

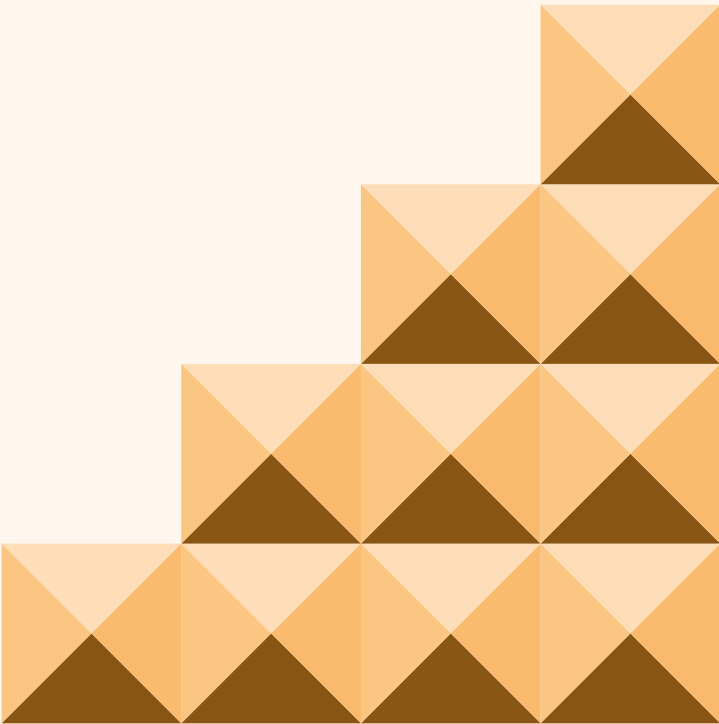
MANUFACTURING A SUSTAINABLE FUTURE

CAPITALISING ON
GREEN TECHNOLOGIES



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Executive Summary

Green technologies are instrumental in addressing the challenge of climate change and meeting environmental obligations throughout the supply chain. Manufacturing economies of the world are in a race to benefit from the green technologies of the future. The implementation of the UK's new Industrial Strategy must help industry take full advantage of the latest green tech to ensure Britain maximises the available benefits to enable companies to compete successfully on the world stage.

To capitalise on this opportunity, the UK should focus on designing a comprehensive, consistent policy environment and building infrastructure that can accelerate the adoption of the very latest green technologies.

According to the Office for Budget Responsibility (OBR), a reasonable UK range for investment multipliers is ~1.3–1.6 in the near term. Based on these standard UK fiscal multipliers, **an additional £9.2 billion of private sector investment by UK manufacturers would increase UK GDP by between £12bn and £15bn over the next decade, supporting the creation of approximately 43,000 new jobs directly, and 63,000 jobs in total when indirect job creation across supply chains is included.** The scale of the payoff will depend on the domestic content of supply chains, but the direction of impact is clear. Expanding finance for manufacturers to adopt efficiency measures, electrified heat, and on-site renewables would support productivity and therefore wider economic growth, job

creation, and international trade competitiveness, while also advancing climate commitments.

Make UK's latest survey has shown that 72% of manufacturers find policy uncertainties create a deterrent to further investment in the area. Today we call on Government to target the UK's world-leading green tech support from early development to real-world deployment to help drive British business into global pole position.

A coherent investment plan is needed so manufacturers can engage with emerging technologies as they develop. This approach will help to deliver the existing Industrial Strategy, which recently affirmed the Government's ambition for greater investment in the green agenda through new ways to finance green projects, investments, training for green skills, simpler planning rules (including grid connections) and targeted tax incentives.

OUR RESEARCH SHOWS:

Manufacturers' **enormous desire** to build green technology into their business plans over the next five years, with **83% very or fairly likely** to utilise its role in their operations.

Industry's appetite to be a **key contributor** to green growth, with **75% of businesses** planning at least some investment in the area in the next five years.

An uncertain policy backdrop is **holding back investment**, with **44% identifying it as the biggest deterrent** to investment alongside the cost of energy at 41%.

Manufacturers have identified **access to finance** (42%), **greater direction** (39%) and **reducing planning restrictions** (18%) as key enablers to unlock their growth potential in this area.

KEY RECOMMENDATIONS

- **Government could introduce a targeted exemption for investments in green technologies from business rates, removing a major disincentive for manufacturers.**
At present, manufacturers that install energy-efficient machinery such as on-site solar energy panels, wind turbines, or low-carbon heating systems can face higher rateable values because this new capital stock increases to nominal value of the factory, potentially penalising firms for “doing the right thing” by investing in net zero technologies.
- **The duration of the Green Investment relief for business rates should be extended from 12 months to 3 years** to align more closely with the return on investment on green technologies. The relief could also be extended to 2050, in line with HM Government’s net zero target, rather than the current sunset clause in 2035.
- **Apprenticeship course content must be more regularly updated to include new technology,** ensuring a talented future workforce with the relevant skills and expertise to implement and improve the latest green innovations, allowing companies to grow to their maximum potential.
- **Government should expand the R&D tax relief** to include capital equipment relating to industrial automation and decarbonisation and expand full expensing capital allowances to allow for the leasing of capital and upcycling of second-hand plant & machinery.

The initial outlay of these interventions would be offset by the potential growth in the economy that could be created through greater support.

DEFINITION: GREEN TECHNOLOGY

Green technology has been defined by the UN as “technology that has the potential to significantly improve environmental performance relative to other technologies.”¹ The European Patent Office also notes that green technology often has a focus on innovation to drive net zero goals.²

The field is broad, bringing in everything from renewable technologies and energy efficiencies to wastewater technologies and transport. While this is a wide definition and can create challenges, there are also opportunities for manufacturers to define this within their specific operations, helping to create better business outcomes and meet our climate obligations.

Through our research, we have identified **green technology for manufacturers as sustainable technologies that enable emissions reductions through productivity gains, energy efficiency, clean power, innovation, digitalisation and circular economy principles.** Manufacturers have a role to play throughout the supply chain either utilising the technology within their operations or as producers of the technology itself.

Our research shows that manufacturers demonstrate understanding of green technology, with 86% indicating at least partial knowledge of the area. Thus, despite the broad terms used to define the topic, manufacturers are taking a keen interest in utilising it.

