

Turning the Ship Around: My Career Journey



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An interview with Dan Fernbank, the recipient of the 2019 Energy Manager of the Year (Public Sector) award in the Energy Management Awards.

Can you share the story of how your career path in energy management began?

I began my career in the financial services industry, as it was relatively easy to secure a job in that field after leaving university. While it wasn't necessarily my passion, I had student loans to repay and needed a job, so I found myself working in finance for a period of time. As I began to realise that I wasn't truly fulfilled in that role, I developed a strong desire to transition into a field with an environmental focus. To facilitate this career shift, I enrolled in courses with the Open University and quickly became aware of the significant impact that human activity is having on the climate. Initially, I struggled to fully grasp the magnitude of the issue and, like many others, believed there were two sides to the climate change debate, when in fact there are not. Motivated by my newfound understanding and passion for environmental conservation, I made the decision to leave my job in finance and accepted a three-month fixed-term position with the Carbon Trust. This opportunity allowed me to begin making a tangible difference in the fight

against climate change and align my career with my values.

I ended up staying with the Carbon Trust for the best part of 5 years, and I held various roles that provided me with invaluable exposure to a wide range of issues, solutions and information. Throughout my time there, I discovered that I possess a multitude of transferable skills, such as project management experience and good numerical skills, which allowed me to focus on gaining the energy and carbon knowledge and experience, which I really did not have at that point.

During my initial role, I gained a wealth of knowledge about Excel that has proven invaluable throughout my career. My line manager at the time was exceptionally skilled in Excel, and I learned a great deal from his expertise. As I transitioned into various account manager roles, I delved deeper into the potential technical solutions for enhancing energy efficiency, particularly focusing on incremental improvements to reduce energy consumption. During that time, the emphasis of my work was primarily on energy efficiency rather

than deep carbon reduction, even though the Trust was making strides in making business sense of climate change. This experience has been instrumental in guiding my career, emphasising the importance of developing sound business cases to support energy efficiency and carbon management projects.

During this time, I also had the opportunity to work more closely with energy managers, gaining insight into their roles, challenges and practical solutions. When the opportunity arose to join the University of Reading, I seized it without hesitation.

You have been working at the University of Reading for 13 years now. In what ways have your responsibilities evolved throughout the years?

I began my journey at the University as an Energy Manager, a role that eventually transitioned into that of an Energy and Sustainability Manager after approximately four years. This shift was primarily a result of the retirement of the former Sustainability Manager, leading me to take on the responsibilities of both the sustainability and energy teams. This change broadened the scope

of my role, expanding beyond energy management to include environmental compliance, sustainable travel and waste management. It was a significant transition that I actively advocated for as it made sense for those aspects to come together. Three years ago, my role further evolved into that of an Energy and Sustainability Director. This progression allowed me to become a part of the leadership team within the Estates department, which significantly increased my influence and strategic impact. It enabled me to play a key role in shaping the University's Estate Strategy and guiding its sustainability initiatives.

Over the years, as my role at the University evolved, so have the initiatives we undertake. When I first joined 13 years ago, energy management focused primarily on energy efficiency, and discussions about net zero and a dramatic reduction of carbon emissions were virtually non-existent. However, the landscape has shifted and the concept of net zero is now at the forefront of our efforts, but that too is constantly developing. While incremental reductions in carbon emissions were once sufficient, it is now imperative that we address larger challenges, such as heat decarbonisation. For the past 7 years, I have been exploring various technologies with which to approach heat decarbonisation at the University. We have only recently reached a milestone when we started with an installation of our first major heat pump retrofit, paving the way for future installations.

Another example of a change is the focus on scope and thinking beyond energy. Historically, business travel at the University has always

been part of our carbon footprint. However, we had previously accepted the continuous increase in this area while making reductions in other scopes. The onset of the pandemic forced us to rethink our approach to business travel, leading to the implementation of innovative strategies that are already making a positive impact. One such initiative involved setting individual carbon budgets for each school and directorate within the University, with a target of achieving a 30% reduction in business travel this summer compared to pre-Covid levels. While we are still in the process of analysing the data, we are confident that this target has been met. This achievement not only signifies progress in reducing our carbon footprint but also empowers our staff to actively contribute towards sustainability efforts, which can sometimes feel beyond one's control when it comes to controlling energy within buildings. This links up with our focus on behaviour change initiatives which have always played their part in the University's strategies. There is never just one solution though, something that works for 1-2 years might not work for 5-10 years, and we have run different initiatives over the years. However, over the past 18 months, we have concentrated on establishing sustainability champions in every school and directorate, resulting in the recruitment of 71 champions who are now actively collaborating with us to drive progress.

