

Energy Management at Fuller's



In this interview, we explore various approaches to energy management adopted by organisations across different industries and sectors. Join us as we delve into the world of energy management within the hospitality sector and shed light on the strategies and initiatives deployed by Oliver Rosevear, the Sustainability Director at Fuller, Smith & Turner P.L.C. to effectively manage energy and carbon resources.

Introduction to Fuller, Smith & Turner P.L.C.

Fuller, Smith & Turner has been in operation for over 180 years – with representatives from Fuller and Turner families still actively involved in the business. Historically, the company was a brewing business that owned pubs, but in 2019 the brewing operations were sold and the company is now a pub and hotel business only. Currently, we operate around 200 managed pubs and around 190 tenanted pubs where our name is above the door, but essentially it is run by the tenant on our behalf. Around 65% of our pubs are London based, but we operate quite a few sites on the south coast as well.

Part of the company portfolio is formed by a group of hotels called Cotswold Inns & Hotels, which are very beautiful stone sites, former old Cotswolds coaching inns, and then we also operate few modern English inns in the South East called Bel & The Dragon, which focus on premium dining. Our food offering is central to what we offer across all our sites, with all food freshly prepared each day by

professional chefs, but our big focus is the beer. A great pint every time is really essential to us as a business, which we always keep in mind when operating at premium pub level and reducing our impact on our emissions.

What does energy management mean at the organisation?

We are constantly looking at ways to reduce our operational costs and energy management and efficiency play a major role. Last year especially saw a huge spike in the energy market and it magnified and accelerated the focus of the business towards responsible energy usage.

I joined the company just over two years ago, initially as the Head of Sustainability, in what was a brand new role for the company. There was lots of good people already running great initiatives in the business and my role was to bring all that together and look at how we can lead on sustainability within the hospitality sector. I am a team of one, so creating working partnerships with consultancies was important and what I focused on over the past

two years was to introduce the right suppliers into the business, that will create an extended team for me.

Internally, I continue to gain traction in terms of support with our sustainability programme as a whole. We have three sustainability committees, for our people, planet and communities. The committees are all led by members of our executive team where each member has accountability for one of those areas. Supported by key people across the business to support the programmes and help drive projects forward. More recently, we have appointed sustainability champions to every one of our operational areas with the view of giving them the tools and insights to drive change in their areas.

This also leads into how we approach our net zero target, especially our Scope 1 & 2 emissions and how we transition away from intensive gas oil and LPG usage in our estate towards more electrification. We expect our energy use to reduce as we drive efficiency, but electricity usage is likely to pick back up again as we move towards

electrification of our kitchens, heating, EV charging, etc. We are already making sure that the electricity we do use is certified 100% green and it has to come from a renewable source. Gas reduction is absolutely the key to it and whilst we might not be able to remove gas from the estate entirely, we will do everything possible to reduce it to a necessary minimum. Our portfolio includes some very beautiful Grade II listed buildings which frankly were not built for efficiency, so that presents some challenges and we are constantly looking at opportunities to overcome these.

A big part of how we approach energy management is behaviour change. In my experience around 25% of all usage is driven by behaviour rather than physical equipment. It's all very well putting some really energy efficient kit in but if people don't use it properly, then you may as well not bother. You've got to win the hearts and minds of those using the kit which is a big focus for us. We work closely with our teams