State of play: Green technology adoption in the manufacturing industry

The Government has made it clear via the Industrial Strategy that it views net zero as a “consistent priority” and aims to “strategically boost green manufacturing, services, innovation, exports, and the circular economy, leveraging British industry to deliver energy security and meet our environmental goals.”³

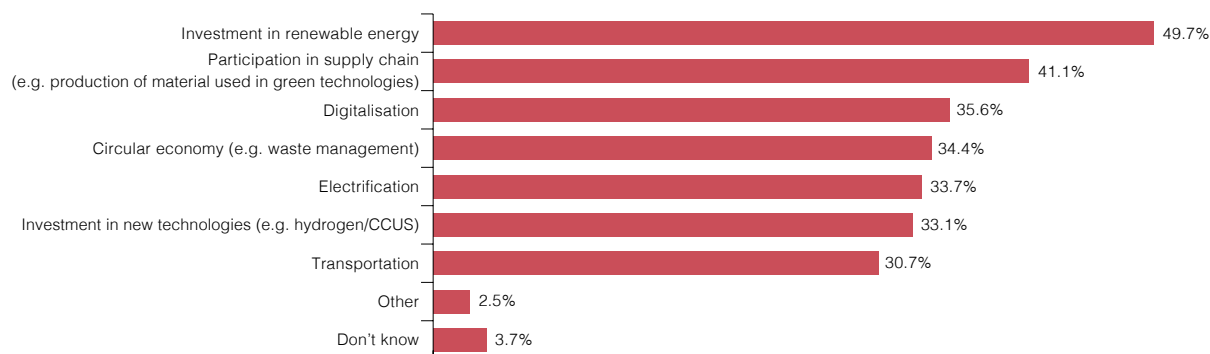
Critically, the Strategy provides important detail on how government will achieve these aims, setting a very clear level of ambition on how it will coordinate specific interventions in order to maximise the broader opportunities of net zero. It aims to place the UK as a world leader in green industries, with a commitment to becoming the most attractive place in Europe to invest in Clean Energy technologies.⁴ There is a clear alignment through our research between policy and practical business decisions as an overwhelming 83%

of manufacturers will focus on green technologies as part of business plans over the next five years. This coalescence presents a significant opportunity for manufacturers to embrace green technology and for Government to deliver appropriate levels of support to foster this adoption.

Manufacturers have already demonstrated significant progress in green technology priority areas and have helped to showcase the leading role that the UK can play.

Chart 1: Renewable energy becoming a priority

% companies citing the most important area when thinking about green technology



Source: Make UK Green Tech Survey 2025

³The UK's Modern Industrial Strategy

⁴The UK's Modern Industrial Strategy

Renewable energy

50% of manufacturers consider renewable energy to be the most important area in which to engage with green technology. Manufacturers are both consumers and producers within the field of green technology, so it follows that two-fifths (41%) of respondents are considering engagement in the supply chain as a priority area of interest.

Delta Fire, based in Norwich, have accelerated their green technology adoption journey, by doubling their solar capacity and becoming energy self-sufficient for up to 8 months of the year.

Heralded as a great success, the company doubled the number of solar panels from 324 to 648 after analysis of their energy data showed that clouds in the winter months had a significant impact on how much they drew up from the grid. By installing additional solar panels as well as a 300kWh battery, they have improved their self-reliance and can export more energy back to the grid than they now consume.

With a 7-year investment payback on the battery and a 4-year payback on the solar panels, Delta Fire cite their switch to greater renewable energy as an effective investment, emphasising that battery prices are only reducing year-on-year and opportunity is there for those considering a similar exercise in future.

The adoption of renewable energy sources is a key driver when considering the opportunity for green technology to provide energy from natural sources that can be replenished faster than they are used. Renewable energy encompasses primary energy sources such as wind, solar and hydro, and thermal fuels such as biomass, biogases, and liquids.⁵ This is an area where manufacturers have a central role in both the supply chain and usage of renewable energy within their processes.

Kingfisher (Lubrication) Ltd, a leading manufacturer of high-quality grease fittings based in Leeds, has installed a cutting-edge solar PV system across approximately one third of its roof space. This bold move will take the edge off the firm's energy bills whilst also enabling Kingfisher to power 30% of its production with renewable energy.

The energy savings have assisted in freeing up cash to invest in its 52-strong workforce. Since transitioning to employee ownership in 2020, Kingfisher has been focusing even more on implementing feedback from its employees, with sustainability coming out high on the agenda.

Kingfisher is now diving headfirst into another investment project aimed at bolstering its energy-efficient machinery, meaning the company can begin to say goodbye to high carbon emitting techniques common in manufacturing processes.

Kingfisher have been helped along by funding from Lloyds' Clean Growth Financing Initiative. Arming the manufacturer with substantial support for the solar panels and eco-friendly machinery, Kingfisher is catapulting its 157-year-old business into an electrifying new phase of sustainability and innovation.

⁵DUKES 2024 Chapter 6

Innovation

Manufacturers are clear on the role that developing technologies can have in improving environmental performance. Over a third (35%) of manufacturers said that digitalisation is an important area for adoption for reaching net zero, which, when coupled with 33% highlighting the importance of new technologies, shows how embracing developing technology can be essential to meeting targets.

The use of research and innovation is another important element of the green technology agenda, with discussions focusing on how the approach should challenge traditional business models to promote sustainable business operations. This may include digitalisation, development of new low-carbon technologies, or innovations to existing processes. This is a space that offers significant benefits to 'first movers', rewarding upfront investment, particularly to those who can address the harder-to-abate emissions, such as those arising from buildings and wider transport.

In previous research, over two-fifths (43%) of manufacturers expected that these technologies would positively impact decarbonisation in the future.⁶ Two years later, we are beginning to see Fourth Industrial Revolution technologies reach the forefront of efficiency improvements and manufacturers are taking advantage of this.⁷

Siemens is using artificial intelligence (AI) to optimise the energy efficiency of its factories. The company's AI-powered software monitors and analyses energy use data in real time, identifies areas where energy can be saved, and allows the firm to implement changes that improve efficiency.⁸

Both innovation and digitalisation can enable wider technological shifts and mass adoption of low-carbon options. This has been most pronounced in the advent of electric vehicles (EVs) and heat pumps. These technologies are increasing in adoption, as shown by the Committee for Climate Change (CCC), which reports that growth in the market share of new electric cars in 2024 has reached 20% alongside an increase of 56% in heat pump installations in 2024.⁹ This increase in market share indicates the opportunities to be found in early engagement with innovative green technologies.

