



What the energy transition means for you

A guide for advisers and investors

According to global forecasts published by Det Norske Veritas (DNV), 2024 is the year emissions were likely to peak, powerfully described as a turning point for humanity. Cumulative global investment in clean energy technologies and infrastructure has overtaken oil and gas exploration and production.

Renewables remain among the cheapest forms of new capacity in many key markets globally. And with increasing electricity demands across developing and major economies, this growth is only set to continue¹.

This growth in clean energy captures one element of the much broader energy transition.

But what does the energy transition mean, and what investment opportunities does it create for advisers and your clients?





What is the energy transition?

Simply put, the energy transition refers to the **shift away from using fossil fuels, not just in energy generation, but across all sectors of the economy.** This encompasses how we produce, distribute and ultimately use energy, and includes a wide range of clean technologies from electric vehicles, smart grids and batteries to heat pumps and alternative fuels.

Making this transition away from fossil fuels will see radical and sustained changes in the technologies and infrastructure used to power vehicles, homes, businesses, communities and industry. Through the electrification of fossil-fuel dominated sectors like transport, heating and industrial processes, it will accelerate the development of clean technologies across areas including electrical and thermal storage, digital energy management and, for harder to electrify sectors, alternative fuels such as hydrogen.

Of course, it won't be possible to switch off dependence on fossil fuels overnight, and the full energy transition is expected to take decades or even centuries to complete. However, with clear regulatory tailwinds and growing market demand, this creates opportunities for clean technologies and infrastructure in displacing as much fossil fuel consumption as possible now and for generations to come.



Why is the energy transition so important?

The energy transition unfolding today shares similarities with major technological revolutions throughout history, including the agricultural and industrial revolutions. Like those earlier transitions, the current shift towards renewable energy is being driven by rapidly declining costs and increasing adoption of new technologies.

However, unlike past revolutions, the energy transition comes with critical deadlines in reducing greenhouse gas emissions and limiting the catastrophic impacts of climate change. This urgency necessitates unprecedented speed and coordination in the transition compared to earlier industrial shifts. That urgency has created momentum compounded by several other social and economic benefits:



Energy Security

The war in Ukraine, and the sharp escalation of gas prices, was a strong incentive for countries to minimise supply disruptions by generating their own energy. Transitioning to renewable energy sources, storage and alternative fuels is an ideal way for countries like the UK to become energy independent and shield themselves from volatile global energy markets.



Innovation and Technological Advancement

The transition is driving technology innovation and cost reductions in areas such as energy storage and distribution, energy grid management and energy efficiency. These innovations are globally scalable and have far-reaching benefits beyond the energy sector, including the electrification of transportation and industry sectors.



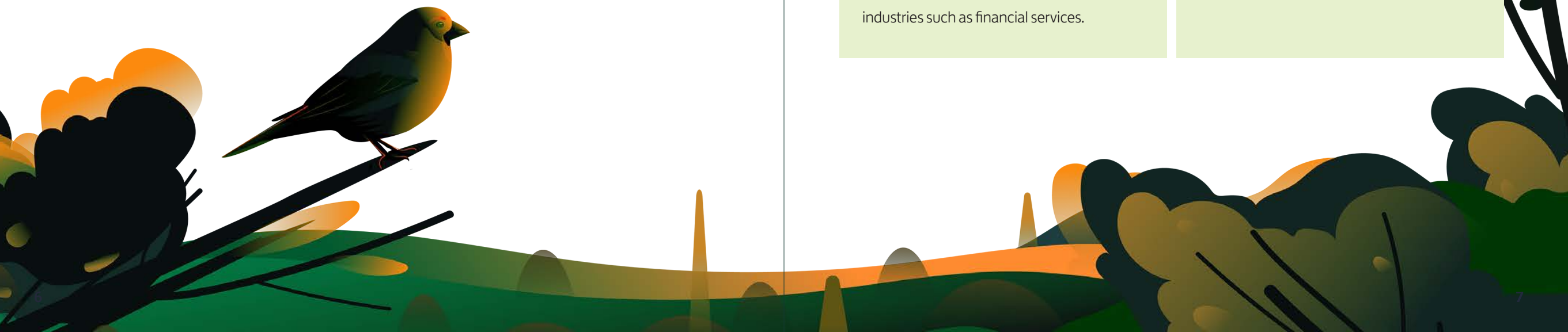
Economic Growth and Job Creation

Developing alternatives to fossil fuels creates economic growth and jobs across clean energy sectors spanning technology and software, hardware manufacturing, energy generation and storage as well as supporting industries such as financial services.



