

THE ENERGY INDEPENDENCE PURSUIT

With businesses – not just blue chip companies – investing in self-generation, **Alex Bell** explores the impact it is having on the transition to net zero



Make no mistake, achieving net zero carbon emissions by 2050 is non-negotiable. It's legally binding. You could say the UK is under the heat pump.

Those playing a pivotal role in the transition goes way beyond just energy companies. Every registered business and each one of their employees will be critical to the outcome. According to Energy UK, harnessing the power and potential of renewable generation has worked well since 1990, with emissions cut by two thirds since. Now though, it is crunch time.

The government has committed to the decarbonisation of UK power by 2035 – leaving just 15 years to achieve the aforementioned next major milestone.

North West businesses with deep pockets started investing in self-generation – solar panels, heat pumps, CHP (combined heat and power) units and battery storage – several years ago. The aim: to avoid price increases and peak electricity costs while pushing to net zero.

Keith O'Connor is chief executive of renewable bioenergy and carbon reduction specialist Fleetsolve. He says the company's 24,500 sq ft Wirral-based HQ will be completely "off-grid" by September 2023.

Those hoping to accomplish something similar must invest, says O'Connor. "In our own building in Bromborough we immediately fitted electricity meters to every circuit, electric

doors, everything really and then measured and logged all consumption," he says. "We ended up changing everything to LED and later invested in PV [photovoltaics]. This only happened once we knew everything we needed to know. We will soon be putting a battery into the building, which will see us be off-grid by September meaning it will have taken us one year to become an off-grid business.

"What you can't do is rush into it without understanding the needs – particularly post-Covid as so many things have changed such as how many people will be working in buildings each week."

O'Connor, recognised in *Insider's* North West Green

Power List this spring, believes businesses are behind the curve when it comes to self-generation.

"The days of cheap energy are coming to an end," he says. "We had energy crises in the 1970s and 1990s and here we are again. It's cyclical.

"Not many businesses are totally off-grid. It's the larger companies who took the decision to do this five to seven years ago that are now reaping the benefits. Some businesses are in a bit of a struggle as their aspirations can be clouded by too much information. There's a level of confusion."

When it comes to the bigger picture, O'Connor says there's a ten-year gap between aspiration

and reality. "While new-builds can be purpose-built with self-generation in mind, gas infrastructure is still embedded in the ground and powering our main stock of buildings," he says. "Gas isn't going to be turned off overnight."

O'Connor says all major programmes carried out by Fleetsolve over the past five years have been collaborations. "We're all in this together," he adds. "What's important for businesses is to reduce the energy in use to the minimum amount possible, recycle heat where possible and then decide which is the best technology to move things forward."

'Perfect Sense'

It was the so-called Apple Campus 2 'spaceship' that caused a self-generation stir when it opened in California in 2018.

The building's daytime electricity provision came from 805,000 sq ft of solar installed on the roof, fuel cell storage and a nearby 130MW solar farm. Not every company can of course match Apple when it comes to green energy investment.

Gerard Hall is managing director of Green World Solutions in Tyldesley. His company has carried out several renewable energy projects for businesses across the UK.

Green World Solutions is currently working at the renowned Pinewood Studios – home of the James Bond film franchise – monitoring how much electricity, water and gas is used in the production of films and programmes.

Hall says: "In terms of self-generation, not many businesses are using on-site generation, not as many as there could or should be. This is typically down to the businesses themselves and their decision making and priorities.

"Other factors that affect renewable projects are the Local

District Network Operators and grid factors that prevent projects going ahead or allowed to be connected to the grid."

Hall says planning restraints can also bring forward difficulties. "We have had this a few times where the decisions are based on individual opinions and it prevented projects being approved," he adds.

Luke Rowson is head of sustainability at Perfect Sense Energy, one of the UK's longest established renewable energy installers. In May, the company acquired new premises close to its old headquarters in Leigh to accommodate growth. "We are installing just under 100KW of solar in our new premises, as well as installing several twin-head EV chargers for our fleet of Teslas," says Rowson.

"We view solar as a foundational technology. Every commercial building should have it installed in some way."

Perfect Sense recently installed 548 solar panels at the Leigh UK headquarters of Laltex Group. The solar PV system will provide Laltex with savings of more than £40,000 in year one.

Rowson says self-generation is becoming a unique selling point for some businesses. "There's quite a few businesses that have self-generation as an ambition," he adds. "It's an expensive journey and there are not many companies that can say cost doesn't matter. But it is becoming a USP for some.

"We've worked on sites that generate more than they use but they don't necessarily utilise all that generated power on site.

"The Greater Manchester region is unique though, in terms of the support available to help businesses make the right decisions. The community is also willing to share best practices. We are not where we could be in terms of running speed but the willingness and collaboration is there." ■

Greater Manchester's Rooftop Revolution



Forget the rainy city clichés, Greater Manchester basks in 1,400 hours of sunshine every year. That means free energy falling from the sky, which we need to take advantage of.

Solar photovoltaics (PV) has the potential to provide 834 GWh/yr in Greater Manchester, equivalent to 7.3% of the region's annual electricity consumption.

With, a science-based target to be carbon neutral by 2038, Greater Manchester must diversify its energy supply, increasing renewable energy generation. To achieve this business and commercial premises need to have a total of 5.5 km sq of solar panels, the equivalent of 770 football pitches.

Therefore, we're calling on businesses to join Bee Net Zero's Rooftop Revolution.

Right now, the business case for investing in solar couldn't be clearer. Every hour a business doesn't have solar PV installed; it could be losing money.

For non-domestic consumers, electricity bills have increased by around 60% in the past decade. As energy bills rise and the economy remains uncertain, businesses are realising renewable energy's potential to reduce costs and environmental impact.

As the fastest zero-carbon technology to deploy, investing in solar offers low-cost, low-carbon electricity from the day of installation, reducing annual electricity costs by 40%-80%.

Solar PV reduces dependence on the grid and the impact of fluctuating charges which are giving businesses headaches right now.

Solar panels are low maintenance and long-lasting, they can even add value to a property. As owners can sell excess energy back to the grid, they generate alternative revenue streams. It's a win-win.

The only downside is up-front cost; but with energy prices at an all-time high and green finance solutions available, the payback time has never been lower.

To make the most of solar, businesses must act now. That's why Bee Net Zero is launching its Rooftop Revolution.

Our partners including Green Economy (part of The Growth Company) and Electricity North West, are helping businesses understand the logistics of solar, establish the business case, and find trusted local suppliers.

By signposting companies to the extensive support available through the Bee Net Zero partnership, we're simplifying the process. On the journey to net zero, Greater Manchester businesses are not alone.

Steve Connor

Green Lead for Greater Manchester Business Board
Founder and Director Creative Concern

It's time to make your business shine
Visit www.beenetzero.co.uk/solar to learn more