Jaguar Land Rover (JLR) is investing heavily into electrification of its brands over the next five years, with a headline £15 billion investment. This has seen the creation of a Future Energy Lab, a £250 million state-of-the-art EV test facility in Coventry, as it prepares to launch nine pure electric luxury models by 2030. Alongside this, their Halewood plant in Merseyside will become JLR's first all-electric production facility, whilst Solihull in the West Midlands will produce electric Range Rover, Range Rover Sport and Jaguar models.¹⁰

JLR's understanding of the shifting market has meant that they have focused on reskilling employees to make the most of the opportunities presented by EVs. The JLR's Future Skills Programme invests £20 million each year across all sites to enable employees to pivot their careers and gain vital skills in new systems, technologies and processes central to the future of automotive manufacturing and engineering.¹¹

⁶Digitalise to Decarbonise | Make UK

⁷4IR technologies such as artificial intelligence (AI), robots, cobots, the Internet of Things (IoT), and 3D printing are transforming the manufacturing sector, increasing the automation of tasks and the exchange of data between machines and systems and leading to new levels of efficiency and productivity', Digitalise to Decarbonise | Make UK

⁸Digitalise to Decarbonise | Make UK

⁹Progress in reducing emissions – 2025 report to Parliament

¹⁰JLR ACCELERATES ELECTRIFICATION WITH NEW £250M STATE-OF-THE-ART FUTURE ENERGY LAB | JLR Corporate Website

¹¹JLR INVESTS £500 MILLION INTO CREATING EV FACTORY OF THE FUTURE IN MERSEYSIDE | JLR Media Newsroom

Manufacturing a sustainable future – capitalising on green technologies

The appetite for adoption of new technologies has been seen in the Government's approach to innovative types of nuclear technology such as Small Modular Reactors (SMRs), continuing to build upon the framework established through

the Civil Nuclear Roadmap released in January 2024.¹² There is a firm understanding that nuclear can play a role in the UK's pathway to net zero and greater energy security, and that now is the time to act.

The Rolls-Royce SMR was named as the selected technology in the Great British Nuclear small modular reactor competition in June 2025. The UK's next generation of nuclear power stations will be designed and built by a British company, creating thousands of jobs, boosting the supply chain and creating growth for the economy. This will form a key pillar of the future energy mix of the UK.

This will utilise more than half a century of Rolls-Royce's engineering heritage to become the UK's first domestic nuclear technology in more than 20 years – providing a British solution to some of our energy needs. Each Rolls-Royce SMR power station will produce enough stable, affordable and emission-free energy to power a million homes for at least 60 years – more than any other SMR.

Circular economy

Over a third (34%) of manufacturers see the circular economy as an important consideration when investing in green technologies. The concept of circularity remains essential in the contribution of green technology to wider sustainability objectives.

The circular economy model is aimed at minimising waste and making the most of resources. Unlike the traditional linear economy, which follows a "take, make, dispose" pattern, the circular economy is regenerative by design, providing further value through the use of recycling. The definition of green technology may include utilising circularity in the process of production or in the operation of the business.¹³

By embracing the circular economy principles, manufacturers can help to protect the environment and realise efficiencies, both slowing down the use of additional raw materials in production and helping to create jobs through new processes and methodologies.

The steel sector has clearly demonstrated the value of adopting circularity through its utilisation of scrap and adoption of electric arc furnaces. However, broader interventions in the manufacturing sector have been equally innovative, ranging from waste heat recovery technologies to closed-loop water recycling systems and instead fully recycled products.

Numatic is a leading manufacturer of commercial and domestic cleaning equipment, including scrubber-driers, floor polishers and vacuum cleaners (perhaps best known for the Henry and Hetty ranges). They have put together a significant circular economy scheme focused on diverting plastic from landfill or incineration, which has seen the development of new ReFlo Technology, an innovation that ensures long-lasting, repairable and easily dismantled post-industrial recycled plastic material from the automotive industry.

The success of this effort has seen Numatic achieve Zero Waste to Landfill since 2017, with sustainable product lifecycle practices, including remoulding and regrounding their plastic internally - though how energy intensive the process is varies depending on the end-product.¹⁴

¹²Civil Nuclear: Roadmap to 2050

¹³Circular economy: definition, importance and benefits | Topics | European Parliament

¹⁴Numatic | Make UK

Electrification

Over a third (34%) of UK manufacturers cited electrification as a key part of their engagement with green technology options. This makes sense, as electrification has wide application. It also reflects the push by industry towards greater productivity and energy efficiency in UK supply chains.

The CCC has found that electricity accounts for 28% of the energy that UK industry uses. However, the CCC has also shown how this proportion of energy use will need to rapidly increase, as industrial processes electrify further. The CCC's research demonstrates that over half of the reductions in UK emissions since 2008 have been through changes in energy supply. Similar reductions now need to be achieved in areas such as manufacturing, which could be driven in part by the electrification of key technologies and processes.

The need for electrification in technologies and processes places manufacturers in a central role as both a possible producer and consumer, driving growth in business investment and national decarbonisation. If policy further enables such growth, the UK will see greater investment in the supply chains of electrification technologies. This will help to create sustainable long-term growth and provide industry with local access to technologies that help their productivity and energy efficiency. A failure to follow-up on the positive start made with the British Industrial Competitiveness Scheme could, however, stall possible economic growth and productivity gains.

A potential blocker to electrification has been constraints on the local electricity generation capacity which can be accessed by manufacturers. We can see that work has begun to fix this problem with the Strategic Spatial Energy Plan (SSEP), and it is important that the Government and energy networks utilise industry as a delivery partner in the energy transition to ensure that power is reaching demand efficiently.

Similarly, significant work is being undertaken to improve the electricity 'transmission' network. This is the network that takes energy from the point of creation (a windmill, a solar panel or, in the past, a coal-fired power station) to the point of distribution.

The Government is now making moves to improve the delivery of electricity through the distribution network (the network that goes to the factory gate), which can help to improve manufacturers' productivity and sustainability. We welcome this focus on improving the distribution network and look forward to working with the Government to make sure that upgrades enable industry to create their own electricity and store it in the form that best suits them.

AMP Clean Energy have been working with Simpsons Malt to meet their ambitious target of reaching Net Zero by 2030. This required a transformative energy solution that would support their energy-intensive malting process while reducing reliance on fossil fuels. AMP Clean Energy therefore focused on a transition to sustainable energy sources: tackling grid constraints and utilising reduced renewable energy whilst maintaining high product quality and operational efficiency.