Health Benefits

Fossil fuel combustion releases pollutants into the atmosphere that contribute to air quality issues and respiratory illnesses. Moving toward cleaner energy will reduce pollution and improve public health.



Greener energy

The UK has already made significant progress in transitioning away from fossil fuels. It was one of the first major economies to set a legally binding commitment to achieving 'net zero' carbon emissions – balancing the amount of CO₂ released into the atmosphere with an equivalent amount removed or offset – by 2050.

Some recent successes include:



Coal-fired power plants have been phased out, with final remaining capacity decommissioned in September 2024.



Renewable energy sources, including wind, solar, biomass, hydropower and tidal energy, accounted for 43% of total UK electricity generation in 2023 – the highest share ever recorded for renewables at that point.²



While gas remains important to ensure reliable supply during times of lower renewables output, alternative technologies like battery energy storage are growing at an unprecedented rate, with more than 4.6GW of UK operational capacity built by 2023.³

Despite this progress in reducing fossil fuel use and greenhouse gas emissions in power generation, the UK still faces significant challenges in delivering the energy transition:

- The electricity grid and local distribution networks need to be upgraded to handle the growing share of renewable energy sources and the expected increase in demand from electrified transport and heating.
- While progress has been made in improving energy efficiency in homes and buildings, the UK has some of the oldest and least energy-efficient building stock in Europe.
- The transition to electric vehicles is underway, with the UK set to ban the sale of new petrol and diesel cars from 2035. However, heating remains a significant hurdle, as an estimated two thirds of buildings in the UK are heated by gas boilers.

2050

All of the UK must meet net zero by 2050, in line with the target set out in legislation.⁴



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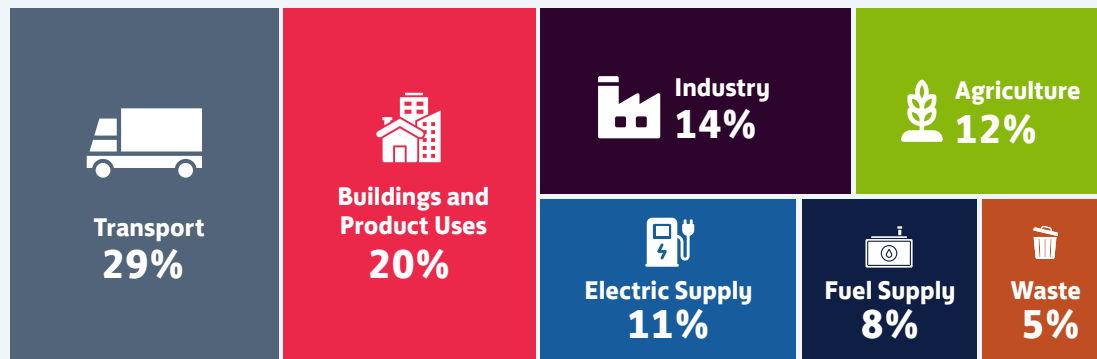
²National Grid - [How much of the UK's energy is renewable?](#)

³Modoenergy - [The buildout report: Record high new capacity in Q4 2023](#)

⁴House of Commons Library - [The UK's plans and progress to reach net zero by 2050](#)

Over 60% of UK greenhouse gas emissions come from just three sectors: **transport, buildings** and **industry**⁵. Transitioning away from fossil fuels across these key sectors will not only reduce greenhouse gas emissions but also create a vastly more efficient energy system, underpinned by electricity as a primary fuel. But getting there will require a new way of thinking for how society plans, builds and operates. Technology has a vital role to play in the shift away from fossil fuels towards the ‘mass electrification’ of the world around us, and the investment community can help support that transition.

