

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

PART 1: WHAT YOU NEED TO KNOW



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EMBRACING A NET ZERO ENERGY TRANSITION



The concept of an energy transition is not a recent one. An awareness of the need to move from fossil fuels to renewable alternatives has been around for a while, but real understanding of the necessity and scope of the change has only gathered pace over the last few years.

Many businesses have begun to embrace their role in a low carbon future with renewable commitments, Net Zero targets and the use of low carbon technologies. However, in order to support this transition and achieve the UK's target of reaching Net Zero carbon emissions by 2050, more businesses will need to get involved. After all, **businesses account for 18% of the UK's overall carbon emissions**¹. By actively engaging with the grid, becoming smarter and more responsible with their energy usage in line with the system's needs, they can support wider decarbonisation.

¹<https://www.gov.uk/government/statistics/provisional-uk-greenhouse-gas-emissions-national-statistics-2020>





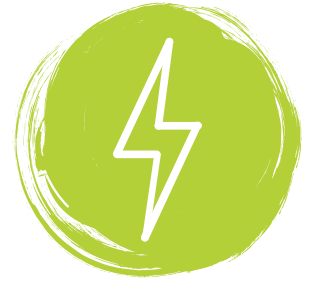
Whilst this might seem daunting, it's something that is not only achievable but can also offer financial, social and environmental benefits to businesses prepared to get involved early. At Bryt Energy, we believe that the energy transition will be filled with new opportunities for those prepared to embrace it and we're on hand to help you navigate it.

That's why we've listed 4 key things about the energy transition that we believe every business needs to know:

OUR VISION FOR THE ENERGY SECTOR IS 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.



1. A CHANGING ENERGY SYSTEM



So, what is the energy transition? It's a question that conjures up many different answers, but in a sentence, **it's removing our dependency on fossil fuels across heating, transport, and energy use in buildings and industry, and moving towards a Net Zero emissions future powered by low carbon electricity sources.**

Undeniably, we will feel catastrophic impacts from climate change if we don't take action to reduce our emissions. Its effects are already visible in climate change trends across the globe, such as more frequent extreme weather events, loss of biodiversity and rising sea levels. However, through strong and sustained reductions in greenhouse gas emissions, we can limit further impact. With the UK's Net Zero target set for 2050, emissions reduction is increasingly crucial for businesses and organisations if we all wish to meet this target.

To achieve these carbon emissions reductions, the energy industry is moving away from fossil fuels, such as coal and gas, towards renewable sources such as wind and solar. But this

brings challenges - we are no longer dealing with a linear, generator-to-consumer model built around planned and controllable fossil fuel-powered generation.

As our generators become 'greener', they also become more decentralised, more intermittent and less controllable. And, with the decarbonisation and electrification of sectors such as transport and heat, the shape, volume and variability of electricity demand will grow significantly, putting extra pressure on the system. As a result, balancing the grid will become increasingly complex, meaning that system operators will become more reliant on **flexibility** to ensure demand can match generation.



“CLIMATE CHANGE IS ONE OF THE BIGGEST CHALLENGES WE ARE FACING. RENEWABLE ENERGY ISN'T PART OF THE SOLUTION, IT IS THE SOLUTION.”



To meet demand and ensure a resilient supply, businesses will need to be more involved in the energy system. This will require **smarter consumption that is more in-line with system needs**. In fact, The Carbon Trust suggest that in order to operate an efficient Net Zero energy system by 2050, 11GW of flexible demand will be needed from commercial users, 12GW from smart assets, and 48GW from electric vehicles².

By understanding, engaging and being mindful with their energy use, businesses can help provide some of this flexibility. In return, they could see financial rewards and avoid potential energy cost increases and fees.

WHAT IS FLEXIBILITY?

Flexibility is the ability to synchronise our electricity usage to the needs of the system, helping to support a grid powered by renewables. In a Net Zero system, responsible consumption isn't just about using less energy; it's also about when you use it.



