

# **NAVIGATING THE NET ZERO ENERGY TRANSITION AND WHAT IT MEANS FOR YOUR BUSINESS**

**PART 3: LEAD THE WAY**



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## SECTION 1

# WHAT COULD A SUSTAINABLE ENERGY FUTURE LOOK LIKE?

With record low-carbon energy generation in the UK, the idea of a system based around renewables is becoming ever more realistic. And, as sustainable technologies become increasingly accessible, more organisations are considering EVs, solar panels, battery storage and heat pumps as part of their energy strategy.

The question many businesses are facing now is how to bring it all together. How can companies leverage a better understanding of their energy usage to inform a more holistic approach? And how can they collaborate with suppliers and employees to implement changes?

The first two guides in this series explored what the energy transition is and how businesses can take meaningful control of energy management and costs right now. This third guide aims to look ahead to our energy future. It examines new technologies, how they will enable a sustainable energy system and what businesses can do to prepare for the future.



## BRYT ENERGY'S VISION

A net zero future, in which consumers are empowered to actively engage with, support and benefit from a sustainable energy system, playing our part in delivering Statkraft's global vision to renew the way the world is powered.



## **DISCOVER NEW LOW-CARBON TECHNOLOGIES**

One of the main factors in the Net Zero energy future becoming achievable has been the pace of arrival of new technologies. These technologies both support, and enable the energy management and flexibility that is essential for helping to achieve a sustainable electricity system and in turn reduce emissions and reach net zero.

We've listed a few of these technologies below, including electric vehicles (EV), photovoltaic (PV) solar, storage, heat pumps and green hydrogen. But while embracing new possibilities, it's also important not to forget what you already have - you can also optimise your existing technologies such as HVAC and refrigeration. This means you can get started and support a low-carbon energy system with your existing assets, improving your operations to identify the best areas to elevate with new technology and get a better return - whether that's efficiencies in electricity consumption or financial payback.

## **WHAT TECHNOLOGIES ARE AVAILABLE?**

### **STORAGE TECHNOLOGIES**

Investing in energy storage can bring cost savings, improve resilience and bring greater sustainability to your business. Batteries can store both self-generated electricity as well as intelligently collect energy from the grid at times when it's at its cheapest or lowest carbon intensity, helping you avoid costly peak charges and enable a more sustainable system. Once stored, you can choose whether to use or continue to store your electricity as part of a wider energy strategy.



## BUSINESS BENEFITS:

- Reduce costs - with greater control over your consumption, you can decide the best times to use, buy and store energy
- Access new revenue streams by offering services to the grid
- Future proof your operations - as well as preparing you for the energy transition, storage technologies increase your business resilience by acting as a backup during power interruptions, meaning less downtime
- Reduce emissions - prevent reliance on diesel-powered backup generation and maximise a renewable electricity supply.
- Practice Good Grid Citizenship - use stored energy to support periods of high grid demand, reducing the need for fossil fuel generation and supporting a net zero system



### Consider where storage technologies make sense:

- Where power capacity is limiting operations
- Support EV charging - prevent the need for costly infrastructure upgrades
- When self-generating electricity
- Being part of the solution towards a decarbonised future

## PHOTOVOLTAICS (PV) SOLAR

With the electrification of heat and transport, it is expected that electricity demand will increase. On-site renewable generation such as solar PV can help support this, whilst also helping businesses avoid increasing energy costs.

Solar panels can be a simple way for businesses to reduce emissions, often using space (such as rooftops) that have no other purpose. And their effectiveness can be boosted when used within a wider energy strategy, including other types of technology such as battery storage. Businesses can use stored solar energy while the sun isn't shining, reducing costs and demand on the grid. Stored energy can also be sold back to the grid at a time when others need it more, providing a source of revenue whilst supporting a net zero system.

## BUSINESS BENEFITS:

- Generate your own electricity and save money with lower energy costs
- Reduce reliance on the grid and therefore the impact of high energy prices
- Enjoy a greater return on investment - with most businesses using energy during the day, firms could see a greater return on investment for PV than other users such as households



## ELECTRIC VEHICLES

EV and EV charging solutions are already being well adopted by businesses. For some larger firms, commitments have been made to switch their entire company car fleets to electric, whereas other companies have installed chargers in workplaces or participated in salary sacrifice schemes to enable employees to purchase EVs more easily.



- **127 firms have made a commitment to switch their fleets to EVs and/or install charging for staff and customers by 2030, through the EV100 programme<sup>1</sup>**
- **Businesses were estimated to be investing £13.6 billion last year in purchasing EVs and setting up the charging and energy infrastructure needed - an increase of £2 billion on the previous 12 months<sup>2</sup>**
- **In a survey of 200 UK businesses sector-wide, 62% said they expected to operate a fully electric fleet in the next four years<sup>2</sup>**

In order to make the most of EV and EV charging solutions, each business should consider the strategy behind the technologies according to its own schedules and requirements - whether you're scheduling EV fleets, or planning employee or public charging.