UK greenhouse gas emissions by sector



2035

the date by which no new cars will be built with internal combustion engines⁶

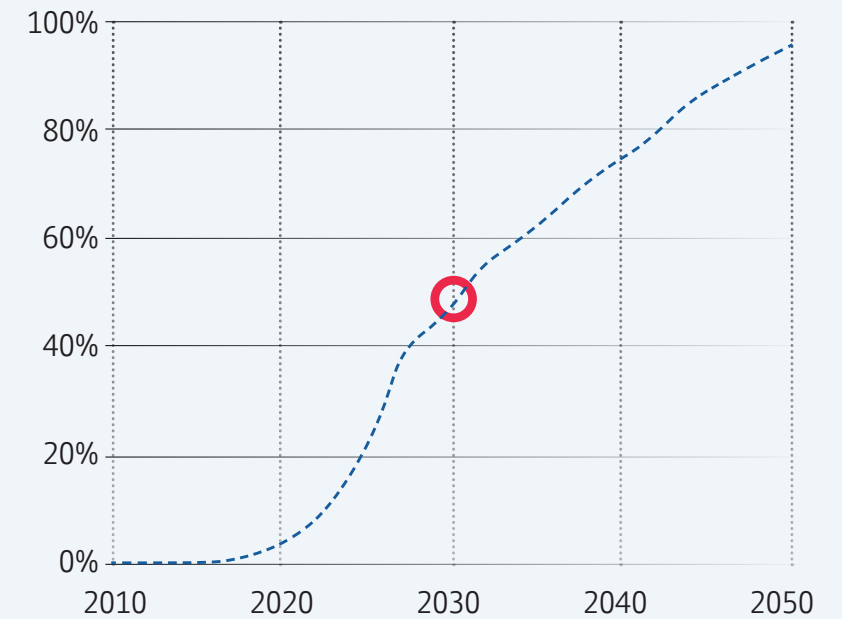


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⁵Department for energy security and net zero - 2023 UK greenhouse gas emissions, provisional figures
⁶GOV UK Phasing out the sale of new petrol and diesel cars from 2030 and support for zero emission vehicle (ZEV) transition

Half of passenger vehicles sales are electric by 2031⁵

Units: Percentages of sales



Electric Vehicle (EV) sales increased **50%** last year and are on track towards a **50%** global passenger EV sales share in 2031.⁷



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⁷DNV Energy Transition Outlook 2024

Smarter tech

The energy transition bears striking similarities to technological disruptions in finance and consumer retail sectors. Like these industries, energy is undergoing a fundamental transformation driven by emerging technologies and changing consumer preferences.

Consumers are increasingly demanding more affordable, accessible and appealing options to how they buy, generate and use energy in their homes, businesses and communities.

Forward looking companies are developing new offerings and business models to meet these evolving consumer needs, just as fintech and e-commerce companies have done. Furthermore, technological advancements in areas like distributed energy resources, Artificial Intelligence (AI) and blockchain are reshaping the energy landscape, much like their impact on finance and retail.

At Blackfinch, we've identified three key technology themes where investment will drive emissions reductions across the highest emitting sectors:



1. Generation and storage

How clean energy is produced and stored in order to ensure availability on demand. This involves more energy generated and stored at or near to its point of consumption and electrifying heating, transport and industrial processes.



2. Distribution

Modernising and expanding electricity and heat networks to heat and power to devices, buildings and vehicles.



3. Digitalisation

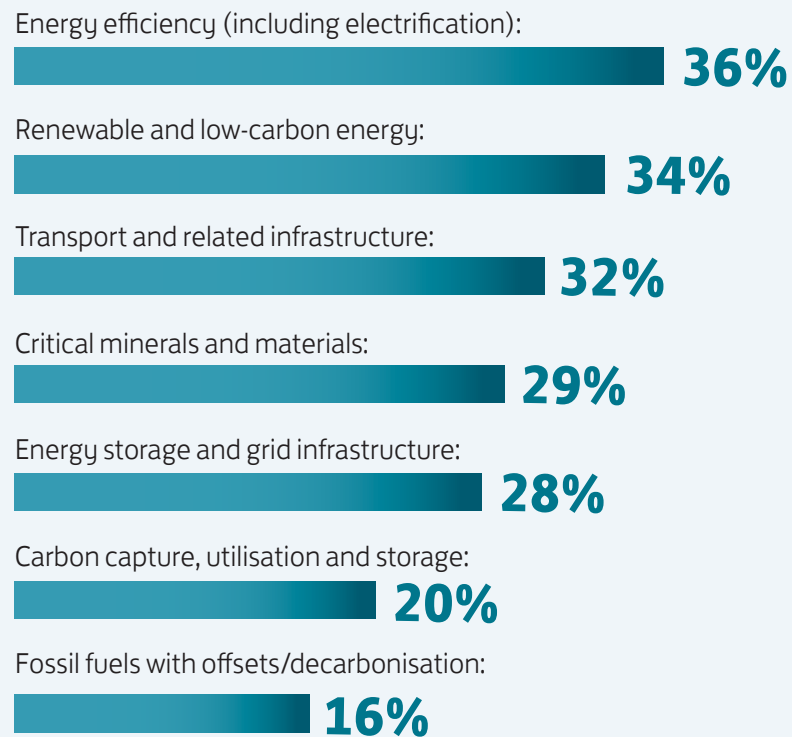
How energy is managed and experienced, including using smart devices to generate, store, use and export, and helping consumers choose and install clean technologies by offering easy-to-use digital tools and better customer experiences.



