

A GUIDE TO

NET ZERO CARBON



Shawton
ENERGY

shawtonenergy.co.uk

Shawton Energy is a renewable energy solutions provider with the experience and expertise to plan, design, install and maintain a solar panel system that perfectly suits your energy consumption; helping you to reduce your electricity bills and to future-proof your business. Through our partnership and co-ownership model with Lazard Investments we can fully fund all projects.

Supporting Your Business on the path to achieving Net Zero Carbon

The concept of achieving Net Zero emissions is no longer just a throw away statement for businesses; it's imperative for the sustainability of our planet. The time to take action is now.

With extensive experience, we specialise in aiding businesses across various industries in the UK to reduce their carbon footprint and transition towards Net Zero emissions. Collaborating with you, we tailor renewable energy technology solutions to precisely match your needs, ensuring a tangible and significant contribution to your corporate social responsibility (CSR) objectives. Moreover, we guarantee compliance with regulations and strive to surpass them by implementing the most suitable solutions.

Our commitment extends beyond implementation; we prioritise ongoing support, maintenance, and longevity in our business strategy. Partnering with our experienced onsite specialists, we offer continuous support throughout the lifespan of your system, ensuring continued benefits year after year.



LAZARD
ASSET MANAGEMENT

Supporting Your Business on the path to achieving Net Zero Carbon

In the journey towards achieving carbon neutrality and creating Net Zero buildings, businesses in the UK have two pathways to consider - balancing carbon emissions or reducing them altogether.

Balancing carbon emissions involves offsetting the environmental impact by compensating for CO₂ elsewhere, thus contributing to the goal of achieving Net Zero by 2050. However, this approach merely masks the underlying environmental issue, as it doesn't truly eliminate emissions.

A more effective strategy entails transforming the energy sources and methods utilised by industries, aiming to completely eradicate carbon emissions. This can be realised through the adoption of renewable energy sources such as solar power, battery storage, and electric vehicle charging. By embracing these sustainable alternatives, businesses can actively reduce their carbon footprint and move closer to the ultimate objective of real zero emissions.



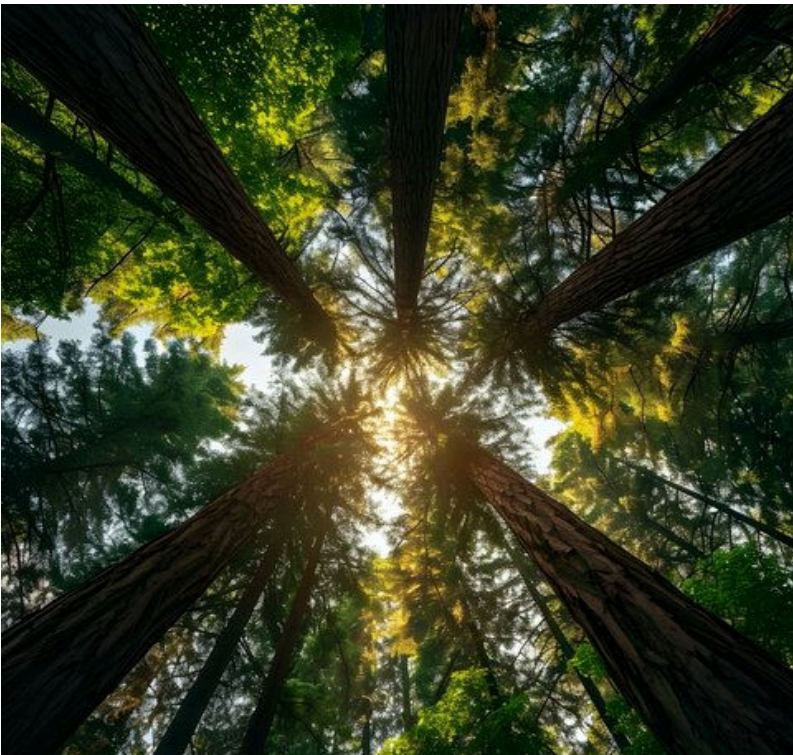
Why should my business go Net Zero Carbon?

In the face of growing governmental and societal pressure for environmentally responsible practices, "going green" has evolved from a choice to a necessity for businesses in the UK.

It's now pivotal for distinguishing your brand in the market and maintaining competitiveness. While reducing carbon emissions is a commendable step towards lessening your company's environmental footprint, the benefits of embracing sustainability are multifaceted.

Striving for carbon neutrality enables your business to achieve measurable corporate social responsibility (CSR) targets, including reductions in CO₂ emissions and achieving energy grid independence. Moreover, showcasing your commitment to minimizing environmental impact has emerged as a significant competitive advantage in today's business landscape.