### **BUSINESS BENEFITS:**

- With the right renewable electricity supply, converting a business fleet to electric can immediately reduce its carbon footprint.
- Having an on-site EV charge point can really boost footfall and how long customers stay if you run a venue such as a shopping or entertainment complex.
- EV charging facilities can boost employee retention.



<sup>1</sup> <https://www.theclimategroup.org/ev100-members>

<sup>2</sup> <https://www.current-news.co.uk/news/businesses-to-invest-13-6bn-in-evs-and-charging-infrastructure>

## EV EXPERTISE

A considered energy strategy can help you make the most of your EV investment. Also part of the Statkraft Group, Mer is a European EV charging company. In the UK, they offer public EV charging infrastructure, along with workplace and fleet charging for businesses.

**Simon Tate, Sales Director, Mer said:** “EV fleets and charging infrastructure have a critical role in the decarbonisation of transport. With a solid strategy in place, your fleet depot or workplace can provide charging solutions to employees and other stakeholders that is quicker, more convenient and more affordable than relying on the public charging network.”



## HEAT PUMPS

It is estimated that non-domestic buildings are responsible for nearly 1/5 of the UK's carbon emissions<sup>3</sup> - with heating commercial buildings forming part of that. Air source heat pumps and ground source heat pumps, which can be installed on the outside of commercial buildings, can help with the electrification of heat. They extract heat from air or water and distribute it as central heating or hot water, reducing emissions and avoiding expensive energy costs.

Heat pumps are still a very new technology. They may not be suitable for all types of buildings and are tricky to retrofit - but funding is available in the UK and upgrading is being encouraged.

### BUSINESS BENEFITS:

- Lower carbon emissions - especially if the heat pump is powered by renewable electricity
- Reduced energy usage and lower running costs



<sup>3</sup> <https://advenco.co/the-future-of-fossil-fuels-in-uk-commercial-buildings/>

## GREEN HYDROGEN

This sustainable alternative to fossil fuel gas will play a key role in decarbonising transport, such as HGVs and shipping, as well as heat - which accounts for 37% of total UK carbon emissions<sup>4</sup>.

The production of green hydrogen will have more of an effect at an industrial level, but with new hydrogen production plants in the UK able to produce the fuel sustainably<sup>5</sup>, a future wide-spread use of green hydrogen could give businesses a huge environmental boost. Other benefits include its versatility - hydrogen can be used as a fuel, to generate heat and electricity, and as a raw material in industrial processes and products.

We see green hydrogen as a vital part of the future energy system with huge potential. In fact, our parent company Statkraft has been working on solutions for a several years and has a number of projects in the pipeline.

## BRINGING IT ALL TOGETHER

Optimisation solutions can help bring energy assets (both new technology and existing operations) together so that businesses can be more intelligent and sustainable with their electricity usage. These technologies are designed to be digital and work together, and there are specialist firms that can help set them

up so your business can start reaping the benefits from them immediately.

Bryt Energy's Optimisation product uses integrating technologies to harmonise the electricity consumption of operations such as industrial machinery, refrigeration or HVAC with periods of high renewable generation and system needs. This enables businesses to be rewarded for supporting the clean energy transition and to unlock value from their operations – all without impacting their business activities. We work with partners who in turn collaborate with solar and storage installers, to put these smart systems in place for businesses and communities.



<sup>4</sup> <https://es.catapult.org.uk/guide/decarbonisation-heat/>

<sup>5</sup> <https://www.statkraft.co.uk/newsroom/2022/statkraft-announces-first-uk-green-hydrogen-project-pembrokeshire/>

**Stuart Taylor, Head of Energy Transition at Bryt Energy said:** “New technologies don’t just provide useful prospects, but also exciting ones. We can imagine a world with electric vehicles, heat pumps, on-site generation becoming the norm. Looking further ahead, we’ll see technologies enable things like virtual solar power plants where power can be self-generated and flexibly stored and consumed”.



## SECTION 2

# HOW DO WE GET TO A SUSTAINABLE ENERGY FUTURE?

## WHAT BUSINESSES CAN DO NOW

The most difficult part of a major project like the energy transition is getting started. Businesses may be struggling to prioritise the move while more immediate challenges such as rising energy costs are present.

But even beyond that, there's an inherent uncertainty - how much will it cost? Do I need to rehire or retrain my staff? What if we prefer our traditional systems? Where do I begin and how can I bring so many different areas together? These are understandable concerns - but the answer is, it is possible to take action with the equipment and workforce you already have.

