

Career in Energy Management

The Energy Managers Association aims to encourage and enable more professionals to enter the world of energy management and environmental roles. Being an environment and energy manager may not seem like the most obvious career for many. The EMA has taken on a challenge of changing the perception of energy management and associated fields, by raising the sectors' profile and sharing insights into the career progress and achievements of leading energy management professionals.

In this edition, we have asked Colin Hawthorne, FM Contracts Manager, (UK and International) at Jaguar Land Rover about his career in energy management so far.



What is your personal story? What was your journey to the position you are in today?

I qualified as a Marine Engineer and spent seven years at sea on a variety of older steam ships (probably the last generation of engineers to qualify on steam sadly) before moving shoreside once starting a family. My experience of boilers and combustion led to me joining the automotive industry to take on the running of a site boiler house with a brief to increase efficiency and extend its life.

Following the successful completion of the boiler house improvements and

the subsequent increase in efficiency and reduction of emissions and cost I took over as the site utilities manager, again with a brief to improve energy efficiency and reduce cost across the manufacturing site. This really sparked my interest in the science behind energy efficiency and the many ways it is possible to influence behaviour of the site occupants and drive the energy agenda forward.

I next took on this role for the wider business as regional utilities manager with responsibility for all European sites, excluding Germany, which had its own regional utilities manager already.

I then spent several years working to standardise activities and actions across my region and drive energy reduction throughout the business with a series of both project and investment opportunities and also with behavioural change activities. During this period, I had studied and passed the Energy Institute's EuREM training package which helped to solidify my experience and learning as an energy manager.

In 2013, I was approached to join another automotive manufacturer and became UK Energy Manager for Jaguar Land Rover (JLR). I introduced energy reporting metrics such as the non-production factor, led project development and funding applications and became an ESOS lead auditor to guide JLR through the introduction of that new legislation.

Amazingly, I am now just starting to plan phase three compliance activities, time really does fly. I am now a Chartered Energy Manager through the EI and my role within JLR has changed to incorporate facilities management activities, contract management and the energy manager role, which has become much more focused on sustainability and decarbonisation.

I am currently producing decarbonisation plans for a number of warehouses across the globe for which I also have FM maintenance responsibility and really enjoying the chance to talk with, and learn from colleagues from the US, China, Dubai, France, Spain and the UK and lead them on our sustainability journey.

What does your role at your organisation entail?

I have a split role at the moment, being responsible for FM contracts in UK and internationally, and secondly developing decarbonisation plans for those same sites.

What is the most exciting part of your job?

Meeting with site representatives from different countries and cultures and unifying their thinking regarding the journey to Net Zero.

What is your biggest achievement to date?

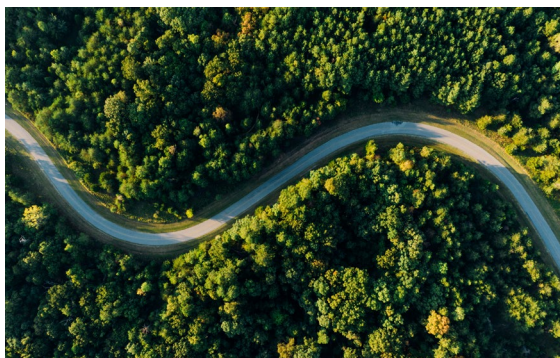
Introducing a weekly energy metric to the business – Non-Production Factor. It shows just how much energy is used (wasted) when everyone is at home. First results were in the order of 40-50% but over the last six years I have seen this reduce to regularly achieve 15% i.e., only use 15% of the full production electricity out of hours. There is still room for improvement, but it is now an ongoing process of refining shutdown procedures and starting up as late as is safe to do so. This is discussed every week on our sites and keeps energy on the agenda.

What was the most exciting project that you worked on and why?

Despite everything I have seen and done over the years I still think that the first project I ever worked on in automotive was the most exciting and productive. I joined an automotive manufacturer to manage the boiler house and found thirty-five-year-old boilers that had not really been upgraded since being converted to natural gas in 1975. I was able to review the boiler operations, write a specification for a new boiler management and combustion control system, complete with inverter drives

on the FD/ID fans and a new emissions monitoring system. It took two years to secure funding and another two years to complete but the outcome was a very satisfactory 40% reduction in gas usage and associated emissions with improved uptime and decreased maintenance requirements.

This came with a hefty cost reduction, and it was this project that led me to become the site utility manager and start my journey as an energy manager that has led to where I am today.



What is the most frustrating part of your job?

Watching sustainable elements of new builds and renewables installations being 'value engineered' out of projects on grounds of cost. This is now changing and our commitment to SBTi is a significant step forward in ending this short-sighted approach to major projects.

If you had the opportunity to change one thing that would make your job easier, what would you change?

I would make it an absolute condition that all projects would be subject to lifecycle analysis to prevent the use of cheaper and less efficient equipment or installations becoming a drain on the operational and carbon budget of the site.

If you could recommend three things to have success as an environment and energy manager, what would you recommend?

Knowledge – never stop learning.

Resilience – everyone is under pressure and will not always have time for 'the environment' so you need to be their conscience and keep pushing for what you know is right.

Collaboration – you cannot do it all yourself, do not even try. You need allies in the business and finding like-minded people who are interested in the environment even when it is not directly part of their roles is invaluable and makes progress more likely.

What advice would you give to someone looking to become an environment and energy manager?

Take the time to understand the processes and activities that go on in your company – if you understand what is happening it is easier to identify opportunities to reduce energy/

carbon/cost that are acceptable to business managers and less likely to be thought of as a diktat from the 'ivory tower'. It is about supporting the business whilst driving the necessary change to reach net zero.

What is the most absurd statement that you have heard in your job?

So many to choose from. "Compressed air is free" is probably the one most often heard which is ironic given its huge expense to a business, and usually uttered by people who have just teed into the main to provide a cooling flow of air to an overheating power supply rather than repair/replace it.

What are your long-term motivations in the company or the position?

I am fully invested in helping achieve the 2030 SBTi targets set for our business which will move a significant way towards the Net Carbon Zero by 2039 commitment.