager at Kingston University developing our decarbonisation strategies aimed to achieve operational Net-Zero by 2038. Currently, the university has reduced 68% of its operational tCO₂ from a 2005/6 baseline.

You won the EMA's Young Energy Management Professional award in 2019. What did it mean for you?

The EMA Young Energy Management Professional award in 2019 boosted my motivation.

It's hard to believe that it has been 5 years since the award. Looking back, it's clear that the award gave me confidence to put myself out there, and I have been fortunate enough to progress my career at Kingston University as their Energy Manager. Since the award, the energy management sector has accelerated and has faced unprecedented challenges. These include grappling with Net-Zero ambitions, maintaining efficiency during COVID-19 and the more recent energy crisis. I feel that the award gave me the confidence to face these challenges head on and succeed.

Can you identify a particular influence that most shaped your career in the industry?

There are a number of influences that have shaped my career to date, from events to individuals. One of my greatest influences would actually be my (now retired) manager – Nigel Heugh, (formerly) Head of Operations and Compliance at the organisation. Throughout my career, he has been an invaluable mentor to me and over the years has distilled a wealth of technical information to me. As a chartered engineer there was rarely a

technical issue or matter that could not be addressed. I am very grateful to have the mentorship of such a knowledgeable individual (so if you are reading this... thanks).

In your experience, what are the three most important skills energy management professionals need for their day-to-day job?

An often-misquoted phrase says: "jack of all trades, master of none". The full quote actually reads "a jack of all trades is a master of none, but often times better than a master of one", this quote perfectly depicts the key skill required to succeed as an Energy Manager. The ability to manage a plethora of different types of tasks, activities and challenges whilst maintaining a positive, can-do attitude is paramount for success in the role.

An Energy Manager covers Technical and Operational matters to Strategic Planning, Procurement and Risk Management to engagement with staff and students to promote good practice. You must be able to prioritise and multi-task diverse workstreams.

Strategic planning is an essential skill for my role as an Energy Manager. Within the industry, over recent years there has been a spotlight on Net-Zero. This has become a critical issue for my role to focus on; I lead on the operational Net-Zero at the University. I have been instrumental in developing the strategic heat decarbonisations plans for the University's building portfolio. The plans have been developed

to align with the depreciation of existing assets, minimise disruption, maximise efficiency and where possible to be technologically agnostic. This philosophy of being technology-agnostic allows the university to develop strategies without being tied or reliant on one single technology. This approach allows for flexibility in adopting technologies and allows the organisation to adapt to new innovations in the future.

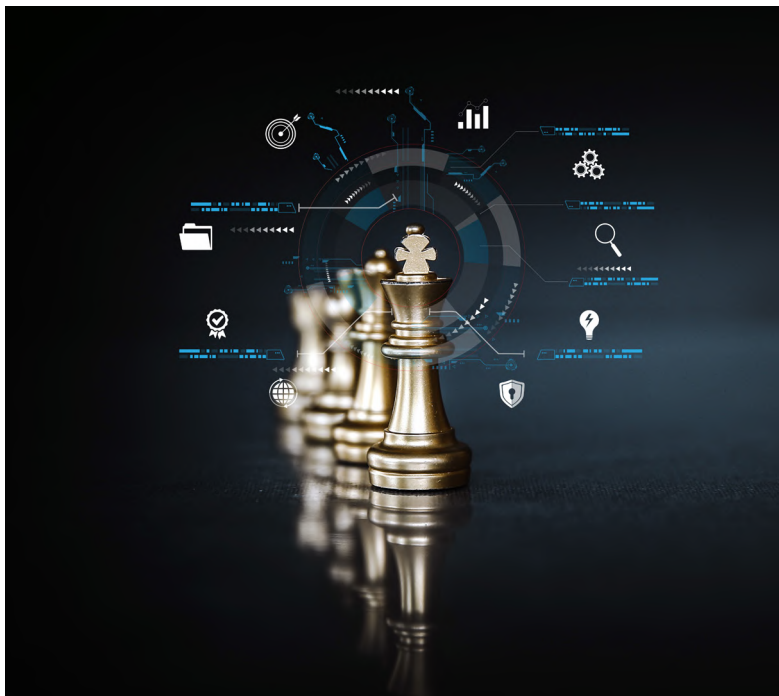
Finally, and by my no means last, is Energy Monitoring and Data Management; it is an essential skill for daily success. I'm a firm believer of using data to drive decisions and to validate the success of projects. In the day-to-day role as an Energy Manager and for other

of improvements. This can be summarised with the classic process of plan-do-check-act.