Electricity will double by **2050** and will be almost **90%** decarbonised by then.⁸



The most attractive areas for investment in the next two years⁹



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⁸DNV Energy Transition Outlook 2024

⁹KPMG - Energy transition investment outlook: 2025 and beyond

Sustainable growth

The energy transition presents a wide spectrum of investment opportunities spanning from private retail investors to institutional capital. For individual investors, retail investment options such as a Venture Capital Trust or Enterprise Investment Scheme allow smaller investors to diversify their portfolios by allocating capital to clean energy projects or companies driving the transition.

On the institutional side, pension funds, sovereign wealth funds and other large-scale investors can engage through dedicated renewable energy funds, direct project investments and infrastructure debt financing. Institutional capital also flows into corporate bonds issued by renewable energy companies and green bonds used to finance sustainable projects.









Additionally, large investors participate in private equity deals for emerging clean technologies and grid modernisation initiatives. The range of investment structures caters to different risk appetites and investment horizons across all levels of capital, from retail investors seeking exposure through diversified funds to institutional players making direct investments in specific projects or technologies driving the energy transition.

At Blackfinch, we cater for private investors through vehicles such as the **Blackfinch Energy Transition EIS Portfolios**, as well as institutional investors through vehicles such as the **IFSL Blackfinch NextGen Infrastructure Fund**.

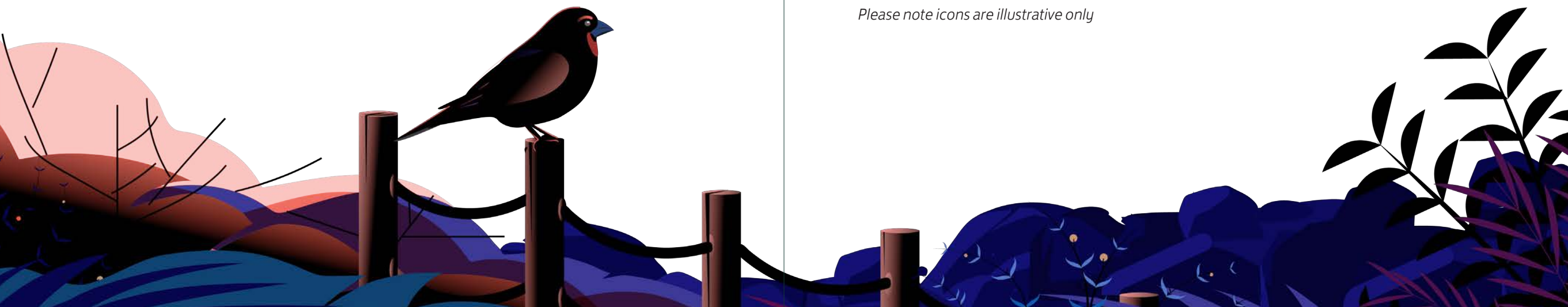
Our energy transition investment framework

Investing in these energy transition-based themes offers several benefits, including being aligned with government commitments – and incentives – to meet net-zero targets, the potential for strong financial returns as the transition gathers pace, and the opportunity to contribute to energy security and reduce reliance on imported fossil fuels. The themes are also broad enough to ensure investors can alleviate risks through diversifying exposure across different technologies, sectors and geographies.

The table to the right shows how these three investment themes can be applied to enable the energy transition across the three sectors where change is most needed.

	Buildings	Transport	Industry
Generation and Storage	 Solar Photovoltaics (PV)	 Charging Technologies	 Green Hydrogen
Distribution	 Electricity Networks	 Chargepoint Networks	 Fleet Depots
Digital	 		