²<https://publications.carbontrust.com/flex-gb/analysis/>

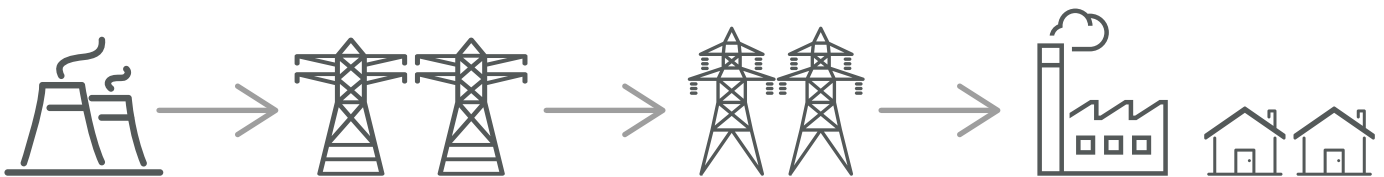
THE MOVE TO RENEWABLES



As we move away from fossil fuels, we'll move from a linear, generator-to-consumer model built around planned and controllable fossil fuel-powered generation to a more decentralised, more intermittent and less controllable one.

LINEAR SYSTEM

One way electricity generation to consumption.



DECENTRALISED ECOSYSTEM

In a decentralised energy system, we are part of an ecosystem, where we use behaviour and technology to optimise usage.



2. GETTING STARTED IS EASIER THAN YOU THINK

One of the main challenges businesses face is **knowing where to start**, but the first steps of your journey don't need to involve a significant capital outlay or retraining programme - **you may already have all you need**.

By beginning with a good business energy strategy, you can get a holistic view of your business operations and energy assets, helping you to identify the time and resources you will need for your transition journey.

Engaging all your partners, suppliers and stakeholders in your operations, and working in collaboration with them can help create a cohesive approach to achieving your Net Zero goals. With a plan in place and your community onboard, you can share your learnings and successes as you all move forwards.