Identifying those that need to be involved from within your own organisation and understanding how they can leverage their position to implement change is key, and recent research from the Institute of Workplace and Facilities Management shows that Facilities Managers have a critical role to play in helping businesses embrace the energy transition<sup>6</sup>.

<sup>6</sup> <https://www.iwfm.org.uk/resource/navigating-a-changing-energy-landscape-in-the-transition-to-net-zero.html>



# 1. EMBRACE LEADERSHIP AND A PIONEERING MENTALITY

Businesses can choose to lead by example in the energy transition. Within a competitive market, “going first” can feel like a risk, however someone has to take the first step, and we believe peers will learn from those endeavours and that it is important to do so. First movers have a responsibility to shout about the benefits of what they are doing - businesses need to be brave and show their actions are both doable and positive to encourage others to follow.

By supporting other businesses in sharing information, we can all learn from each other. This can pave the way for innovation and better ways of working, which can then again be shared, helping everyone achieve a more sustainable future, faster.

**Bryt Energy’s Sales and Marketing Director, David Taylor, explains:** “With any movement, that first mover is important, but the people following in behind at second or third position are equally as important, because they buy into the vision and enable you to gather momentum. This won’t happen overnight, and you need different things that incentivise those in and behind the movement. It’s important to figure out who you need at what time - who to attract and why.”



## ENCOURAGING MORE VISIBILITY AT A LOCAL LEVEL

A movement that requires everyone to get on board needs to be as visible as possible to encourage others to follow, and to share any knowledge gained.

By doing this, what may seem daunting can become better understood and part of the new normal.

**Stuart Taylor, Head of Energy Transition at Bryt Energy, said:** “An important element of working for the greater good is encouraging more visible signs of the transition at a local level. With solar farms, for example, panels are visible to people to see and learn where their electricity is coming from, and the community can take some pride and ownership in it. Communities with wind farms, for example, benefit from not just supporting the transition but in other ways - jobs, visitors. It can be anything that constantly reinforces the message - EV charging points, for example, the more people see them, the more people think positively about infrastructure being there and making a positive move for themselves.”

## 2. COLLABORATE WHEREVER POSSIBLE

Reaching a sustainable energy future means collaboration must become the norm - within your own organisation, with suppliers and with third parties. This is not something any of us can achieve alone - our value chains are inextricably linked and we must work together to make a net zero future our reality.

Businesses should seek to build relationships and trust with suppliers and their partners. This enables both sides to make sure energy efficiency opportunities are being maximised. For example, by letting your supplier know of any expected changes to consumption, sharing knowledge with peers so they can adopt best practices, or being open with your customers about energy usage and progress on sustainability goals.

On the technology side, it's important to have a holistic view and ensure everything is working together. We've found through our work with organisations such as the Institute of Workplace Facilities Management (IWFM)

that it's important to have a joined-up approach in order to maximise energy and cost savings. This is where optimisation solutions can be used to bring everything together, enabling you to use technology and assets you've already got in place, as well as to make the most of new devices.

We'll also need to adopt a wider-citizen approach when considering energy usage.

By helping to balance supply and demand and using the electricity network responsibly, businesses can contribute to it's reliable and affordable operation. This will mean becoming engaged participants rather than simply taking what we want when we want it.

### COLLABORATION ALSO HAS OTHER BENEFITS:

**Learnings:** Businesses should not be expected to reveal confidential information to competitors, but it is possible to share enough that people and peers can learn from what's working and what isn't. This will help accelerate the transition industry-wide.

**Accessing data:** The idea of open data means peers and other businesses have access to information that will help enable the transition - this could include the findings of a similar company's emissions reporting or energy transformation journey.

**Finding a better, smarter way:** Operating as a closer community when it comes to energy, businesses can benefit from using each other's technology and data by seeing what works and what doesn't.

**We recommend your energy strategy should encompass input from:**

- **Landlord/building management**
- **Facilities management**
- **Energy managers**
- **Procurement**
- **Sustainability**
- **Finance**





# ACCELERATE YOUR ENERGY TRANSITION, TODAY

Being part of the energy transition and adopting low-carbon technologies is possible no matter the size of your business. With a thought-out energy strategy, collaborating technology and relationships, and open communication, we can all do our bit to get to net zero.

This means that a better approach to energy really is within our collective grasp and it's up to all of us to make it a reality. Our vision for the energy sector is a sustainable future in which consumers are empowered to actively engage with, support and benefit from a sustainable energy system. Why not make sure your business is part of the change?

To talk to our experts about how we could help your business in the net zero energy transition, call us on **0330 053 8620** or email **[heretohelp@brytenenergy.co.uk](mailto:heretohelp@brytenenergy.co.uk)**.