The result was the installation of a state-of-the-art energy centre at Tweed Valley Maltings, powered by biomass boilers that provide consistent, low-carbon heat as a baseload energy source, and a UK first electric boiler, which utilises curtailed wind energy to replace fossil fuels in the malting process. This move towards electrification has resulted in 25,000 tonnes of CO₂ saved annually, equivalent to the emissions of 11,000 homes, alongside an 80% reduction in Scope 1 emissions at Tweed Valley Maltings.¹⁵

¹⁵Simpsons Malt: Revolutionising Decarbonisation in the Scotch Whisky Sector
- AMP Clean Energy

Transportation

Nearly a third (30.7%) of respondents noted that transportation was an area of focus when considering green technology. This indicates the importance of addressing Scope 3 emissions in wider process improvement work.¹⁶

This can encompass different areas, including employees' business travel or the transportation and distribution (up- and downstream) of goods. It may include utilising EVs throughout the delivery chain or exploring new modes of distribution such as the utilisation of rail freight.

The manufacturing process and transport logistics sector are highly interlinked, enabling businesses to move goods around the country and overseas. As such, manufacturers are heavily dependent on a functioning and efficient transport infrastructure network, including our roads, rail, air and shipping infrastructure.

It is no surprise that today manufacturers rely heavily on the road network, with 61% of firms managing their own fleet of heavy goods vehicles (HGVs) or vans for trade. They also rely on many of these infrastructure networks for labour. Whilst investment in roads is necessary, increasing the UK's limited investment in its rail infrastructure, particularly for business cargo use, could significantly reduce industrial emissions across Scope 3. With organisations like Royal Mail moving away from rail freight due to high electricity prices, despite the Government's target to increase rail freight volumes by 75% by 2050, the issue remains complex.¹⁷

This demonstrates the need to challenge energy costs in logistics given the substantial benefits to sustainability that could be accrued by incentivising greater use of rail freight.

It is estimated by Network Rail that one freight train can remove approximately 110 lorries from our roads, reducing carbon emissions, traffic congestion and improving safety in locations where road freight is substituted for rail freight.¹⁸ However, manufacturers face barriers to access such as high costs (which includes the cost of electricity charges), not producing enough goods to fill containers, and lack of access to terminals (also known as the last-mile challenge, where a lorry would still be needed).

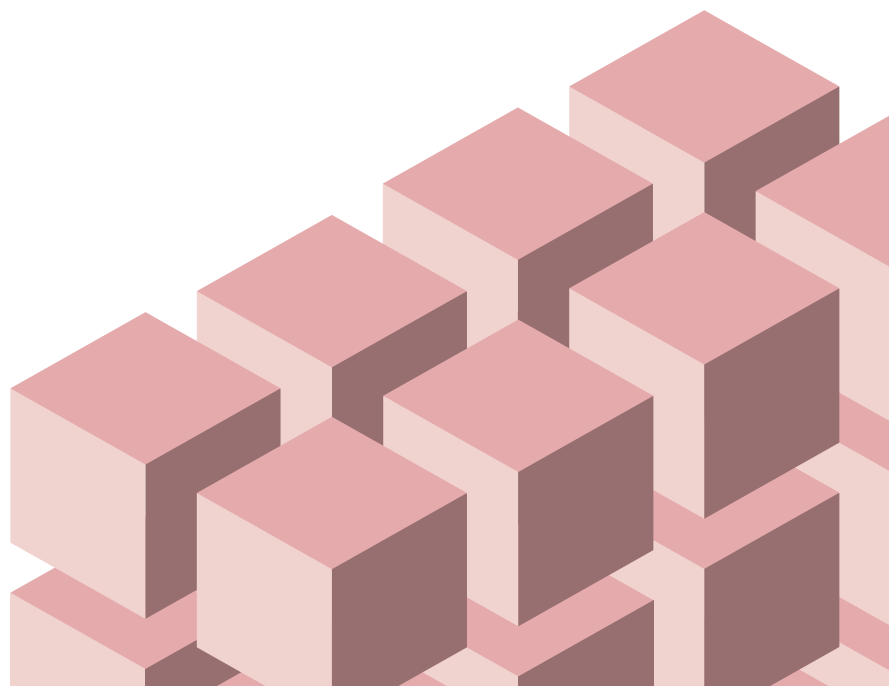
Make UK's *From Road to Rail* report has recommended that the Government take a long-term and short-term approach to transport mechanisms for business. In the long-term, transport infrastructure investment should focus on multi-modal facilities (i.e. ensuring roads, rails, airports, shipping ports are seamlessly integrated to each other). However, in the short-term, Make UK has recommended the utilisation of digital technologies to improve access to rail freight cargo for SMEs, modelling a digital ticketing system based on passenger rail (or air freight) and applying this to rail freight to allow manufacturers to buy container space flexibly.

¹⁶Scope 3 includes all other indirect emissions that occur in the upstream and downstream activities of an organisation.

What are Scope 3 emissions and why do they matter? | The Carbon Trust

¹⁷Royal Mail to stop moving post by rail on cost grounds | Freight

¹⁸From Road to Rail: Optimising Goods Transport in UK Manufacturing | Make UK



Overcoming barriers to investing in green technology

Research into the growing market for green technology reveals the sizeable opportunity for manufacturers. For instance, research from the International Energy Agency has estimated that the global market for key mass-manufactured clean energy technologies will be worth around \$650 billion a year (approximately £511 billion) by 2030 and the related energy manufacturing jobs could more than double at the same time.

The net zero industry globally is growing strongly, to the extent that demand sometimes outpaces supply.¹⁹ In order to make the most of this growing market, it is important that manufacturers look to bold and innovative strategies to deliver a first mover advantage and future success.

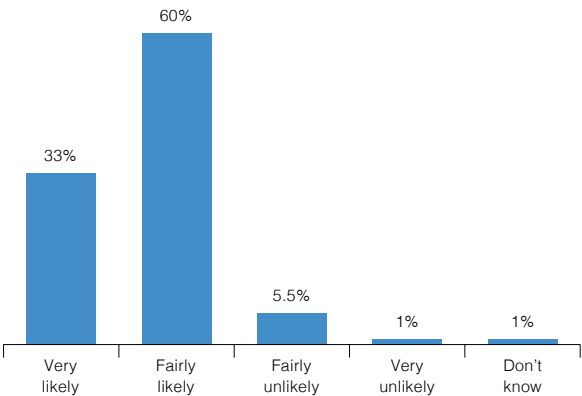
Our survey has shown that manufacturers are alert to this opportunity, with 93% of manufacturers likely to factor it into their business plans over the next five years and around 75% planning some form of investment in the same time frame. This indicates that, despite a challenging business environment, manufacturers are still invested in the green

agenda, seeing it as an opportunity to build their business operation: a way to improve productivity or to drive down costs through greater energy efficiency.

