

by Andy Creamer, Andrew MacBride, Astley Fenwick,
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Impact of COVID-19 on Energy Management Roles



Andy Creamer,
Energy Manager
at Mapeley
Estates and
Group

Mapeley manages a large estate of several hundred commercial and residential properties. I started in Energy Management about 5 years ago. Initially, to manage utilities for the group and to implement a sub-metering project, having experience in electrical, technical, customer service, buying and project management – one of the benefits of being so long in the tooth.

Over the 2 years before lockdown, this role had morphed into a more strategic role. I am responsible for the whole gamut of energy and water related activities, but mainly focussed on efficiencies of consumption and carbon, and hence cost – arguably our raison d'être. This mostly involved office based strategic activity e.g. ASC and HV/LV electrical billing projects, physical projects e.g. urinal water controls, procurement of contracts for energy and services, and compliance; and site based tactical actions related to installations and audits, and supplier reviews.

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I am also responsible for offering an internal consultancy within the Group to our Development, FM and Lifecycle Teams for energy related issues and queries.

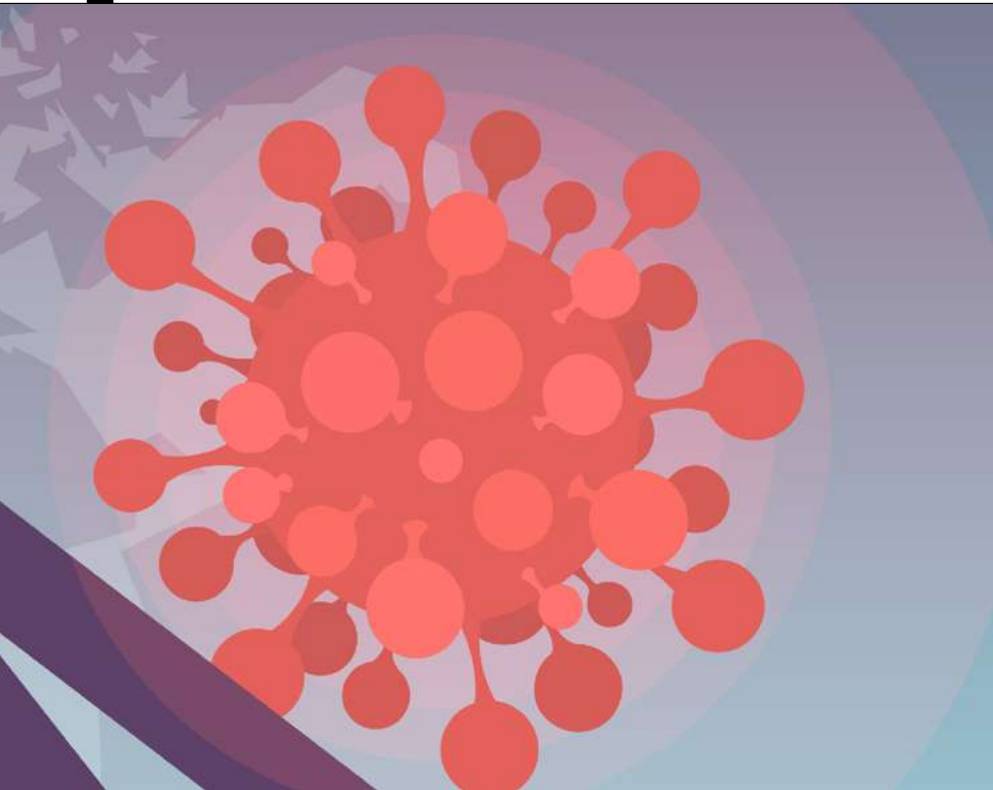
Since the lockdown, I have worked from home almost exclusively – only rarely venturing out to the office when I need a bigger screen or printer/scanner. No other business visits have been permitted until September. There is a much greater focus on efficiencies almost at the exclusion of all other non-cost related activity.... The £ is King. I have no CapEx projects now, they have gone west at the point of lockdown, and in any case few contractors to do them. I don't foresee any real change until the next financial year and that will be a continued effort to reduce cost by efficiency and procurement. Working on MS Teams/Zoom/Google Meet is challenging as living out in

the sticks means a 2-MB broadband is a really good day – add to that little/no mobile signal makes life harder than it needs to be for work. In any case, I just find these programmes completely impersonal. I don't think we should, or could, abandon face to face forever, despite the utterances of some of the NASDAQ listed companies.