Demonstrating how your company meets sustainability objectives can often be the decisive factor in winning over clients or customers.



What impact will Net Zero have on you as a business?

Increasing Government Regulation

For businesses, the impacts of climate change itself, as well as societal responses to the climate emergency, have become impossible to ignore. The UK government's response has been to set a target of achieving net zero emissions by 2050. According to The Carbon Trust, small and medium-sized enterprises (SMEs) with fewer than 250 employees contribute nearly 20% of the UK's total carbon emissions. Therefore, SMEs will play a crucial role in meeting the government's net zero target.

Changing consumer behaviour

Consumer behavior is also evolving rapidly. Customers are increasingly demanding that businesses reduce their environmental impact. Merely offering quality products and services is no longer enough; consumers want transparency regarding the product's origins and the manufacturing process's environmental impact. They are actively seeking out green products that are both safer to use and environmentally friendly.

Scope 3 Emissions

Leading UK businesses are already committing to reducing greenhouse gas emissions, with many setting targets to achieve net-zero emissions in their supply chains (Scope 3 emissions). These commitments are influencing procurement processes, with purchasers expecting suppliers to align with their climate ambitions.

Change in the Banking Industry

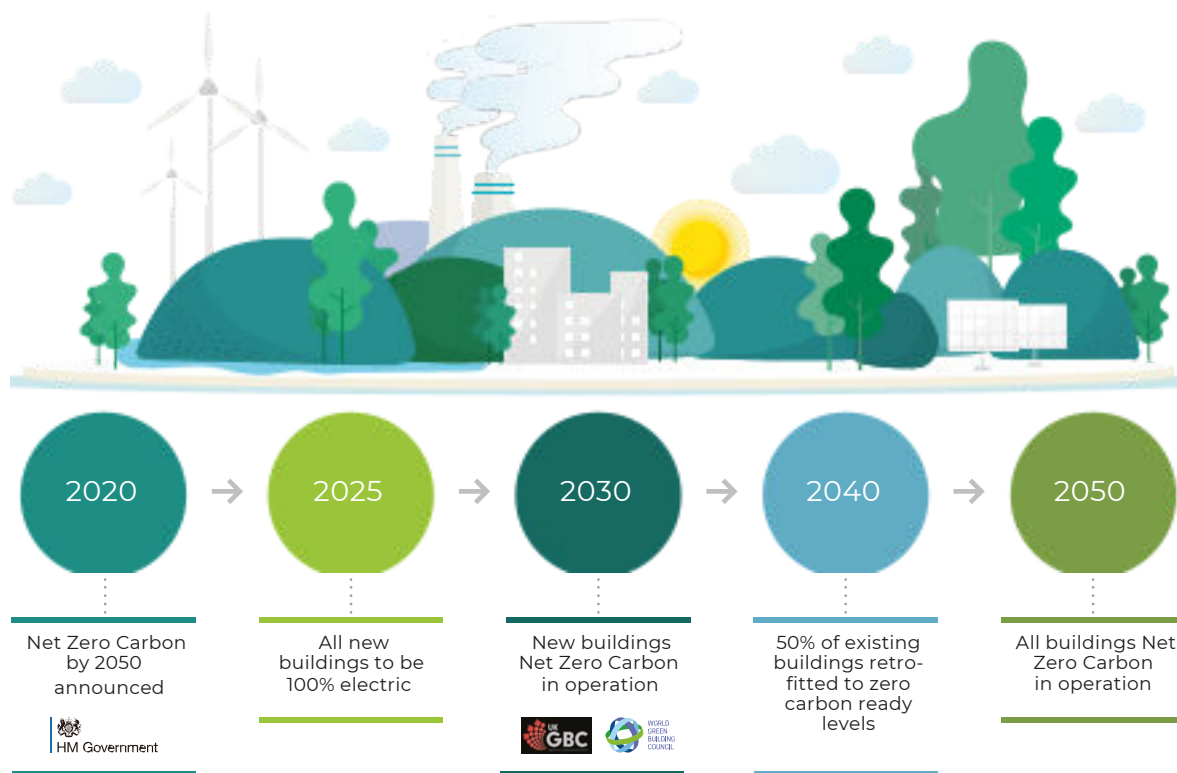
Financial institutions are also playing a role, committing to refrain from financing activities that harm the environment. This commitment will affect businesses' access to trade finance and insurance products.

Employees

Furthermore, research suggests that employees are more satisfied working for companies perceived as environmentally friendly, regardless of financial performance. As such, fostering a green reputation could enhance employee satisfaction and retention, even in times of economic uncertainty.