With margins becoming finer, it is perhaps not a surprise to see companies taking a high-risk, high-reward approach when the cost of inaction is much higher. By reimagining their strategies and embracing technology, manufacturers can capitalise on their unique competitive advantage. In understanding these risks as opportunities, 2025 has a navigable path of success for the UK manufacturing sector, though further support is still required to help break down barriers.

Chart 2: Green technology proving central to business plans

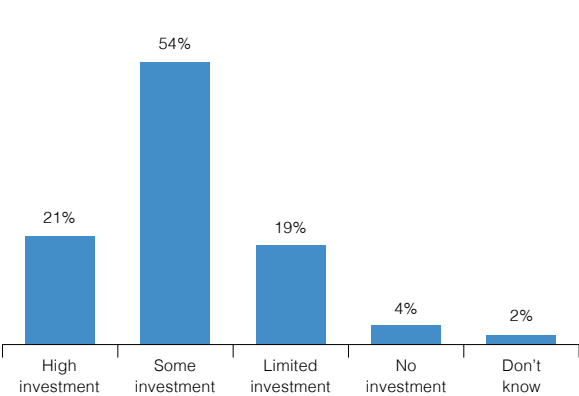
% of companies likely to feature green technology in business plans over the next five years



Source: Make UK Green Tech Survey 2025

Chart 3: Considerable levels of investment expected

% of companies' investment plans in green technology over the next five years

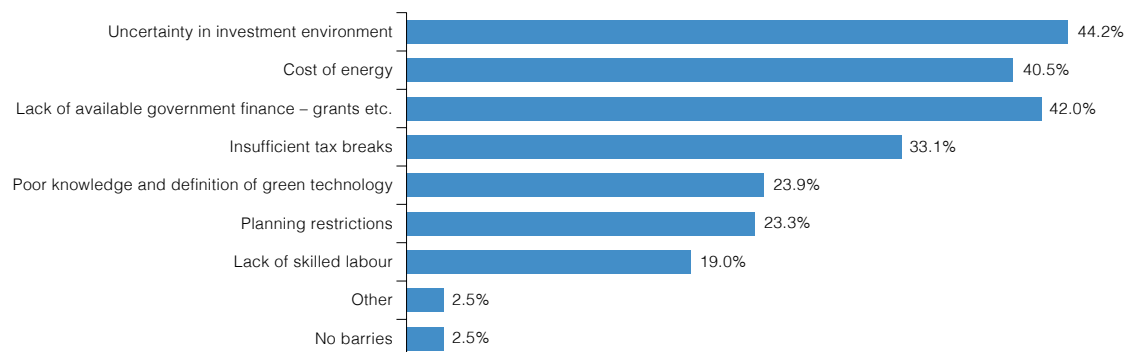


Source: Make UK Green Tech Survey 2025

¹⁹EUR-Lex - 52023DC0062 - EN - EUR-Lex

Chart 4: Uncertainties and rising costs blocking increased investment

% companies citing biggest blockers to investment in green technology



Source: Make UK Green Tech Survey 2025

Manufacturers cite a range of barriers preventing them from investing (further) in green technologies, with uncertainty in the investment environment, cost of energy and access to finance dominating responses. These findings are consistent across our research with our 2025 Executive Survey highlighting similar barriers to investment.²⁰

- **Uncertainty in investment environment:** Uncertainty in the investment environment is the biggest barrier, with 44% of manufacturers citing this challenge. The culmination of rising tax burdens, coupled with higher energy and employment costs, has tested manufacturers' resilience and changed their investment strategies.²¹ This has been compounded by the concerns created from US tariffs, despite positive movements to reduce these.²² The advent of an Industrial Strategy will help to provide clarity to the complex investment environment through the identification of 'frontier' industries and greater strategic oversight. We encourage the Government to implement the strategy in a way that effectively addresses these barriers and in a timely fashion.
- **Cost of energy:** Two-fifths (41%) of firms cite the cost of energy as a barrier to investing in green technology. The Government's proposals to address industrial energy costs in the Industrial Strategy will come as an enabler for some to increase investment from manufacturers in green technologies. The British Industrial Competitiveness Scheme aims to reduce electricity costs by £35–40/MWh through exemptions from policy levies for the IS-8 and foundational manufacturing industries. This has been developed alongside a proposed increase for the British Industry Supercharger Package – an uplift of the Network Charging Compensation scheme from 60% to 90% for

75% of UK manufacturers
are planning green investments
IN THE NEXT 5 YEARS

the most energy-intensive industries, providing additional relief from 2026 to "around 500 eligible businesses".^{23,24}

These policies will go some way to addressing the immediate blockers to further investment, but Government should consider a long-term solution to inflated energy costs, either through the Review of Electricity Market Arrangements or further engagement with the core components raising energy prices.

- **Lack of available finance:** As is often the case, access to finance - whether through inflated pricing or ability to navigate complex public and private financial instruments - comes out as a key concern, affecting 42% of those surveyed. When thinking about climate finance, it is important that we consider its role across the economy and how different actors can engage in a just transition to a net-zero economy. This means broadening the focus beyond public finance and policy to include leveraging corporate and financial institutions to help make funds available for the green transition. We have seen an understanding of this throughout Government policy thinking, such as in the Clean Power 2030 action plan, which notes that "an estimated £40 billion on average per year between 2025-2030" of private investment will be required to deliver this vision.²⁵ There needs to be continued engagement with the private sector to leverage finance in the right spaces, particularly as climate risk is

²⁰Executive Survey 2025 | Make UK

²¹Executive Survey 2025 | Make UK

²²Manufacturing Outlook 2025 Q2 | Make UK

²³Energy intensive industries (EIIs): consultation on the proposed uplift to the Network Charging Compensation Scheme for energy intensive industries - GOV.UK