Please note icons are illustrative only



Blackfinch's approach to the energy transition

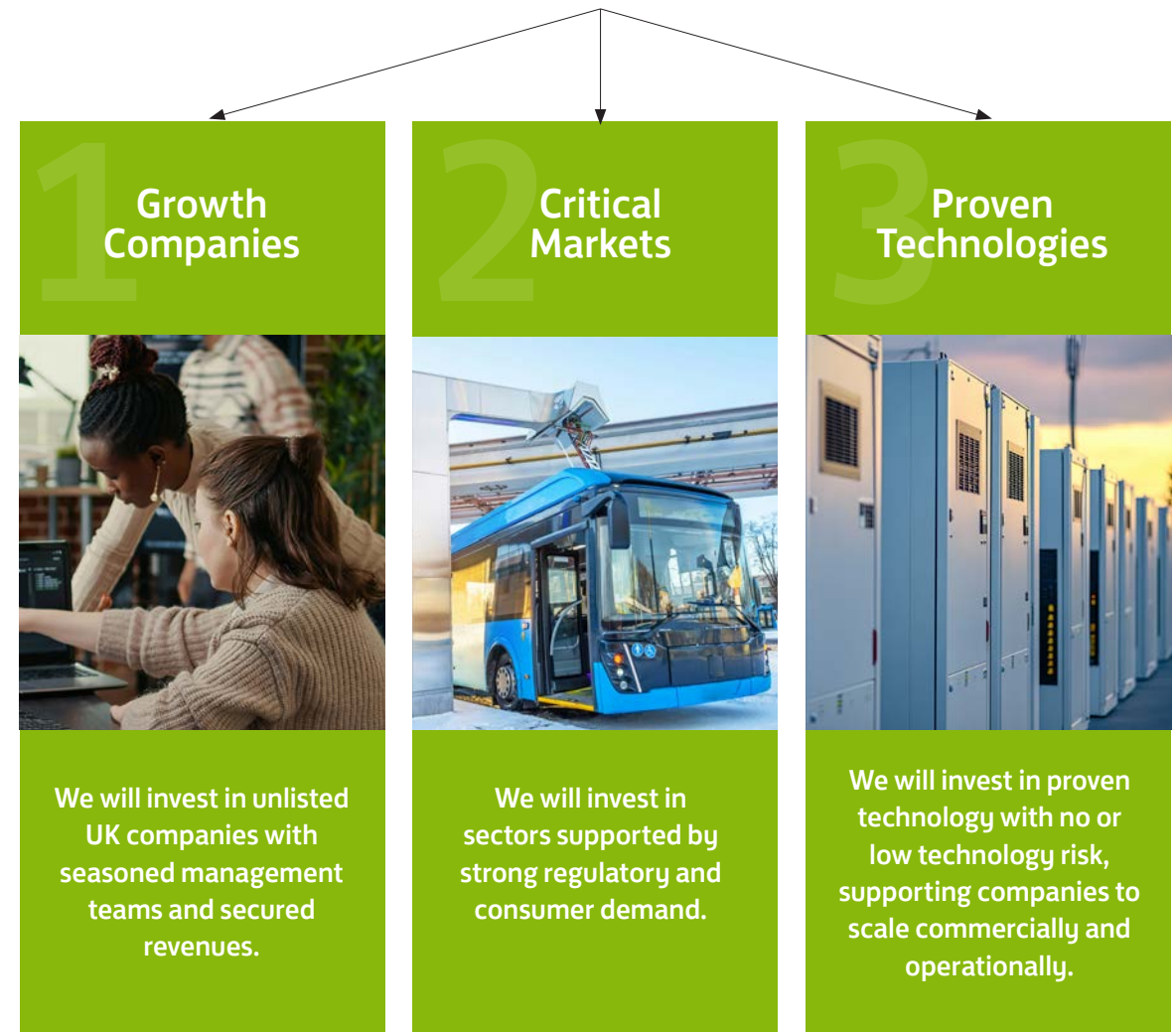
At Blackfinch, through our extensive group-wide experience in Property, Energy, Infrastructure and smaller companies investing, alongside our technology-led Venture Capital team, we have a unique combination of expertise and insight across the areas which will participate in the energy transition.

By applying our proven pedigree and track record across these sectors, we are very strongly placed to capitalise on the clear and growing momentum in energy transition investments.

We will invest in companies, their technologies and underlying assets that will be make a critical contribution to the long-term decarbonisation of the transport, buildings and industry sectors. As your specialist investment partner, we will leverage our vertically integrated investment expertise across Energy, Technology and Property to source and manage companies through growth and scale-up to exit and listed status.



Our energy transition investments will focus on three key principles:



Investing into greener energy, delivered through smarter technology will enable our investors to align with Blackfinch in our goals to access the most sustainable companies around, which are all united by a common purpose to create a more sustainable environment. We firmly believe that together, with you, we can drive forward the technology needed to help society thrive.