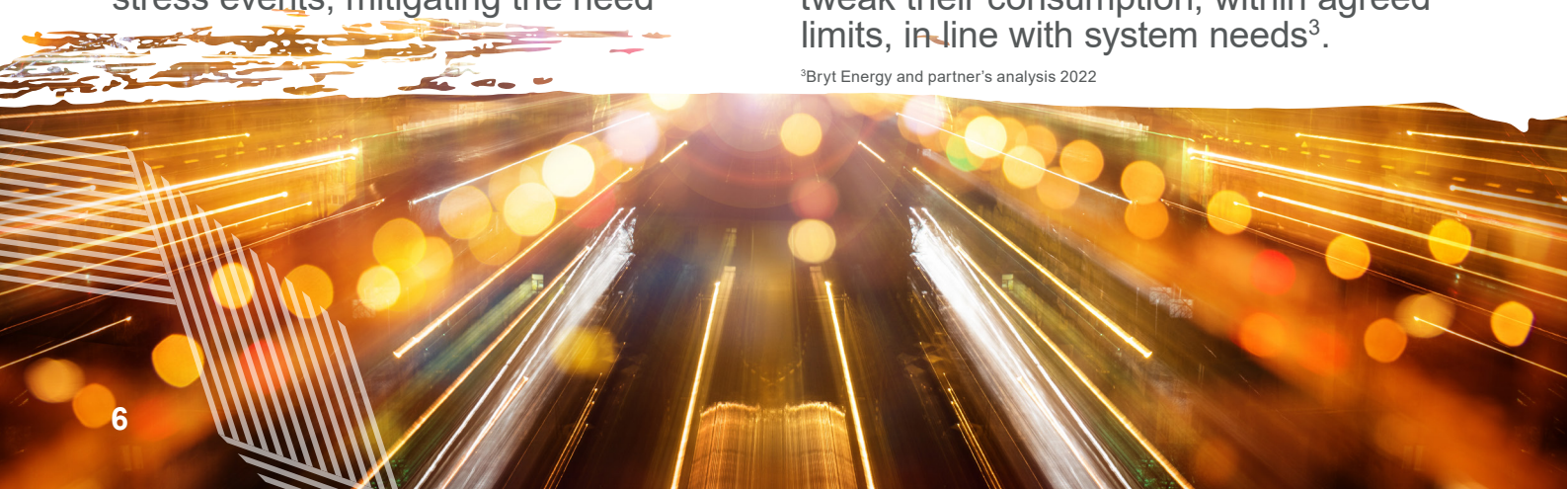
PIONEERING OPTIMISATIONS SOLUTIONS TO GET STARTED WITH TODAY

For those looking to be more engaged with the grid, there are solutions available that enable businesses to optimise their energy consumption further. These can integrate with existing energy assets, such as refrigeration, HVAC (Heating, Ventilation, and Air Conditioning), building management systems and industrial process management without disrupting operations - allowing businesses to be more responsive to system needs and support a Net Zero future. In doing so, we can also help to avoid network stress events, mitigating the need

for expensive and time-consuming infrastructure upgrades.

By taking greater control over your electricity, you can future-proof your energy strategy amidst an ever-changing market, whilst maximising the value of your contract. For businesses prepared to participate, there are financial benefits to be gained, from reducing costs to accessing new revenue streams. In fact, at Bryt Energy, our customers have offset up to 20% of their energy spend by allowing us to tweak their consumption, within agreed limits, in-line with system needs³.

³Bryt Energy and partner's analysis 2022



3. PLAY YOUR PART AS A GOOD GRID CITIZEN

Whilst the immediate business benefits may be primarily financial, long-term, changing our approach to electricity will also benefit our society as a whole.

In a Net Zero future, balancing the system will be more challenging and it will be up to all of us to play our part. We'll need to be more responsible in our usage and to do so, change our mindsets to that of a 'citizen' instead of a 'consumer' - an engaged participant rather than simply taking what we want.

The term 'good grid citizenship' is about using the electricity network responsibly, contributing to the reliable and affordable operation of the grid so that it works for everyone. It means taking a more considered approach to electricity usage: only taking what's needed, being more efficient and offering back surplus to meet the system's needs.

It's thinking about the grid as not just something that services us but something that is shared - we as a society need to make use of it and it needs to work for all of us.

MEASURING THE SUCCESS OF OPTIMISATION

However, unlike installing a solar PV system or switching to an electric vehicle, the emissions savings from being a 'good grid citizen' and optimising your electricity supply cannot be easily measured and reported on; there is currently nothing in place to allow businesses to account for the environmental (and social) benefits created through demand flexibility.

With the right contract, businesses can already see the financial rewards in providing flexibility to the grid, and these benefits will become more apparent in the avoidance of potential fees, high energy prices or costly infrastructure upgrades. What we believe businesses need next is a means of articulating the wider social and environmental success of their optimisation efforts. By recognising a company's contribution in supporting a Net Zero grid and offering incentives to participate, we could see a real acceleration in adoption, as sustainability-focused businesses will be able to demonstrate how energy optimisation is supporting system decarbonisation.

4. THERE ARE REAL BUSINESS BENEFITS



The energy system is changing, but by getting involved now, you can take advantage of vital opportunities for your business.