²⁴The UK's Modern Industrial Strategy

²⁵Clean Power 2030: Action Plan: A new era of clean electricity

becoming more embedded into firms' business plans.²⁶

- **Insufficient tax incentives:** One in three (33.1%) respondents noted this as a concern, with manufacturers commonly reporting increasing tax burdens as a growing issue. In this context, Government should consider how tax incentives could be used as a way of stimulating investment in green technologies. The Industrial Strategy has focused attention on funding for technology, but Government should pull on wider levers to drive investment which may include tax incentives or further financial instruments such as grants.
- **Poor definition of green technology:** A common concern with a broad area like green technology is that businesses do not feel able to engage due to a lack of clarity surrounding its definition. This is reflected in our survey, which shows that around 30% of respondents are finding this a blocker to further engagement. The pinpointing of 'frontier' industries as part of the Industrial Strategy will help to focus attention but is limited to the generation of clean power. Government should explore ways to broaden this focus and strategically link areas of green technology to provide clear direction to business. We therefore invite greater clarity on the application of these technologies.
- **Planning restrictions:** Our research has highlighted that 23% of respondents find that planning restrictions have blocked further investment into green technology. This is a common theme as the adoption of new technologies often requires changes or extensions to existing facilities. This is a problem now well understood by Government, and efforts are being made to address this in the Planning and Infrastructure Bill. However, it is important that the focus extends beyond grid connections and allows for a broader embrace of green technologies.
- **Lack of skilled labour:** 19% of respondents highlighted access to skills as a primary concern. Previous research has found that there are currently 55,000 unfilled long-term vacancies in the UK manufacturing sector, costing the economy £6 billion in lost output each year.²⁷ These problems will only increase as more skilled workers are

required to develop green technologies. For example, to meet the demand for (mainly) EVs, by 2040, the UK manufacturing sector will require nearly 200GWh of battery manufacturing capability - generating nearly 100,000 new roles.²⁸ The Industrial Strategy has focused on the continued use of the Skills Plan complemented by a Clean Energy Workforce Strategy. We encourage Government to consider how the Workforce Strategy can provide a pipeline of talent with attention given to regional needs of manufacturers to support the transition to a UK-wide embrace of green technology. The private sector has already made advances in this area.

- One example is Lloyds' sponsorship of MTC (Manufacturing Technology Centre) in the Midlands. This year marks a ten-year partnership between Lloyds and MTC aimed at providing a new generation of engineers and technicians with the specialist skills, research and technological innovations needed to support the advanced manufacturing of the future. Lloyds recently announced it is extending the partnership, which began in 2015, through to the end of 2029, with a total sponsorship of £15 million during that period. The impact of the partnership is clear, having already supported the training and upskilling of around 5,000 apprentices, graduates, and engineers, with a target of exceeding 6,000 by 2030. In addition, Lloyds have supported hundreds of businesses to access expert advice and support on their factory floors to better adopt new technology, digitise, improve their productivity and decarbonise.

Overall, the Industrial Strategy affirms that Government recognises the barriers manufacturers have identified. Whilst the commitments it makes to address many of these challenges are encouraging, an assessment of how much they will help to overcome manufacturers' concerns can only be made when we enter the delivery phase. Government should also remain cognisant of the wider application of green technologies and promote green technology innovations that stretch beyond those 'frontier' industries.

²⁶From commitment to action: tracking UK financial services' progress on net zero

²⁷Make UK Industrial Strategy Skills Commission Report 2025 | Make UK

²⁸Make UK Industrial Strategy Skills Commission Report 2025 | Make UK

SPOTLIGHT: PRIVATE FINANCE

By far, the greatest part of the investment needed for the net-zero transition will need to come from private funding. Public funding can crowd in private investment, but it will not be sufficient to close the investment gap. For a successful net-zero transformation, we need vast amounts of private sector financing and, in particular, financing raised through capital markets from a broad range of investors, including small retail investors as well as large institutional ones.

A recent City of London report has found that finance institutions and corporations in the UK are investing in climate solutions. The report shows that \$15 billion (approximately £11 billion) of green bonds were issued by financial institutions and corporates in the UK in 2024, the highest since 2020. This represents an 11% private share of the total amount issued by all six global financial centres but unfortunately still lags behind international comparators.²⁹

Some banks have tried to address this challenge by offering financial instruments, including Lloyds, whose Clean Growth Financing Initiative (CGFI) enables businesses to access discounted lending to support a broad range of investments in sustainable business. This can be anything from small improvements in environmental impact, right through to large-scale renewable energy infrastructure. Lloyds did this by partnering with leading sustainability consultants to develop a list of qualifying green purposes to support businesses across common environmental sustainability themes.

SPOTLIGHT: POWER TO PROCESS

Our survey indicated that 72% of manufacturers have found that wider uncertainties around reforms to energy markets are delaying investments to at least some extent. We are expecting further clarity through decisions taken on the Review of Electricity Market Arrangements (REMA).

Since surveying, the Government has taken the first major decision as part of the REMA process in ruling out a shift to zonal pricing. This is an important step, and we believe that an ambitious approach to reformed national pricing is the right decision to deliver certainty to investors and help to achieve the Government's Clean Power 2030 mission, which will be supported by green technologies. We believe that a more strategic and co-ordinated approach to the overall energy system is appropriate and provides stronger signals for efficient siting of new assets to improve overall operational efficiency, which will unleash the potential of UK manufacturing.

Despite this, there is further work required to boost manufacturers' confidence in reforms underway to the UK energy system. As part of this process, we believe that the market would benefit from publication of a detailed cost-benefit analysis on further elements of the REMA package from Government, demonstrating transparency in decision-making and helping to cut out the noise. This should be considered alongside a wider stakeholder engagement process which places customer-centric decisions at its heart. The welcome use of strategic planning to facilitate new assets increases both need and opportunities for engagement with those who will benefit from improvements, and we encourage Government to bring end users into the development of the Strategic Spatial Energy Plan as its preparation progresses.

If implemented successfully, REMA could help to clear up policy uncertainties and deliver the long-term system change needed to reduce energy costs for the foreseeable future.

²⁹From commitment to action: tracking UK financial services' progress on net zero

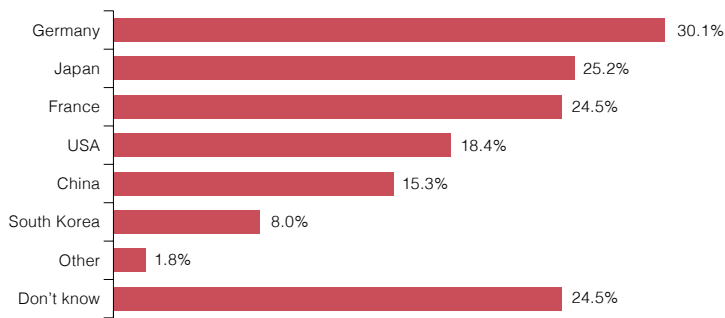
International Comparators

When comparing the UK to its international competitors, manufacturers typically point towards European countries, such as Germany and France, which are dominating green technologies in the supply chain (30% and 25% respectively). There has also been considerable investment in the wider EU environment.

