

Business: The new power adaptors

Where is energy on the boardroom agenda and who is influencing change at the top? We spoke to four businesses before the COVID-19 crisis to see **how they are adapting** in the present to create a clearer future.

Meet the contributors



Matt Edgley
Commercial Director
– Teledata



Nigel Holden
Head of Co-op Power
– The Co-operative Group



Quentin Abel
Managing Director
– APC Manchester



Donald Moore
Managing Director
– Rowlinson Knitwear

Power is the “number one cost” for Matt Edgley, commercial director of Teledata, who spends around £1m a year keeping his Manchester data centre humming. As each new customer is added, the amount of electricity needed for a server rack is added to the cooling equipment and battery back-up alongside.

While data centres are a heavy user of the grid, Edgley knows that spending a third of turnover on power isn’t sustainable and has chosen to pursue a range of energy efficient measures. He also believes, because of the additional charges on his tariff, more should be done to help an industry supporting the technology platforms of UK plc.

“You could think data centres are an environmental monster but in reality, we are taking facilities out of private spaces and putting them in a more efficient, shared space,” he says. “If anything, we should be compensated for helping, but it’s completely the opposite.

“I couldn’t even explain how the bill works: about 35 per cent is metered charges; we pay for losses between the distribution point and the data centre; different rates at different times; and periods where you pay for the most in-demand times in winter.

“Power is the biggest challenge we’ve got, by far.”

In the first of a series of reports from Electricity North West, we’re setting out to understand how businesses are thinking about energy use and what matters to them now.

While it’s clear some companies are well advanced on this journey, and providing leading edge thinking for others to follow, many are watching and waiting to see how things develop.

After posting on social media, to ask for contributors, the response itself told a story. One company we spoke to, said it was unclear what they could say which would add value to the debate, and help them to look good in front of others. The conversation remains for people with strong opinions and a good story to tell.

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What follows are the experiences of four businesses. In addition to Matt Edgley from Teledata, we spoke Nigel Holden, the man in charge of The Co-operative Group’s fledgling energy business, who is procuring power on behalf of 40 customers; Quentin Abel, who runs a logistics business and is a “climate change champion” on Cheshire East Council; and Donald Moore, who is aiming to turn his textiles business into a B Corporation – friendly to people and planet alike.

Energy use: what’s driving change?

Businesses have a greater awareness of their impact and the energy they use. Global headlines on climate and the environment have played their part to raise consciousness of renewable energy and reduced consumption. Customers and communities are asking questions and public businesses, including the likes of JD Sports, are publishing reams of information online about their green credentials and carbon reduction programmes.

But the reasons driving behaviour change are mixed. For the businesses we spoke to, the immediate cost of energy is still the big issue. While the moral reasons to act are becoming clearer, alongside the longer-term investment case in energy saving schemes. What's also happening is when a business takes one step, it often leads to other projects and opportunities. Reducing energy, or understanding it better, often creates a snowball effect. Data and measurement also help this process.

“For our customers, it depends who you are talking to, but what we implement has got to work properly and it's got to be cost effective. That's a given,” says Nigel Holden, head of Co-op Power, which is procuring green energy from the group and other sources.

“For some, the decisions are very commercial. They come to us saying: ‘we've got a real problem, our budget is shooting up’, for example. As we grow, the driving factors will no doubt change, but it's predominantly being driven by finance directors and procurement departments.”

Quentin Abel has three reasons for installing solar power, and replacing the rooflights, at APC Manchester's facility in Trafford Park. While the first one cuts through the noise – “for goodness sake, if we don't do something and do it now, we aren't going to have a future” – he's also had buy in from the team and recognises the cost savings over time.

“We're managing to improve the working environment for our staff, and they are actually proud of the fact that we're doing something,” he says. “Quite frankly, investing in a solar array is an investment in the future. And you know, if you are lucky enough to have some money, doing this is a better investment than letting it sit in the bank.”

The same is true for Donald Moore at Rowlinson Knitwear, but the savings to be made are just part of a bigger picture. The company became employee owned four years ago, but the drive to become carbon literate and reduce energy use, is coming from him and his team. “We exist to be a force for good, not to gain business. It's got nothing to do with that,” he says. “But it will help companies in the long run if they do take steps.”

Projects: the power of action

In 2019, as the climate protests grew, Moore and his team decided to understand in more depth about carbon usage and how to become more climate conscious. They took a day out of the business to learn what they could do to make positive changes. The result was a quick move to install solar panels at the Stockport headquarters and become able to “produce more than we use” for 10 months of the year.

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They also have seven company cars, which are either electric or part electric, and have installed LED lighting and motion sensors throughout the building. These have been easy decisions that have helped to cut electric usage by half, he says.

“We’ve invested £1m in all of these things; which when you compare to our turnover, reflects the level of the challenge we have got. The amount of savings we can make almost make us positive on day one.”

Abel is also happy that in the summer, he can be a net exporter of energy back into Manchester’s grid. Following the installation of LED lights, he’s planning to invest in battery storage, and with the new roof lights has already reduced the amount of power needed to light the inside of the unit.

“By putting fresh, decent units on the roof, it has allowed us to spend most of the year without needing lights on in the warehouse. You’d be astonished at the number of businesses who just accept their warehouse is dark and dingy.

“Because we combined both jobs, it was not so expensive to do. The payback period for this, instead of looking at five years, is more like seven. You could say, why do that? But it’s made a big difference to the working environment and investing in the future is important.

For Edgley, at Teledata, investment in energy efficient gains has equalled the amount spent each year on power. After an extensive data gathering exercise, alongside support from the Business Growth Hub, the team was able to monitor and understand real-time power usage across the facility.