How would you explain what it is like working in the energy management industry to a Martian?

Energy management is a diverse and continually evolving multi-disciplinary industry. It involves the optimisation of how organisations use energy and other resources to ensure efficiency, fine-tune operations and reduce costs. All whilst contributing to long-term environmental targets and compliance obligations. Many people that are unfamiliar with energy management may not fully understand and appreciate the importance and value this function brings to an organisation.

Energy management is crucial for an organisation. Regardless of the size and complexity, every company relies on energy to operate, whether it is serving office equipment, production lines or research in category A laboratories. Without proper management inefficiencies



energy management professionals, it is vital to be able to have the ability to manage, analyse and disseminate large data sets. A day-to-day aspect of the role is monitoring the sub-metering platform and Building Management System at the university to identify trends, anomalies and areas

arise, poor operating practices can occur and ultimately energy gets wasted. This can result in a significant expense and impacts the organisations' bottom line figure. By managing energy effectively, organisations can optimise operations, reduce waste and reduce costs – whilst reducing

the environmental impact due to associated emissions.

Beyond the operational financial savings, energy management also can allow companies to become more resilient to external risks, such as energy price fluctuations and navigate periods of uncertainty – by establishing a long-term energy procurement strategy. This is particularly important in the recent years with the energy crisis. Energy management also enables organisations to comply with and meet regulatory requirements, and work towards sustainability commitments. All of which can improve the reputational image of an organisation.

As mentioned before, energy management is multi-disciplinary and requires those involved to adapt to external pressures, innovate with technology and navigate new and varying challenges. To be effective, those in energy management need to be able to take on differing roles depending on the task in hand including but not limited to: Technical Expertise, Data Analysis, Financial Management, Project Management, Compliance and Regulation, and Stakeholder Engagement.

Energy management covers a plethora of responsibility and is a diverse field. The unique aspect of energy management is that it's one of the few, if not the only function, that can cover all areas of an organisation and it is a function that can bring continuous benefits to an organisation in the short, medium

and long-term. However, it is often a field that is somewhat unknown and often goes under the radar.

Is there an area of energy management or sustainability that you wished you did more of?

In recent years, I have been leading the development of the campus wide strategies to tackle the decarbonisation of heat challenge. I really enjoy the process of developing long-term strategies. Energy management can sometimes

ensure climate resilient building stock. It is expected that 80% of the UK's existing building stock will be occupied in 2050. Not only will it need to be operating to Net-Zero, but it will need to be able to withstand threats of a future climate, including overheating and risks of repetitive flooding. This is a challenge that is not going to go away.

What sustainability or energy management actions do you use in your personal life?

Ultimately, I am really passionate about the environment. All my hobbies relate to the outdoors, so I want to protect it. In my personal life, I try to practice what I preach when it comes to sustainability/energy management. There are a few effective actions I follow. I love using my smart meter – some people loathe the moment the dial shifts to red as you boil the kettle for your third coffee on a Monday morning, but for me it reinforces good practice even at a domestic level (I don't boil it 3 times). I encourage my household to 'wear a jumper' before



be very granular, so I like to have the opportunities to take a step back and look holistically at the bigger picture. I would like to create further strategies and energy master planning, however the boundary and building stock of my organisation is finite.

Another area of sustainability that I would like to do more of would be related to climate adaption and implementing measures to

turning the heating up. I have a passion for cycling, so you won't see me commute by car through the ULEZ zone. I also try to re-use and buy items second hand, and always avoid 'fast fashion'. It's easy to be overwhelmed when you look at sustainability and the threat of climate change, but I find it's pretty easy to incorporate good practice into our daily lives. As an outdoor enthusiast, I'm biased and feel we have a moral duty to protect it.