We have seen energy contracts and fuel prices falling, and have taken advantage of that; however, one unexpected bonus was the reduced carbon for our SECR return, although next year will see an equivalent increase, but I am happy to take any small mercy out there.

I don't usually proffer advice to anyone – so here's three for the price of one:

1. Get a proper office chair if you are at home. Cost me £15 on eBay and



- so much more comfy.
- 2. Find a way to separate work and home lives. When I am working at home I always put on a tie and it's like a brain switch for me...either that or I truly have lost it.
- 3. Maintain a sense of humour...

Follow these and keep yourself sane – the work then gets done as a matter of course.



Andrew MacBride
- SMaRT hub - Energy Manager, Arcus FM

I have been energy manager for Arcus FM for 5 ½ years. Previous experience included refrigeration engineering and contract management. Our primary focus is around reducing energy for our clients through the optimisation of buildings, plant & equipment. Looking back over my relatively short time in this industry it is clear to see that we are continuously learning and developing techniques, what was right 5 years ago may not be right today. We have learnt to embrace continuous change.

Pre-COVID, we were working with a good working knowledge of our client's business operating models and how they were using their buildings; on the whole things were relatively predictable and as such most of our energy reporting and alerting systems were easy to use and interoperate. My role would involve regular meetings with client's key stakeholders to ensure we were supporting their Net-Zero targets. Most of our meetings were face to face, however there was a trend towards reducing unnecessary travel and making better use of video conferencing technologies prior to the arrival of COVID-19.

COVID-19 brought some large-scale changes for Arcus FM. Those most affected are our engineering teams and front-line workers. Luckily for my energy team, we have been able to work successfully from home. We have found that the use of Microsoft Teams has played a huge part in keeping us all connected, in fact in some respects we are communicating better now than before. Being in an office environment has its advantages and we are all hopeful that we will be returning when it is safe to do so.

During the first few months of COVID-19 my team were very busy

keeping up with the amount of change our client was having to implement. We found that we were requiring daily Teams meetings with client departments to keep abreast of change. Change can be daunting for a lot of people but as a team we have been working on embracing continuous change. Pre-COVID, we were aware that we are living in volatile times and that we need to be able to adapt and change at a moment's notice. This awareness has meant that we were able to move rapidly with our client whilst maintaining a high level of support and future development.

COVID-19 is going to be around for a long while so for us as a team we are going to have to keep up the same level of adaptability we have demonstrated so far. Our clients have a difficult journey ahead and it is our department's goal to support them every step of the way.

My learning since the arrival of COVID-19 is the importance of the whole company working together to achieve a common goal. There is no room for silo working and teams that might not have worked together closely before are now having to pull together. We have been working towards 'One Arcus' for a while and in the present circumstances it is clear to see why unity is so important.



Paul Graham,
Utilities, Waste and Sustainability Manager at Kingston Hospital NHS Foundation Trust

I've only been involved in energy management for three years, but I've noticed some changes. In the NHS, we lag behind the latest advances so things like building level sub-metering and AMR are still quite new but have proved their worth during the pandemic.

Before COVID-19 started to make itself felt in the Trust, my role was mostly desk-based, on site with a focus on solving 'urgent' problems like "why has the water bill gone up

this month?" and "what do I do with this waste?" as well as supporting colleagues from my site knowledge and IT capabilities. I took a day each week to work from home during which I could focus on anything that required uninterrupted concentration. COVID-19 first affected my role early in the year when we still thought the waste was a Category A pathogen (it's not). However, until the government started encouraging people to work from home, work mostly continued as normal.

In late March, I switched overnight from a mostly office-based role to working from home full time. I borrowed an office chair and an extra PC monitor to differentiate my work setup from my downtime PC use. Working was increasingly stressful as changes came thick and fast. The operational challenges for waste and centralised decision making were the biggest challenge for the first few months.

However, due to our remote monitoring setup, I was still able to keep track of energy use across the site. I could conduct remote meetings (first by mobile phone, then by MS Teams) and keep up with developments on site. I also found that I had more capacity to focus and, as a result, some important projects we had on the backburner have moved forward since the lockdown started. I've also enjoyed the wealth of webinars available which were always hard to get working on our internal equipment.

Since July, the Trust has re-started most clinical services. Internal face to face meetings are banned, with exceptions only by special application. We have all been given access to Office 365 and other tools to enable remote working which was not a widespread practice before lockdown. I feel that the organisation has supported me to continue working from home with minimum difficulty, I attend site for a few hours every week to catch up with colleagues and batch some site-based tasks. Daily email bulletins communicate things we need to know and are supplemented by videos from the executive team when something is particularly important.