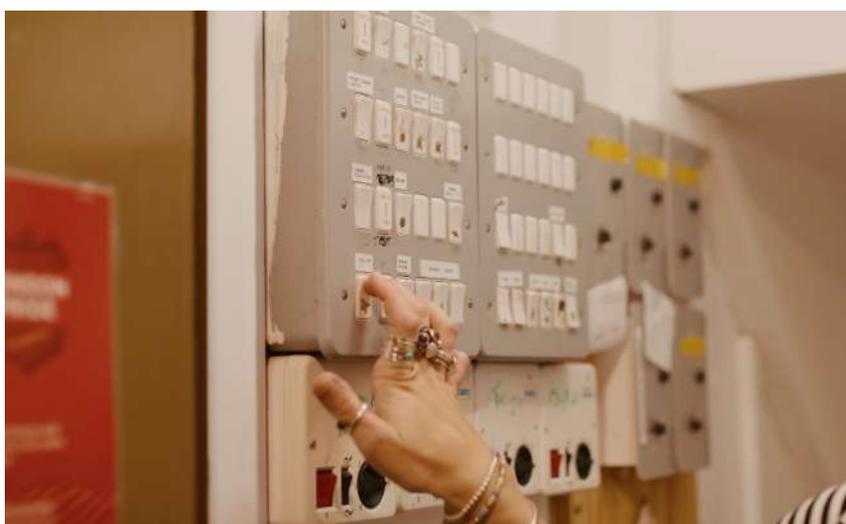


and we help them in very practical terms to see how, by changing their habits, they can play a role. Over the past two years, through one of our partner consultancies, we undertook day audits on every single one of our sites. We looked at physical controls, equipment in place and how it is used

aspects, we also have quite ambitious plans for physical changes in how we operate in a more sustainable way. When we look at energy usage in our estate - heating, lighting, cooling, a big area for us is hot water, catering equipment and cellars.

Have strategies been adapted to include focus on a Net Zero policy?

We have committed to an ambitious target to achieve net zero in our operations by 2030 and supply chain by 2040. We have also sought to validate our targets through the Science Based Targets initiative. To help us reach the targets, we joined the Net Zero Carbon Forum, which is a group of around 47 hospitality businesses, ranging from pub, hotel and restaurant groups that came together in 2021 to essentially consider how quickly the sector could accelerate towards net zero. Being part of a forum really helped us to collaborate with others in our sector about what is effective and how to move forward, which is particularly helpful when we look at Scope 3 in our tenanted pubs where we encourage the right thing, but we cannot force it. Whilst we are responsible for the



to help them understand their impact, but also their opportunity. We point out the small changes in their daily routines which can make a big difference in reducing our energy use and carbon emissions. Generally, people are unsure what they can do on a personal level

by employees during their day. It helped us to realise that every one of our sites is different, which is kind of interesting, but it also means we need that focus if we want to achieve any changes.

Apart from the behaviour change

heating systems, hot water systems, insulation, etc., we are not necessarily responsible for what is inside the building and how it affects our net zero commitments.

What areas of everyday's business are most challenging in terms of energy management?

Heating and cooling are probably our biggest challenges. For an average pub, around 20% of the energy usage sits

in the cellar, cooling for the beer lines, cooling for the cellar and often lots of other equipment for which there is no space anywhere else, for example ice machines. We take a whole system approach when it comes to

our cellars and we focus on ensuring the envelope is as airtight as possible – because it's essentially a big fridge and heat sources, such as the already mentioned ice machines, are out of the cellar if possible. Controls are a key component to this and we now have two types of controls in our cellars - one for the products' core temperature and the other the ambient temperature. Products need to be kept at 12°C so the ambient temperature can still come up to 15°C, reducing the unit's cooling demand which improves the energy efficiency of the equipment by around 20%.

Cooling of our lagers and stouts goes through a remote cooler which is essentially a big ice block which cools the beer as it goes through it. Historically these were on 24/7,

constantly maintaining this ice block and running on full power, even if a pub only operates for 12 hours. We have installed remote timers onto these units which essentially shut them off for periods of time whilst still maintaining the cooling. This is saving us about 25% in energy usage.

There are lots of changes that we are able to influence in our kitchens. Apart from the already mentioned

behavioural change – making sure our teams think about how they're opening and closing their kitchens and



start up times for equipment, through to electrification of our gas hobs. Our audits highlighted that whilst

gas hobs can just be turned on and off when needed, often hobs are kept on for hours before the first order comes in. So, electrification of this area is something that we identified as being beneficial for our energy efficiency measures. We have successfully deployed fully electric induction hobs which only come on if a pan is placed on it at some of our sites. We are continuing the roll out of those across our estate and at the same time, we are just in a process of doing a case

study to sense check the results. Based on that we will probably be investing quite heavily into electric kitchens to transition away from gas towards electrification and more efficiency as well. We will not be able to entirely eliminate it but we will be reducing it to the best of our abilities.