However, further afield, respondents highlight Japan and the US as leading the way (25% and 18%). This chimes with considerable investment programmes that have been focused on driving green technologies to the front of the industrial agenda.

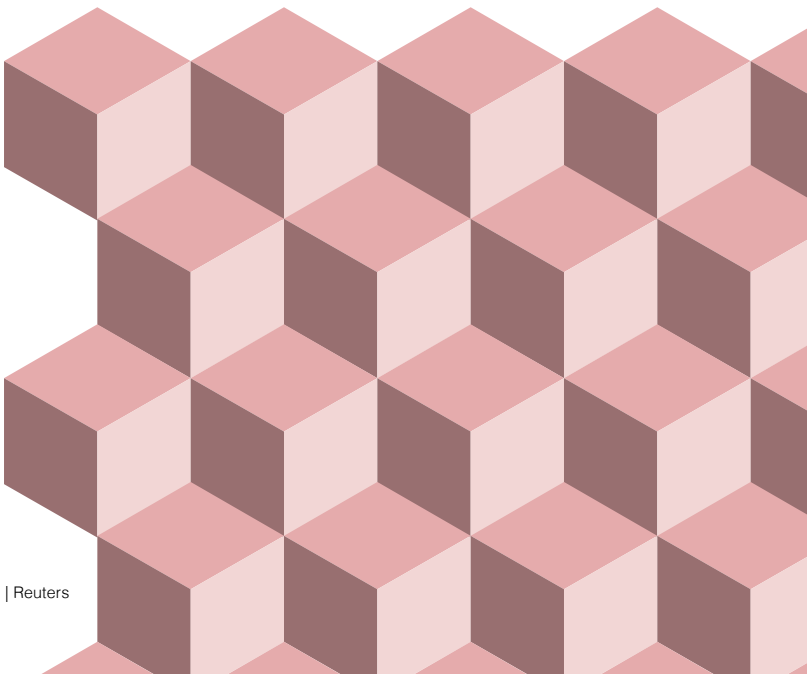
China features lower in our survey rankings, with only 15% of respondents considering the nation prominent in green technology supply chains. While this may initially appear surprising, it is worth noting that the impact of their major investments in 2024 may not have filtered through to business operations at this point.³⁰ We can expect them to rank highly in the supply chain in future.

Chart 5: Manufacturers have identified a wide range of global competitors
% of countries using green technologies prominently in supply chains



Source: Make UK Green Tech Survey 2025

³⁰China's clean energy investments nearing scale of global fossil investments, researchers find | Reuters



EU

The EU has found considerable success in green technologies, with the net-zero ecosystem estimated to be worth over €100 billion in 2021 (approximately £87 billion). They continue to make efforts to coordinate industrial plans to reach net zero through the [Green Deal Industrial Plan](#), which focuses on massively increasing the technological development, manufacturing production and installation of net-zero products and energy supply in the next decade.

The outline for a new Green Deal Industrial Plan is based on four pillars:

- **A predictable and simplified regulatory environment:** this involves a Net Zero Industry Act which aims to provide a simplified regulatory framework for the creation capacity of products that are key to meeting climate neutrality goals, such as batteries, windmills, heat pumps and solar panels.
- **Faster access to sufficient funding:** targeted public funding is deployed to foster innovation, manufacturing, roll-out and related strengthening of grids and infrastructure alongside private funding. This includes increasing access to state aid funds, utilising existing funds such as the Recovery and Resilience Facility and Invest EU programme, alongside focused interventions through the Innovation Fund.

- **Skills:** this uses the European Skills Agenda to support skills in digital and green jobs, including establishing partnerships in the net-zero ecosystems, increasing funding, and improving recognition for these specialist skills, with the ultimate aim of addressing the demand for new skills at all levels.
- **Open trade for resilient supply chains:** this focuses on utilising third country partnerships to create 'win-win situations', opening new markets whilst also providing access to raw materials, parts and components as well as services that industry needs.

Tracking of the success of this plan is in early stages, so it is difficult to draw definite conclusions on the effectiveness of the policy. However, it is worth highlighting that many European businesses have already taken a leading role in this space. For instance, the global wind turbine market is dominated by ten major manufacturing companies, satisfying 88% of demand. Four of those companies are headquartered in the EU: Vestas, Siemens Energy, Enercon and Nordex SE.³¹

³¹European clean tech tracker



Japan

Japan's Green Transformation plan aims to raise up to ¥150 trillion (approximately £762 billion) through public-private finance to incentivise a move away from reliance on fossil fuels and catalyse investments across diverse green technologies, from renewables and smart grids to smart cars and energy-saving equipment.

There is also an emphasis on 'transition' finance, focused on the new technologies needed to decarbonise emission-intensive industries. For instance, nearly 30% of Japan's CO2 emissions come from material manufacturing industries. Innovative technologies are needed to help reduce the sector's emissions.³²

- **Target Setting:** Japan's slow start in the energy transition has not prevented it from setting ambitious, fast-moving goals. The GX Plan aims to reshape the country's power mix by 2040, with 40-50% from renewables and 20% from nuclear.
- **Funding:** the Government's investment will be issued in the form of government bonds, GX Economic Transition Bonds, financed with a carbon levy and the emissions trading system introduced in the future. The use of bonds is to kickstart investment and encourage a growth focus in the transition.
- **R&D:** Due to Japan's position as one of the world's largest emitters, they have focused on directly supporting R&D through the Green Innovation Fund, which is supporting innovation at the country's leading companies. In February 2024, 55% of bond auction proceeds were allocated to R&D initiatives.