The sustainability team has grown over the years as well, expanding to a current team of 11 members. In fact, the team size has nearly doubled in the past 6 years particularly, largely

due to our successful initiatives and the increasing support and expectations from others. While this growth is incredibly positive and rewarding, it can also present challenges as we strive to meet the high expectations set for us. There are no easy solutions or quick fixes, but we remain committed to delivering results and exceeding expectations.

You won the EMA's Energy Manager award in 2019. How was it received by the organisation?

I was delighted to receive this type of external recognition for my work, as it can be easy to feel overwhelmed at times. The award provided me with reassurance that my efforts are making a positive impact. Additionally, the University also acknowledged my achievement internally, further validating the significance of the award. Overall, this recognition holds great value to me and serves as motivation to continue pushing on in my work.

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

It's difficult to pinpoint just one, as throughout my career, I have been fortunate to encounter numerous individuals who played a pivotal role in shaping my professional growth. The learnings I got from my managers during my early career really stood me in good stead over the years and even now. But it wasn't just people I worked with, one particular experience that stands out is a presentation I attended years ago by an expert in heat pumps. His can-do attitude and ability to challenge the preconceptions completely shifted my perspective on the technology. This encounter inspired me to delve deeper into the intricacies of heat

pumps and explore new possibilities within the field.

In recent years, it has been the passion and ambition at the University. The genuine interest and support from the University's community have made it a truly rewarding place to work. While there are always challenges to overcome, the overwhelming enthusiasm and dedication of our community make every obstacle seem surmountable. It is truly gratifying to witness the collective effort and commitment towards our shared goals, and I am excited to be a part of such a vibrant and forward-thinking community.

If you have suddenly been given a £1 billion budget to spend on any projects of your choice, what would be your plan?

I volunteer with the Reading Community Energy Society which strives to enable installation and expansion of renewable and low carbon technologies, in and around Reading, for the benefit of the local community. I would love to develop large scale community energy, a renewable energy farm, a combination of wind, solar and storage to demonstrate the concept and scale of what can be achieved. I have been involved with them for 9 years now and it's a great initiative but still pretty much on a small scale, so I would use some of the money to scale it up.

Along similar lines, I would invest in decarbonising housing where there is a lot of scepticism surrounding the technologies and complexities of such undertakings. To address this, I would focus on a specific suburb where a complete retrofit would be implemented which would prove the feasibility, and also provide valuable insights and lessons learnt for future projects.

What is the most significant 180-degree turn you influenced in your career?

I recall a conversation with my predecessor at the University, whom I briefly met before assuming my role here. He compared the process of accomplishing tasks at the University to turning a ship around and this analogy resonated with me ever since. I feel I have definitely

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"turned the ship around" in terms of operational sustainability at the University, which could possibly be the biggest shift in terms of the organisation and how the work I lead influenced it.

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

Not a particular area, but I wish I could do it faster. Progress can sometimes feel slow as there are always things which are taking longer than I hoped. However, I am proud of how far we have come. Over the past 15 years, which is most of my time here, we have managed to reduce our emissions by nearly 65%. This achievement represents significant progress that I am truly proud of.

I am eager to do more at the sector-level as I believe there is much to be gained from collaboration and shared learning. However, finding the time to dedicate to this endeavour has proven challenging. I

am hopeful that with the expansion of our team, I will be able to contribute more meaningfully in the future.

What do you think is the answer to a net zero world?

I'm not sure that I have the answer on a world scale, but if I was going to do one thing on a national scale, I would decouple renewable electricity generation prices from fossil fuel pricing. I think the electricity market completely skews the pricing of electricity at the moment. Renewables are a cheaper way of generating electricity than fossil fuels are, but the market favours the fossil fuel industry, which keeps us in a relatively high carbon world. Having said that, the UK has already massively decarbonised its electricity generation but I think it would still make a difference, not just in our electricity supplies, but also then in heating supplies and the shift to electrification.

What are your aspirations for the future?

The University has a target of Net Zero Carbon by 2030 and I would like to be leading that journey to get us there. I hope that I will also be able to share our experiences as well as learn from others on a sector level more, as I mentioned previously.

On a personal level, I would really love to continue building up the community energy schemes that I am involved in. I think they are a great opportunity to get people on board and get local ownership. If you look at communities in Germany for example, they often have a wind turbine which is community owned, and the excess they then sell for profit that goes again towards the community. I think it's a brilliant model and I would like to find more time outside work to do that.