I think that home working will continue to be encouraged for back office staff. The organisation is short on office space and specialist applications are increasingly cloud based with remote access. In a hospital, there are many functions that you would not want to push off site due to the need for direct collaboration and data security. I hope that teams will adapt quickly to communicating by video call and messaging, it has been a struggle to maintain team spirit as communication now requires more intention and doesn't just happen.

My advice to other energy managers, especially in the NHS, is to take advantage of the opportunities afforded by the current openness to change and maintain your personal and spiritual energy. I wasn't aware how stressed out I was getting until I took a break and it took the whole week to calm down. My church has kept meeting via streaming and zoom calls which has been the greatest support and helps me to maintain perspective.



Astley Fenwick,
Director at
**Trinity Energy
Management
Ltd**

During my career as an Energy Management Consultant, I have seen numerous changes over the years in technology associated with the industry and new methods of approaches to energy management. I have always managed to adapt to these changes, but nothing like the changes I am now experiencing because of COVID-19 pandemic. And I know that I'm not alone in this since the whole country has had to come to terms with a new way of life.

I started my career as an electrical engineer, designing and managing installation of electrical services for building services and manufacturing industry, and have always had a strong interest in what could be done to limit the amount of energy being used in the areas I designed. Following a move in 1990 to GSK, I subsequently became the Site

Electrical Engineer and then due to an edict from the directors to reduce energy consumption by some 25%, I was also asked to take on the role of Site Energy Manager as well. I formed a team comprising engineers from the different manufacturing areas and embarked on a three-year project to reduce site energy consumption, bearing in mind the target set.

The project briefly involved better motor management, improved lighting, tighter control of compressed air, installation of two wind turbines and several others. However, the most important to me was the involvement of all the staff by involvement and communication with them. At the end of three years, we had met the target and saved some 40% compared to the start of the project.

In 2004, I decided I needed a career move and became an independent energy management consultant. Since then, I had become interested in the subject of trying to save the limited resources that the Earth has to offer. I concentrated on manufacturing and large industrial premises because of the significant amount of energy usage. My work involved, and still does, the carrying out of energy audits and producing reports to indicate how savings could be achieved. If required, I can also design and project manage the replacement of equipment or modification of existing equipment to operate more efficiently. I would also look at the prospect of renewable energy but would only recommend this approach after the use of energy had become more efficient. This is like comparing renewable energy as the water in a leaking bucket going to drain - you want to limit energy wastage before you supply this from the energy produced by a valuable investment.

Obviously, during lockdown I have not been able to carry out any audits and understandably, companies are concentrating on how to keep their businesses afloat rather than being distracted by energy management. And, as I see it, that's the problem all energy managers will be experiencing at this point in time. It was hard enough before COVID-19 to

ascertain interest from the company heads but it is even a greater challenge today.

During lockdown, like many others I spent a lot of time in my garden, but now it's just a case of trying to keep up with the latest changes in technology, especially using the EMA resources and planning for the future. One of the topics that I am actively pursuing is systems for monitoring and targeting energy. To me, this is the most important approach to energy management because if you don't know where and how you're using energy then how can you manage it?



Sarah Jolliffe,
Company
Energy Manager
at BAM
Nuttall Ltd

Energy management in the construction industry has always been a mixed role. In my career so

far, the role has included managing energy needs for a handful of offices, managing temporary power connections for our projects, and ensuring the business meets its obligations under the ESOS and SECR regulations. But in construction, the lion's share of energy use is in the form of liquid fuels and this is something managed by the projects and is nothing like as complex to manage compared to electricity and gas supplies. The industry continues to be reliant on liquid fuels and is associated with construction plant, equipment and power generation – these are items that are currently quite difficult to shift to electric power trains.

Therefore, the energy manager role inside this industry is quite different from the average energy manager and for me at least, it has been dominated by a need to report on energy use and manage the business' wider sustainability objectives. This is a very project-centric industry and means that it has been very difficult to make investments in

energy/carbon saving technologies. Anything with a return on investment of over 18 months generally fails to be realised.