ACHIEVING GOVERNMENT TARGETS

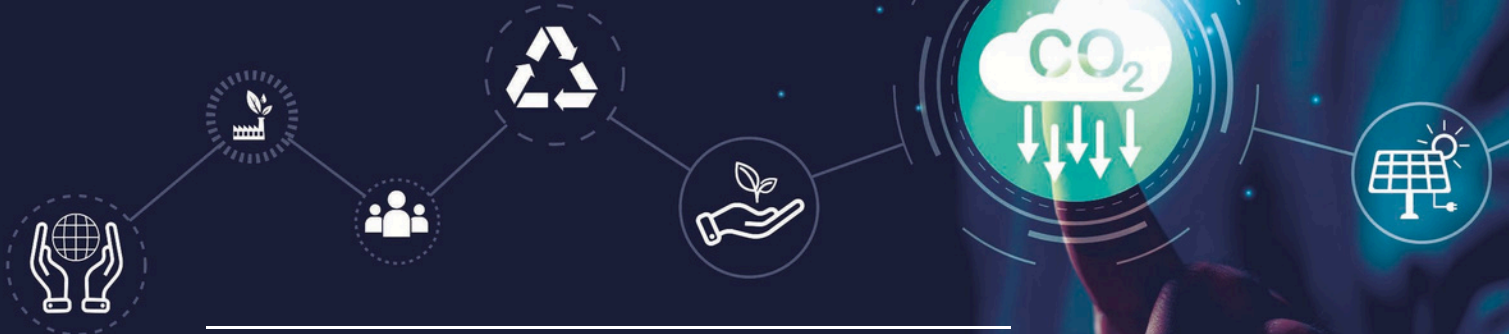


In May 2019, the Committee on Climate Change recommended that the UK should aim to be Net Zero on all greenhouse gases by 2050.

Businesses must commit to change and become part of the solution, and utilising renewable energy is one of the most innovative ways to do this. The built environment contributes around 40% of the UK's total carbon footprint. With around 80% of 2050's buildings already built, de-carbonising our existing buildings needs to be a strong focus.

Heating alone results in 10% of the nation's carbon footprint, so improving efficiency and mitigating direct emissions from fossil fuels is a priority. The best people will want to work for sustainably focused businesses. To attract the brightest future workforce, employers must demonstrate that they care about our environment.

BENEFITS OF DECARBONISING YOUR BUSINESS WITH SOLAR PV



- ✓ Compliance with government targets and legislation
- ✓ Savings of up to 30% on electricity bills
- ✓ Long-term efficiencies
- ✓ Deliver on corporate and sustainability objectives
- ✓ Satisfaction of making an ethical contribution
- ✓ Increased brand engagement and loyalty
- ✓ Positive differentiation from competitors
- ✓ Increase your energy security – less reliance on the grid
- ✓ Improved bottom line and increased profitability

Determining your route to carbon Net Zero may seem insurmountable, as it will be entirely unique to your business. Our approach simplifies the process into four stages. However large your carbon footprint, we will be with you every step of the way. We'll find, implement and continuously improve a bespoke combination of innovative, practical and cost-effective technologies.

We deliver the entire project life cycle – from feasibility, all the way through to operations and maintenance.

TAKING REAL ACTION TOWARDS A WORLD THAT RUNS ENTIRELY ON GREEN ENERGY

Shawton Energy is more than just an energy solutions provider. We are experienced engineers passionate about delivering a portfolio of practical, green renewable solutions. We develop, design, construct, operate and maintain high-performing green energy projects with a results-based approach, which retains focus on tangible benefits that are both visible and measurable. A comprehensive blend of practical site experience, technical knowledge, engineering and design management, expertise and project leadership wisdom drives our solutions. As a systems integrator, we specialise in bringing renewable subsystems together, ensuring they function as an optimal whole. And through our partnership and co-ownership model with Lazard Investments we can fully fund all projects.



Solar PV



EVC
Charging



Battery



Energy
Efficiency



Onsite
Energy



Heat Pumps

CASE STUDY UNIROYAL



Shawton Energy teamed up with Uniroyal Global Limited to help them achieve their sustainability goals. We installed a 1MW system at their headquarters in Earby, Uniroyal which will save them 279,375 kg of carbon emissions every year.

Through a collaborative approach we design, built, installed a solar project and will continue to operate and maintain that project for 25 years through our fully funded solution where they buy the energy produced from the solar panels at a much reduced price than what they would get from the grid and ensuring their carbon footprint is greatly reduced helping them on their Net Zero journey.