They’ve worked on the air conditioning plants and installed a new low loss transformer, with a voltage optimiser, and an energy storage system. Further projects, including a building management system, are also planned.

“We’ve invested £1m in all of these things; which when you compare to our turnover, reflects the level of the challenge we have got,” he says. “The amount of savings we can make almost make us positive on day one.

“While we have taken a risk, we are using less energy because of the voltage optimisation and the super low loss transformer. There are also potential revenues associated with storing energy, because the grid will actually pay you to shed load at certain times of day; and there is a trading market to export back.”

The knock-on effects and opportunities are being experienced by Co-op Power, too, as it begins to collect customers and offer a helping hand. Holden says that once cost and deliverability are covered, people are asking what else they can do to help.

“We get all the data now, and they’ll ask us to help with budgeting, financial reporting, and carbon reporting. We’ve just helped two thirds of our customers with the Energy Saving Opportunity Scheme, which assesses their estate every four years for areas to make savings.”

Challenges: hurdles in the system

It's not all bright light and sunshine though. These are examples of companies that have taken investment risks with a view they are doing the right thing, while saving money and helping solve a larger challenge. They are learning as they go and not all the answers are clear.

"Without assistance from the Growth Hub, we would never have had the confidence to go and invest the money," says Edgley. "We still don't know where the market is going, and feel like it's a gamble, but one we've had to take. It puts us in a better position commercially, potentially. The more efficient we can be the more competitive we can be," he says.

But he still feels pinched by the structure of the bill.

"You only have to look around in Manchester and see that not many data centres are being built these days – because it's so important to get that critical mass to make it pay off. People end up cutting corners to get them built and don't necessarily make them as energy efficient as they could be. There is going to be an undersupply of data centre space, unless it's going to be made more attractive to operators.

He adds: "We are investing all this money into battery storage and efficiency, for example. But there is one line on the bill that is for renewables obligation. We pay £10,000 a month towards the cost of renewable energy in the UK, even though we have got a 100 per cent renewable contract ourselves. I do think there needs to be some recognition of the investments we are making and compensation for the charges being made."

For Moore over in Stockport, having the ability to generate power on his roof is just one part of a jigsaw with some pieces still to find, especially when he wants to export energy back into the grid. Changes to the feed-in tariff have meant small suppliers are no longer subsidised to the level they once were for generation. The government argued that the cost of technology had been driven down to the point where it wasn't needed.

"How it works is pretty dreadful currently," he says. "We signed up for it in October 2019 and the district network operator has been really slow to grant us the right to do that.

"You're lucky if you get any money back by putting it back into the grid, right? In the old days, when solar panels were all the rage, you got paid lots and it's barely anything now. What we're trying to do is hook up with local companies as a consortium, so we've got enough to make it worthwhile."

Abel in Trafford Park would like to do the same thing, working with or exporting to neighbours, as he gets his head around what to do with the facility on the roof. One sticking point though, is the apparent limit on what APC Manchester can export back to the grid in the first place.

"There may be good technical reasons why we can only export part of what we produce, but it would be nice to export the full amount when we are able to. That may not be possible, which is when battery storage becomes useful," he says.

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“My hope is that most companies will have well established plans in the next five years. My fear is that won’t happen across the board.”

The future: where do we go from here?

Energy use is just one cost that a business incurs. It’s impact and where it comes from is a much bigger conversation. If companies are choosing to make changes for commercial reasons, they are also being influenced by their customers and the conscience of their leadership. Anecdotal evidence suggests this issue is moving up the agenda of investors too.

This means that changes made by one business exist in the context of a regional, national and global story. There are many players in the game, including the networks, energy companies, business groups and activists. There is a lot of information but from our conversations, it’s not always clear to people what to do and where to start.

“I think this is about having honest partners and companies to work with,” says Holden from Co-op Power. “There also needs to be some clarity on what’s required. You’ll get organisations come out tomorrow and say they are zero carbon, and that can’t always be right. It’s very easy to make a commitment to something, but you have got to have the ways and means to get them on that journey.

“Steve Murrells, our chief executive, says that a lot of this stuff is going to take a very different way of working. People need to come together and start sharing ways of doing things differently.”

For Quentin Abel, Donald Moore and Matt Edgley, their decisions have been supported by a strong sustainability team at the Business Growth Hub in Manchester. When we asked them who else they speak to about energy, climate and a desire to make a difference, it sounds like it’s early days for them, too.

“I don’t get to talk to people as much as I would like in that context,” says Abel, who is also an active member of the Institute of Directors, and acts as a spokesperson for the infrastructure and the environment. “But frankly, I will talk to anybody. I wouldn’t list everything that we have so far done and the things that we are thinking of doing next. I would normally demonstrate what a difference it makes having clear roof windows, for example.”

He adds: “People used to try and claim that smoking had health benefits, right? And take alcohol, for instance; people would literally say ‘one for the road’ as you were leaving the pub. Now, if somebody offered you a drink before you were setting off to drive somewhere, you’d think they were trying to murder you.

“There are still people who would think that energy and climate just isn’t going to be an issue. But the messages we can deliver should be good humoured and explain what companies can do and the huge benefits involved: for people’s wellbeing, sense of self, a more natural, lighter working space and real bottom-line savings as well.”

Holden concludes: “The reality is that the next ten years of carbon management are absolutely critical. What we do now will be the difference between success and failure. My hope is that most companies will have well established plans in the next five years. My fear is that won’t happen across the board.”