Over the past 5 years, there has been a real surge in rhetoric around action on climate change. Since COP21 in 2015, real momentum has been gathering and most energy managers I've spoken to concur that their roles have seen an increasing component of climate change management. In 2018 and 2019 the IPCC published 2 reports on the topic, and this seems to have further catalysed media attention and general public awareness to the point where we are beginning to see businesses being targeted to take action. This has been good for roles such as those in energy management since energy use is the primary cause of fossil fuel consumption leading to climate change. Therefore, we are being increasingly relied upon for expertise in tackling the problem and are at the forefront of forming strategies for our businesses to help meet these challenges. It has also given

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birth to new roles which is good for the energy management and sustainability related professions.

So, when it comes to COVID-19, like many businesses, the construction industry has suffered greatly with a mass scaling down of physical operations which has unfortunately led to job losses. The civil infrastructure sector however has fared considerably better with only a limited impact and so far has led to a reasonable continuation of business. For me personally, I wasn't furloughed and continued to work from home like I already had been for many years.

The only thing that has ceased completely is energy auditing in person for which I would normally visit an office or site to undertake. Also, in-person meetings have completely stopped in favour of digital conference tools such as Microsoft Teams, Zoom and Skype. These tools have been quite effective, and they have in fact opened all our eyes to realise significant expense and travel time savings.

Post COVID, I expect physical auditing activities will resume as normal, but there is a big question mark as to when that might be right now. Only business critical activities are permitted so it is quite difficult to make the case for in-person visits where there is no clear need. In-person meetings on the other-hand are likely to be almost completely moved to digital conferencing over time – the cost savings to the business are just too appetising to ignore.

In summary, I remain very open minded about my career opportunities and this has always served me well stemming all the way back to when I left school as a general builder. Being versatile and able to adapt to changes in the industry will always make you attractive to employers no matter what your role description is.

I would also recommend that energy managers pay attention to the wider climate change agenda since this is presenting new opportunities all the time and is quite exciting in some ways.



Chris Norburn,
Director
of Energy
Operations
at Breathe
Connect

I have been in the Building Services Controls and energy industry for over 30 years. When I started out in this profession I would state - in my personal opinion:

- "Energy Management was mainly involved with consumption, M&V data analysis, reporting and billing."
- "Building Services Control was mainly pertaining to comfort of staff and protection of the building and its assets."

I would suggest as climate change became common knowledge and the cost 'penalties' became the norm, I have seen customers' drivers for energy management evolve over the last 20 years – where initially the ask was to help alleviate the burden of carbon penalties and rising energy prices with quick ROI initiatives. However, in the last decade, I have seen this 'simple return on investment' approach become more part of the enabler within business cases, with the new 'data' criteria such as staff comfort, wellbeing, security of supply, lifecycles and efficiency of maintenance labour taking just as much a precedence.

Wellbeing and 'safe healthy buildings' are now a very much discussed topic with my customers on how we control, monitor and manage the buildings' environment to help minimise risk of infection transfer – some practices associated with this may well now increase energy usage and costs!!

My role pre COVID was two-fold – ensure my clients are serviced well with tangible benefits whilst ensuring my staff were constantly trained and developed to ensure a professional delivery on budget, expectation and time. This involved regular face to face meetings internally and externally. Once I knew the lockdown was imminent, I had to ensure all the planning and processes I had in place for many years to

cover any situation like a pandemic - the Business Continuity plan – was ready to be mobilised. This included amongst many factors the below:

- Staff working from home with seamless effect on delivery and/or customer experience.
- All sites to maintain remote connectivity and monitoring with a robust and fit for purpose IT infrastructure in place.
- Staff welfare and continual support.
- Customer and staff communications and reporting.

The pandemic affected a large portion of my role. I had to learn and/or improve skills associated with remote communication and reporting, adapt to new ways of working 'live and online' and management of time with what was in effect working from home every day whilst in a family environment. This meant I had to create and stick to a strict task and activity plan. When to get up (no commute), planning my days to maintain efficiency, ensuring I had breaks and took daily exercise. I became more conscious of my own mental health and wellbeing.

Looking ahead a few months, the main factor being looked at now is, "do I need to attend an office every day or even every week?" "Do my customers need me to travel distances for meetings when online is just as good?" "Do I need the daily personal interaction with my staff and clients?" I do not need to waste costs, carbon and time commuting long distances for a brief meeting. Do I actually need a fixed office and the costs associated with such?

My thoughts are that working remotely is more carbon efficient, cost effective and also improves productivity. However, I feel that a mix of pre and post COVID working practices would be ideal as some personal social interaction still has value and importance.

My tip for any managers looking at this. It's not just about cost benefits and savings but also about mental wellbeing and social interaction. Embrace the good points from lockdown and mix these with the beneficial aspects of pre lockdown.