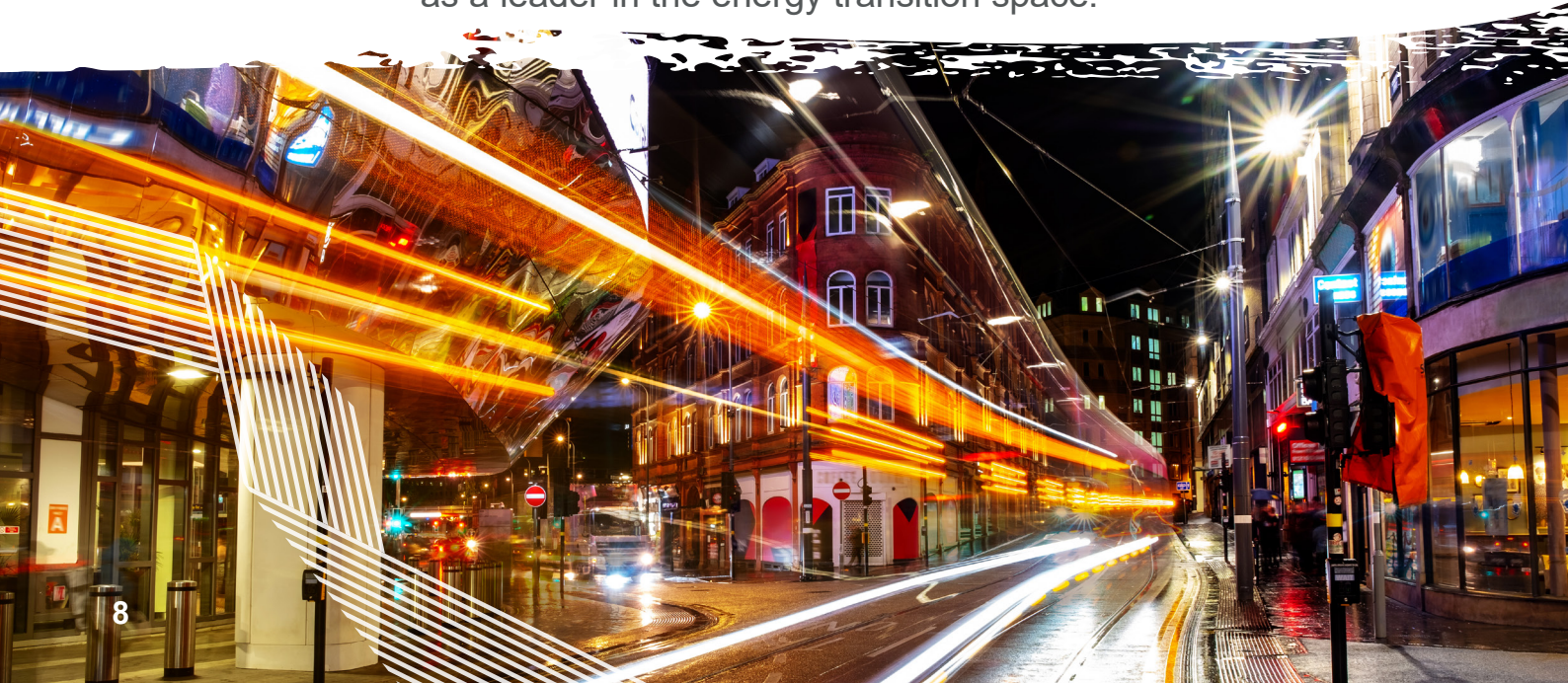
FINANCIAL

In a volatile and ever-changing energy market, embracing the energy transition and being flexible with your electricity usage can help you to boost financial resilience and remove vulnerability to high prices. By responding to the energy system's needs, you can take greater control over your electricity and maximise the value of your contract.



FUTURE-PROOFING YOUR BUSINESS

By being prepared for the energy transition and creating a plan, you'll be in a better position to understand your operations and take advantage of future opportunities, whether that be adopting low carbon technology or a tailored supply contract. And, moving early could offer your business a reputational advantage as a leader in the energy transition space.





OPTIMISING EXISTING TECHNOLOGY

Many businesses already have the technology in place to start making this transition. For example, if your business has refrigeration, HVAC, building management systems, industrial process management or any other form of flexible load, you have the potential to optimise your usage, save money and access new revenue streams.



SOCIAL AND ENVIRONMENTAL

By using the electricity network responsibly and responding to system needs, you can become a 'good grid citizen' and help ensure a reliable and affordable Net Zero grid for all.



TAKE THE NEXT STEP

At Bryt Energy, we offer a range of optimisation solutions to help businesses use electricity more intelligently and sustainably, and to support the energy system in achieving Net Zero. Combining our expertise in renewables and market access with industry leading technology providers, our solutions seamlessly integrate with customer assets and buildings to optimise their electricity usage and unlock the value from their operations. This approach helps to secure an efficient, affordable and reliable renewable future for us all.

If you're interested in learning more about the energy transition and how to navigate your business through it, get in touch with our team of experts at heretohelp@brytenergy.co.uk or on 0330 053 8620.

SO WHAT NOW?

There's no need for a massive overhaul of your current system or processes - but your next steps need to be data-driven and well planned. Look out for Part 2 of our series to find out what you can do right now to accelerate your transition.