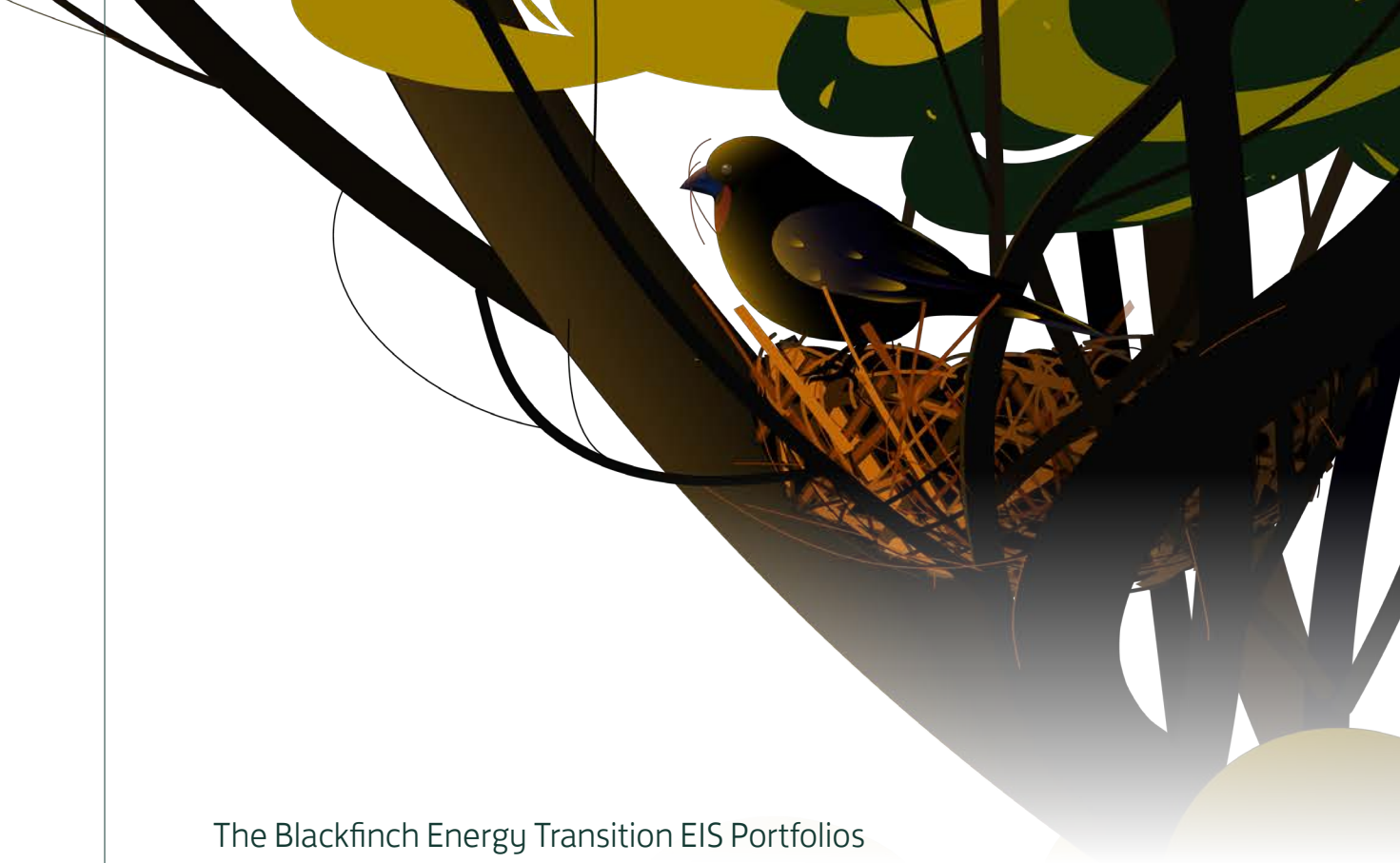
Blackfinch Energy Transition EIS Portfolios

Now celebrating its 30th anniversary, the UK Government launched the EIS scheme in 1994 to encourage investment in start-ups and early stage companies. It provides an important source of finance to help new, unlisted businesses to grow, which in turn supports the growth of the wider UK economy.

Alongside diversifying by type of technology and sector, we will look for **early-stage technology companies with promising innovations and clear market potential**, to those that are further along their growth journey and require capital to scale.

We aim to invest full capital within 12 months of receiving a client's application and funds. We know that the growth potential of investments is matched by the high risk of loss. We manage this risk through making a wide range of investments, with a minimum of ten investments per portfolio.

Spreading investments across a multi-sector portfolio of ten or more firms helps to mitigate the effect of companies that underperform or fail. We work closely with firms from early growth to profitability and exit. We know some will flourish while others may falter or fail. We make tough decisions as necessary, and keep our focus on firms bound for success.



The Blackfinch Energy Transition EIS Portfolios target a return of 3x on investment, excluding fees and tax reliefs.