PROJECTED FIGURES



Installation
time:
12 weeks



Annual energy
generation:
931,614
kWh



Carbon saved
annually:
279,375
kg



Array
output:
825
kWp

CASE STUDY BURNLEY COLLEGE



Burnley
College



Shawton Energy recently helped Burnley College improve its carbon footprint and future sustainability by installing Solar PV systems on its teaching block and state-of-the-art sports facility.

Working alongside our trusted installation partner Ashcroft Electrical Services, we installed a rooftop Solar PV system across different buildings and a new technology suite at the further education establishment in Lancashire. In the technology suite, we installed products from global leader SolarEdge, which will allow students to learn more about Solar PV and renewable energy after incorporating these technologies into the future education syllabus.

THE PROCESS

Our installation plan had to consider that this is an educational facility and professional training and recovery centre which students had to have full access to. The installation was carried out during term time, so health and safety were paramount. Taking just over four weeks, the works carried out had minimal disruption to the everyday use of the teaching block and sports facility.

Shawton Energy funded the project through a 25-year PPA agreement, which means we are responsible for the operation and management of the Solar PV system for the project's lifetime.

Burnley College will buy the electricity generated from the solar modules on their rooftop at a fixed rate, which is a saving of over 25% of current grid electricity prices (note – October 2021 price).

THE RESULT

This project is a prime example of how a business can maximise solar energy generation and provide cost-effective maintenance and operation of solar arrays.

Comprising three separate solar arrays, the combined 736-module system is forecast to reduce the college's carbon emissions by 48 tonnes per year and cut its annual electricity bill in excess of £80,000 based on current energy prices. Total savings over the next ten years could exceed £1.2m when energy price inflation is taken into account.

Now, Burnley College can enjoy dramatically lower electricity bills and generate its own clean, green energy, whilst reducing its carbon footprint and also showing its commitment to sustainability. Just on the sports facility alone, its forecast that Burnley College will achieve significant savings in excess of £5.5m on its electricity bills over the course of the PPA agreement.

“This system will play a considerable part in helping the college on its decarbonisation journey. Not only will it save us money by reducing our energy bills, but the development of the technology suite will help our students to learn about the capture, storage and transfer of renewable energy in real time”.

KEY FACTS



Installation
time:

Four weeks



Carbon saved
annually:

48,780kg



Average annual
reduction in
electricity bill:

£220,000

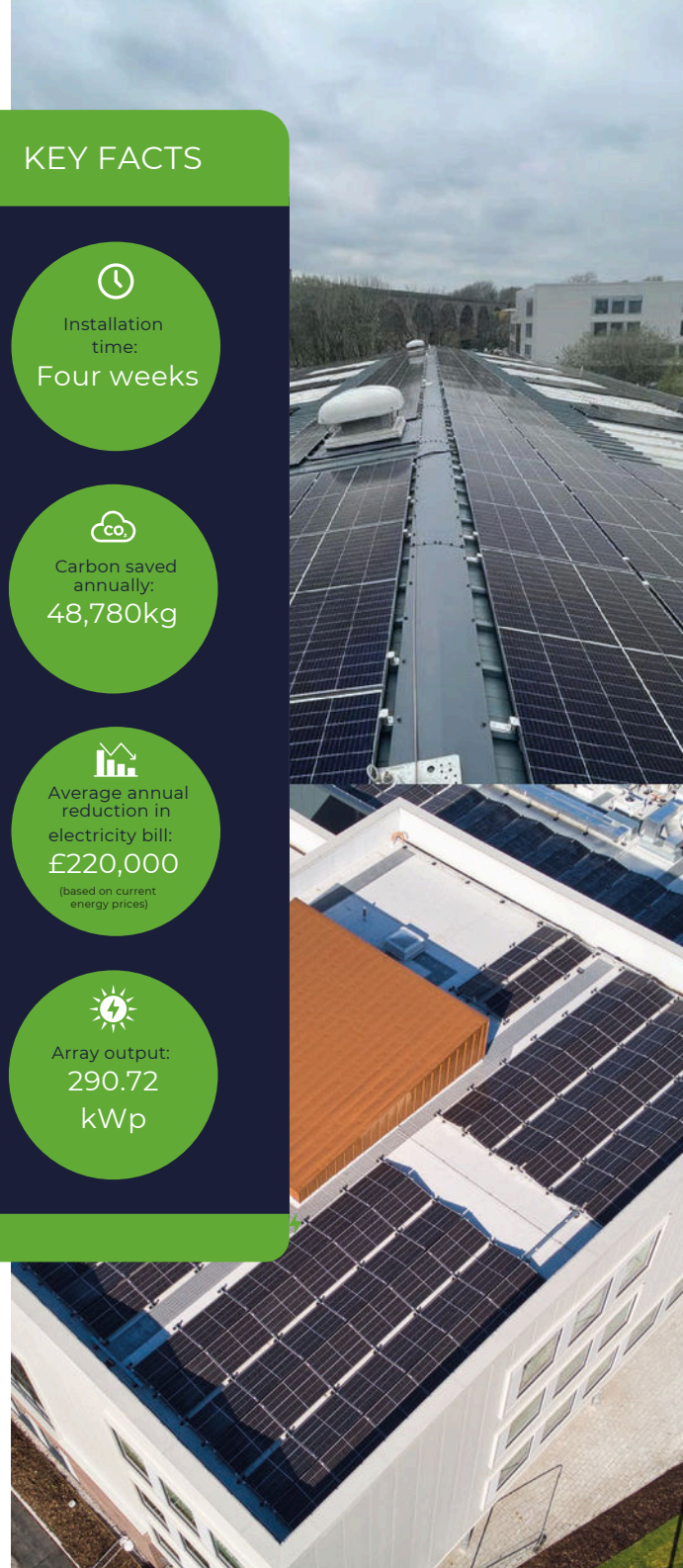
(based on current
energy prices)