Our biggest challenge for electrification at the moment is power capacity, the ability to get power upgrades and at what cost in different parts of the country. It varies enormously and can be anything from a few thousand pounds to hundreds of thousands. The location does not always make it easy either, we encountered a site in a centre of a town where we thought that getting an upgrade will be easy and at a reasonable cost but it came to

a crazy amount of money. Then we had another site in the middle of nowhere, where we expected a high cost but it only came to a couple of thousand pounds, so it's very difficult to predict. We are making applications



at the moment, so we have capacity in place to proceed with our plans.

Can you describe an energy management project that reflects the organisation's principles?

We have some very old buildings and therefore some very old heating systems where just switching to an electric heating system is not feasible. We have to consider solutions on site-by-site basis and we have sites where we might be able to switch over

to full electric heating and cooling system which have the added benefit of offering a better guest experience with guests having cooling in the summer and heating in the winter. Where we cannot do that, we are looking at reducing the load of gas we have on the site, reviewing the boilers, the type of controls in place, building insulation and hot water demand.

We have a solution, which has now been delivered at some of our sites and where feasible will be rolled out further, which essentially recovers the hot air from our cellars and from our walk-in fridges and converts that into hot water. It is deployed on a number of our hotel sites and it's delivering the hot water not only for the pub but for the hotel as well. Essentially, we are almost removing gas demand for hot water so we are only left with gas demand for heating.

One of the other things we deployed this year across the estate, including our tenanted sites as well, is a product which is added to heating systems and which drives the efficiency of the water getting around the heating system and improves the heating efficiency by about 15% on average. We deployed the solution last winter, and alongside it we did an estate wide boiler servicing to ensure that they are working at their best. We expect that to drive significant gas usage reduction going forward.

Due to the nature of our business, having all aspects of a project in place at the right time of year is crucial and so further challenges we face are around availability of equipment for our plans. The supply chains for the induction hobs and a lot of other catering equipment are still quite damaged from Covid, so we are planning quite far ahead now to make sure that we have all in place for a convenient time to allow for the work, staff training, etc.

What is in the pipeline for the future?

We are looking at a number of areas at the moment where we would like to focus. One of them is voltage optimisation which is something that we haven't really deployed in the business before and from my previous hospitality experience it can be quite effective, if deployed on the right site. We are currently working on some early trials to see how effective it will be for us.

Then, we would also like to focus on EV charging expansion. Currently, we have around 14 chargers in the estate across seven sites, but we haven't really accelerated that yet and we are seeing a growing demand from our customers to be able to charge their cars whilst they're staying with us.

And finally, we are also looking at opportunities for renewable generation

as well. We already have solar panels on our head office, about 40 kilowatts, and we are looking at a number of sites where we're intending to put solar panels on roof tops or land. Some of our sites come with land that were bought with the pub, which present other opportunities in the wider land renewables but we are also exploring other types of renewable technologies on specific sites. The energy crisis highlighted the importance of energy security for many organisations and we are no different so that is something we want to focus on in our efforts as well as procurement of green energy on the energy we still need to source. We have reduced our gas usage by 14% and our electric usage by 13% over the past two years and we look forward to building up on our progress further.

Author's Profile:

Ollie Rosevear joined Pub & Hotel group Fuller, Smith and Turner as Director of Sustainability in 2021. He is responsible for leading their journey towards Net Zero by 2040 and developing a wider ESG strategy. Prior to Fuller's, Ollie spent the previous 11 years as Head of Environment for Costa Coffee where he helped design their BREEAM Outstanding Roastery and was responsible for developing the award winning Zero Energy EcoPod concept.

