

SKILLS AND TRAINING

Energy management – staying ahead of the curve

Energy World spoke to Ethan O'Brien, a London-based energy manager who has recently gone through the EI's Level 2 energy management training course.

EW: Tell us a bit about your current role. What does your day-to-day energy management work look like?

EOB: I am an Energy and Carbon Advisor at Cory Riverside Energy, a leading recycling and energy recovery company which uses river infrastructure to transport London's waste and turn it into energy and recyclable materials at the largest-of-its-kind energy-from-waste plant in the UK. My role is focused on driving and implementing the energy and sustainability agenda, as part of a dedicated team.

Like with many other energy managers, in practice this revolves around the 'three Cs' – compliance, consumption, and cost. I work to ensure compliance with legal and statutory requirements; I track energy and resource consumption at all levels to drive efficiencies; and I work on energy procurement to ensure we purchase energy at the best price, in the most flexible way.

Given Cory's energy generation focus, I also take an active role in shaping both local and national energy policy platforms to aid business development and continued growth.

EW: Energy management is a very dynamic field that requires both technical and people skills. What do you think will be the main challenges that energy managers will face in the near future?

EOB: I believe our main challenges will be keeping energy costs as low as possible, and communicating the value of having sustainability embedded as a strategic priority within our organisations. Given the unit price for energy is forecasted to increase considerably, to keep energy costs competitive and to mitigate risk our best tool in the toolbox is to deliver energy efficiency projects. It should not be a difficult sell that the cleanest, cheapest and greenest source of energy is the unit that is not consumed. However, too often it is.

Energy managers should

challenge themselves to communicate the myriad of strategic benefits from increased energy efficiency – not just energy or cost savings, but which also include health, safety, well-being and all-round improvements in productivity.

If projects make commercial sense and have these recognised strategic benefits, businesses will invest to save energy. Those that do not, from both a business and sustainability perspective. Energy managers must meet these challenges if they are to play a pivotal role in delivering the UK's transformed low carbon energy system.

EW: What are your views on the energy efficiency policy landscape in the UK at the moment? How do you feel ESOS has been recognised and implemented across the organisations affected by the Scheme?

EOB: My first major critique of energy efficiency policy in the UK is something Dieter Helm pointed out in his *Cost of energy review* – its complexity comes at a cost typically borne by complying industries, without necessarily generating operational efficiencies from reducing energy and carbon. Luckily, the recent Department of Business, Energy and Industrial Strategy (BEIS) consultation on streamlining reporting will address these concerns and simplify the energy tax landscape, which is a wholly positive development.

The holy grail would of course be a harmonised carbon price across the economy, allowing market-based efficiency to reduce carbon emissions and drive energy efficiency. However, given this has not been applied successfully anywhere in the world, we should view the world as it is, and not sacrifice much needed action on the altar of perfection. Through this lens, policy in the UK is not perfect but when compared to other developed countries, it is a

commendable effort.

On ESOS, I view the policy's technical justification as seeking to improve information flow in organisations, which create barriers that prevent more energy efficiency action. Any objective analysis of the scheme shows it has achieved some success in exposing high-level management to efficiency projects.

That said, I believe there is a clear need to increase the transparency of the scheme. Administrators should publish key data on measures implemented and energy savings achieved. By making this information on ESOS publicly available and understandable, public confidence in the whole exercise of improving energy efficiency would increase.

More broadly, the wider policy landscape looks increasingly encouraging with both the Industrial Strategy and Clean Growth Strategy identifying that clean growth, minimising energy costs and improving energy productivity are priorities on which government is to focus.

There is a natural synergy between energy efficiency and national productivity, and given productivity growth is such a key economic necessity to the country, aligning energy efficiency with it would help drive investment and focus.

EW: How have you gone about your professional development in energy efficiency?

EOB: An energy manager needs to have a wide range of both quantitative and qualitative skills to be able to thrive in a complex environment. It's a must to be financially literate and be able to do the math, have the ability to process vast amounts of consumption data and, at a human level, to be persuasive to others about improving energy performance. The professional must be well-rounded.

To this end, I felt the Energy Institute's (EI's) Chartered Energy



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Ethan O'Brien

Manager qualification would provide me with both the depth and breadth of skills I needed, so I committed early to the EI's programme. I went straight for the Level 2: Energy Management Professional training course, which I found to be well-structured, full of practical and useful material, with a great level of support from experienced tutors.

The natural step was to follow on from this, and this October I start the Level 3: Advanced Energy Manager course, which will further expand my expertise and plug any knowledge gaps. Upon completion in 2019, I anticipate submitting for Chartership and full Energy Institute membership status.

EW: How important is it for energy managers to keep on top of their professional development and expanding their skillset?

EOB: In a word – vital. You have to be relentless and ambitious about your career and skillset to succeed in general, but given the rapid pace of change across the energy sector, it is paramount to future progression. If one is to believe the news – sometimes a difficult task – we are now in a data economy where the world's most valuable resource is no longer oil but data. Energy managers must stay ahead of the curve on data analytics, as data will be integral to our ability to extract signal from noise and yield positive results.

Above all, as an energy manager you need an optimistic outlook on life, and must have the imagination and clarity to think and see things differently. ●

Ethan O'Brien is Energy and Carbon Advisor at Cory Riverside Energy, coryenergy.com

Details for the EI's Level 2: Energy Management Professional training course can be found at bit.ly/2JTFRHO

Targeting energy savings at Cory Riverside Energy



Cory Riverside Energy's Wandsworth site
Photo: Cory Riverside Energy

Ethan explains his proposals to reduce energy use at Cory's Wandsworth site.

Recycling is not cost or carbon free but generally this is not widely understood by the public or policymakers alike. When recycling is put out for collection, this is only the first step in a complex chain which ends up with a material finding a use in a secondary market.

To understand more about energy use and recycling, as part of the EI's Level 2: Energy Management Professional training course I completed a techno-commercial proposal on energy saving measures at a large recycling facility in Wandsworth, London, which is processing up to 84,000 tonnes of recyclable materials every year.

The facility contains a range of high-tech plant and equipment including optical sorting units that use the latest composition and colour detection technology to sort recyclables into different streams. The site has excellent visibility of half-hourly electricity data which made analysing all areas of energy consumption at audit stage possible. This included HVAC, lighting, motors and drives, cranes, IT systems, processes, behaviour change, and fuel use in transport.

The project provided a chance to produce a bespoke report with actionable insights for decision makers, and not – unlike some ESOS reports – just make recommendations that

would sit in a shelf gathering dust.

Overall, the project was successful in identifying as many as ten potential improvement measures with attractive payback periods and energy savings. If something sounds too good to be true it probably is, so for each improvement opportunity the proposal document also assessed the potential risks associated, such as delivering on time and within budget, not achieving the predicted savings, and causing unplanned interruption to site operations. The outcome was a more credible and believable set of proposals, which was backed up by sound data.

Some of the proposals, such as LED lighting replacement and behaviour change, have been taken forward. Other measures have been included in Cory's 'Energy Roadmap' – which is a business-wide framework for measuring, managing and reducing the company's carbon footprint, setting in place key milestones to ensure Cory is staying on track to achieving carbon reductions.

The Roadmap acts as a central repository where data on multiple projects can be easily accessed and stored for future use. It also serves to link sustainability opportunities to organisational key performance indicators and wider strategic success, ensuring business clarity on our future direction of travel.

EI Level 2: Energy Management Professional

200 hour self-paced online course, provided with support from EI expert tutors.

energyinst.org/whats-on/training