Array output:

290.72

kWp



CASE STUDY DAKOTA HOTELS



As part of their commitment to sustainability, Dakota Hotels wanted to install solar PV systems on their rooftops at multiple hotel locations, to provide their buildings with renewable energy.

The business approached Shawton Energy to become part of their decarbonisation journey, by installing solar at their Eurocentral Hotel in Motherwell. We then went on to install another two systems at their Hotels in Edinburgh and Manchester.

Having already installed electric charging points in 2021 when acting as the sole hub for all the e-buses used throughout the COP26 summit in nearby Glasgow, Dakota wanted to do all it could to become more sustainable.

THE PROCESS

In a bid to reduce the hotel's carbon footprint, we worked closely with our trusted installation partner, Ashcroft Electrical Services, throughout each of the installations. We installed high-quality SolarEdge inverters using optimised systems with Longi 400w panels and Van Der Valk trapezoidal and flat roof mounting systems.

As Hotels are active environments with guests and staff requiring uninterrupted access and services, we had to take this into consideration during the entire process. We created site compounds at the very end of each hotel car park, which were as far away as possible from the property entrances and the main guest parking. All materials were also taken onto the roofs by crane to ensure that there would be no disruptions to the guests at any time.

DOUBLE TREE HILTON

Following the project completion Double Tree Hilton saw the project and approached us to undertake projects for them.

They can expect to save 16,640 kg of carbon emissions every year at each of their sites

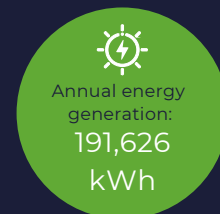


THE RESULT

Hotel Manager of Dakota Eurocentral Hotel, John Dickson said,

“Working within the travel and tourism sector provides both a responsibility and an opportunity to be a catalyst for change within the industry. We try our best inside the hotel to be as sustainable as possible, so it makes sense to try our best on the outside with the installation of the new solar-panelled roof. We are very excited about our future aspirations to become more sustainable. This is simply the beginning of our efforts to pave a new dawn within the sector across Scotland and beyond.”

KEY FACTS



START-TO-FINISH LONG-TERM SOLUTIONS

Shawton Energy is here to understand your needs, share what we know and partner with you throughout. What may seem like an overwhelming challenge can be broken down into strategic and manageable pathways for transformation that start with goal setting and developing a step-by-step decarbonisation roadmap.

We streamline the process from beginning to end, coordinating all the necessary people, permissions and processes to ensure no disruption to your business. Long-term, our monitoring and maintenance systems will empower you with decision-making information to keep your operations at optimal energy performance.

A COMPLEX JOURNEY IN SIMPLE STEPS

Listening and Understanding

Meetings and interviews between our strategic team and your key stakeholders provide a thorough qualitative picture of issues facing your business

Data: Establishing The Base Line

Measuring and quantitative data collection, facilitating the analysis that will form the basis of your bespoke energy solutions plan

Solution Implementation

Buying and implementing appropriate renewable technologies and optimising your building systems to drive efficiencies

Continued Partnership

An ongoing supportive relationship to monitor and continuously improve energy performance, extending towards Scope 3 (indirect) emissions

Ready to futureproof your business, reduce energy bills and demonstrate your commitment to the environment?

Contact our team today



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