Up to 30% **Income Tax relief** in the current or previous tax year, providing investments are held for a minimum of three years

Up to 100% **Inheritance Tax (IHT) exemption** on qualifying investments after two years (and if held at time of death)

Capital Gains Tax (CGT) deferral relief (up to three years prior to investment and up to one year in advance)

Growth free of CGT (if Income Tax relief has been claimed)

Offsetting of capital losses up to 45% (dependent on marginal rate of Income Tax at time of loss)

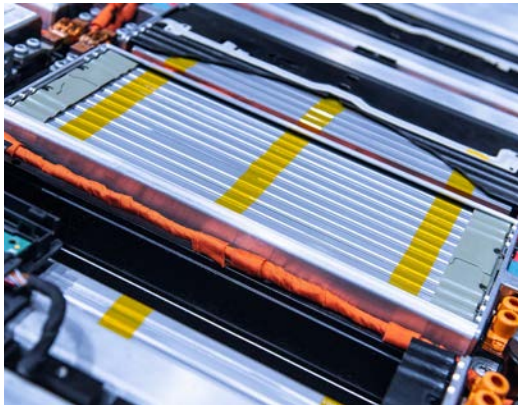
Carry back to previous tax year (for Income Tax relief)

Examples of energy transition technology



Easy-Install Heat Pumps

Companies offering hardware and software solutions that make heat pumps compatible with existing heating systems, reducing costs, time, and disruption to accelerate adoption.



Battery Diagnostics

Innovative technologies like acoustic imaging for real-time battery health monitoring and defect detection, enhancing safety, reliability, and reducing failures.



EV Fleet Management Solutions

Simplifying EV charging payments and reimbursements, enabling efficient electrification of fleets and easing the transition to an electric future.

Our newest Portfolio Companies

GT WINGS

GT Wings develops cutting-edge wind propulsion solutions for the commercial shipping industry.

Its flagship product, the GT AirWing™, is a highly efficient 'wing-sail' that helps push the ship along, reducing fuel consumption and carbon emissions. It helps ship owners meet stringent new fuel efficiency standards and supports the maritime sector's transition to a more sustainable future.

www.gtgreentechnologies.com

Adia

Adia is making heat pumps more accessible and affordable for everyone, by making it easier to retrofit pumps into older homes.

Adia's plug-and-play tech removes the need for expensive conversions, so a heat pump can be installed in just two days for less than a new gas boiler.

www.adiathermal.co.uk

IFSL Blackfinch NextGen Infrastructure Fund and IFSL Blackfinch NextGen Property Securities fund

The Blackfinch NextGen Funds range are focused on what we at Blackfinch believe to be the next generation (NextGen) of investment. We believe property and infrastructure investments should form a key part of a modern portfolio within a diversified asset allocation, and that meaningful returns can be found within the property and infrastructure sectors by investing across five specific themes.



Both public initiatives and private investments are vital to fund this transition, presenting vast opportunities for investors, particularly in sectors like renewable energy production and battery storage. Indeed, McKinsey estimate¹⁰ that spending on physical assets to achieve net-zero will amount to \$275 trillion by 2050, or \$9.2 trillion per year on average. Our energy system is evolving. And while there are challenges ahead, the amount of investment required and technological innovation to come represents abundant opportunities for investors.

What does this mean for you?

Legislation and regulation are important driving forces behind the energy transition theme, creating a wave of innovation as some of the UK's greatest minds come together to try and solve the problems facing buildings, transport and industry alike.

As the transition towards green technology accelerates, it presents investors with an opportunity to contribute to this positive change whilst also gaining access to the potential investment returns this can provide.

Across Blackfinch, our investment teams are both excited and passionate about investing in this space. If you or your clients would like to hear more about any of the investment vehicles we have outlined above, please do get in touch. We're keen to join forces with others who understand the importance of supporting the energy transition theme.

¹⁰McKinsey Global Institute - What it will cost to get to net-zero

Find out more

We have a team of Business Development Managers all over the UK who will be happy to visit your offices, explain our products and even deliver training sessions for your team.



Webinars

Hear directly from our investment team

[Head to our YouTube](#) →



Case Studies

Breaking down client planning scenarios

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Contact Us

Please do get in touch if we can help. We'd love to hear from you.



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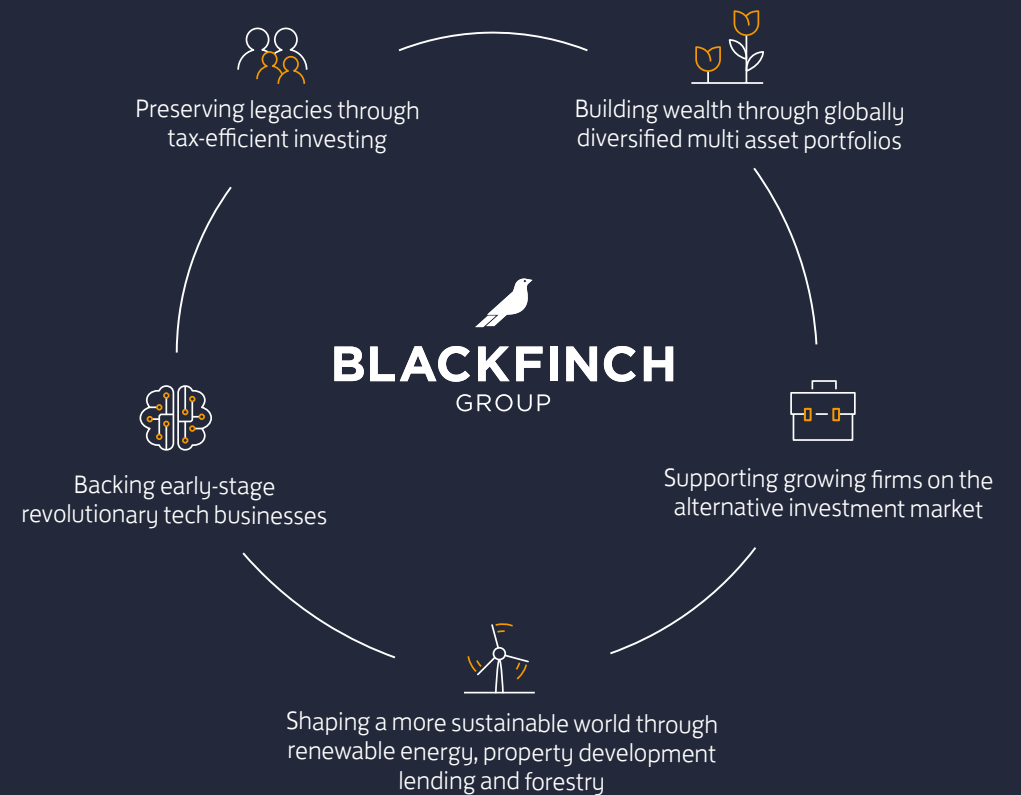


www.blackfinch.com

Blackfinch, a lifetime investment partner

Blackfinch offers a number of investment solutions, to address a range of client objectives.

No matter where they are in their investment journey, from starting out in building their wealth, through to managing their estate to ensure they pass on as much as possible to the next generation, we are here to help you achieve their goals.



Risks

Due to the potential for losses, the Financial Conduct Authority (FCA) considers this investment to be high risk.

What are the FCA key risks?

1 - You could lose all the money you invest

If the business you invest in fails, you are likely to lose 100% of the money you invested. Most start-up businesses fail.

2 - You are unlikely to be protected if something goes wrong

Protection from the Financial Services Compensation Scheme (FSCS), in relation to claims against failed regulated firms, does not cover poor investment performance. Try the FSCS investment protection checker (<https://www.fscs.org.uk/check/investment-protection-checker>).

Protection from the Financial Ombudsman Service (FOS) does not cover poor investment performance.

If you have a complaint against an FCA-regulated firm, FOS may be able to consider it. Learn more about FOS protection (<https://www.financial-ombudsman.org.uk/consumers>).

3 - You won't get your money back quickly

Even if the business you invest in is successful, it may take several years to get your money back. You are unlikely to be able to sell your investment early.

The most likely way to get your money back is if the business is bought by another business or lists its shares on an exchange such as the London Stock Exchange. These events are not common.

If you are investing in a start-up business, you should not expect to get your money back through dividends. Start-up businesses rarely pay these (<https://www.financial-ombudsman.org.uk/consumers>).

4 - Don't put all your eggs in one basket

Putting all your money into a single business or type of investment for example, is risky. Spreading your money across different investments makes you less dependent on any one to do well.

A good rule of thumb is not to invest more than 10% of your money in high-risk investments (<https://www.fca.org.uk/investsmart/5-questions-ask-you-invest>).

5 - The value of your investment can be reduced

The percentage of the business that you own will decrease if the business issues more shares. This could mean that the value of your investment reduces, depending on how much the business grows. Most start-up businesses issue multiple rounds of shares.

These new shares could have additional rights that your shares don't have, such as the right to receive a fixed dividend, which could further reduce your chances of getting a return on your investment.

If you are interested in learning more about how to protect yourself, visit the FCA's website (<https://www.fca.org.uk/investsmart>).

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