With the enormous scale of investment, Japan has started to take the lead on green IT, and AI has become essential for businesses aiming for towards net zero, demonstrated by companies like Japanese Hitachi Systems. Their initiative provides a dynamic framework that guides organisations through their carbon reduction journey, incorporating assessment, data collection, visualisation, implementation, and continuous improvement. This approach has been able to set itself apart from competitors by offering an end-to-end solution.³³

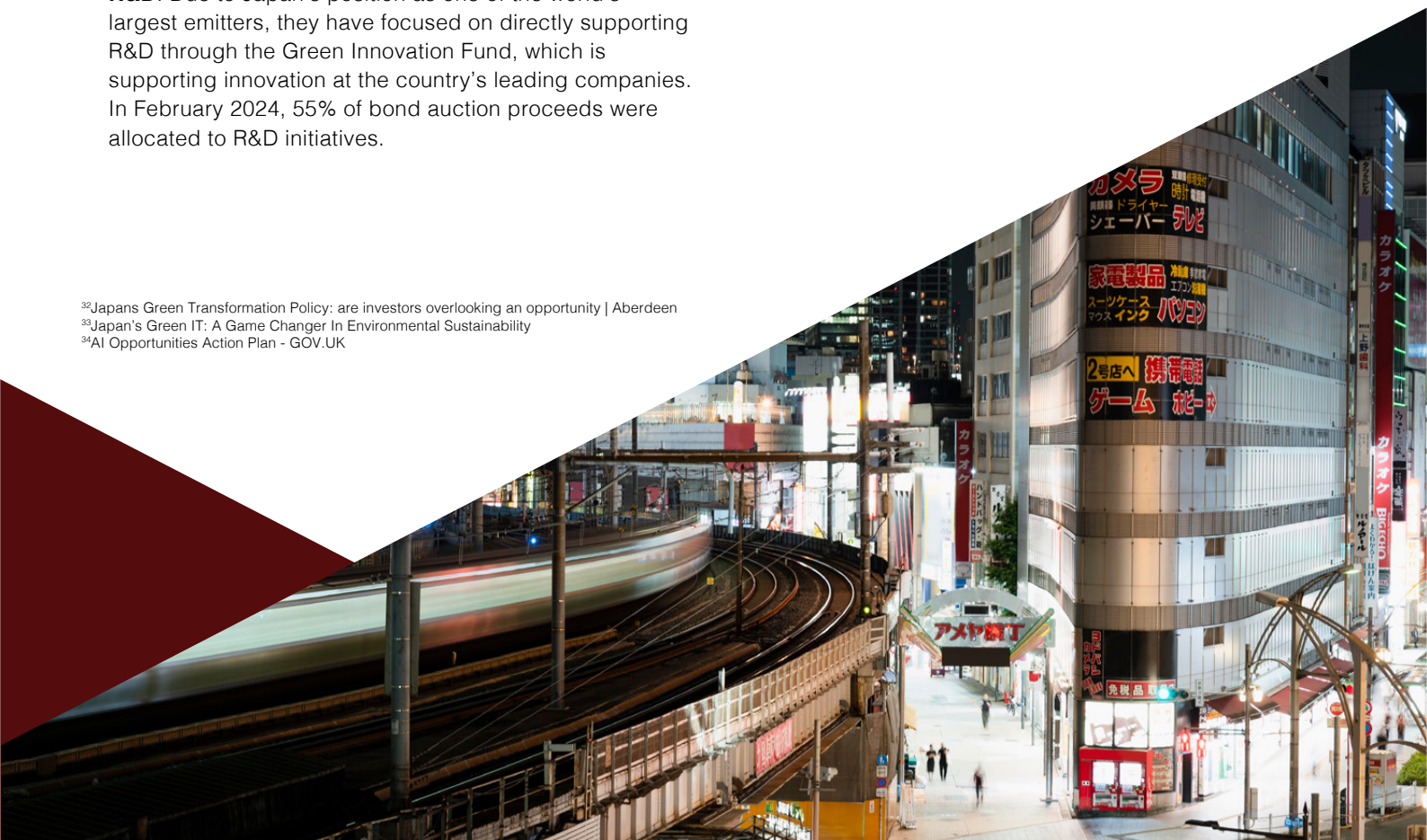
The UK Government has shown that it has significant appetite for the country to become a centre for AI, currently representing the third biggest AI market in the world.³⁴ The advent of data centres can achieve significant co-benefits, creating cost savings through shared infrastructure and operational expenses, enhanced reliability and scalability, improved security, increased connectivity options, and contributions to economic growth and sustainability efforts.

The Japanese example indicates the way that an investment in AI can assist in reaching net zero improving productivity, performance and efficiency across the economy.

³²Japans Green Transformation Policy: are investors overlooking an opportunity | Aberdeen

³³Japan's Green IT: A Game Changer In Environmental Sustainability

³⁴AI Opportunities Action Plan - GOV.UK



US

The United States' Inflation Reduction Act (IRA) of 2022 had intended to mobilise over \$360 billion by 2032 (approximately £263 billion) with a key goal of reducing carbon emissions by around 40% by 2030. The advent of the Trump administration and adoption of the 'One Big Beautiful Bill Act' has seen the US approach to climate finance change. The Act has rescinded funding for clean heavy-duty vehicles, repealed the Greenhouse Gas Reduction Fund, and implemented the rescission of the funding for the implementation of the American Innovation and Manufacturing (AIM) Act amongst others.³⁵

The biggest rollbacks were to the electric vehicles and residential energy efficiency credits, which all terminate before the end of 2025, though similar steps have been taken in relation to the wind and solar tax credits. The Bill terminates the section 45Y production tax credit (PTC) and section 48E investment tax credit (ITC) for wind and solar projects placed in service after December 31, 2027, though facilities that begin construction before July 4, 2026, may take the full amount of the credit for the original phase-out period.³⁶

Despite this, elements of the IRA remain present, and it is worth considering how a financing model using a combination of grants, loans, tax provisions and other incentives can be used to accelerate the deployment of green technology.

- **Energy transition:** The IRA provides a complete framework to support the energy transition. Substantively, the IRA includes tax credits for the production of electricity from renewable sources, for electricity produced through nuclear power plants, and for clean hydrogen. It also expands the remit of the Loans Program Office (LPO), enabling the establishment of a \$3.6 billion loan guarantee programme for innovative clean energy technologies.
- **Green growth:** The Act sets an ambitious target of a 50-52% decrease in carbon emissions by 2030 (when compared to levels in 2005). The IRA focuses on the development of American green industries that provide economic stimulus and out-compete conventional industries, as well as foreign green industries. For instance, in the industrial sector, the IRA looks to accelerate the development of a clean steel sector, concentrating on immediate emission reductions and bolstering domestic production. These incentives have focused on active businesses and funding through tax credits.

Within three years, the IRA has driven over \$115 billion (approximately £83 billion) in clean energy investments and created 90,000 jobs in two years.³⁷ This indicates the extent to which policy innovation can stimulate growth in green technologies.

³⁵2025.06 Reconc_All Anti-Enviro Provisions_SENATE.docx

³⁶The One Big Beautiful Bill: Impact on the IRA's Clean Energy Tax Credits | Steptoe

³⁷Two Years of the Inflation Reduction Act: Transforming US Clean Energy | GIIA



Unlocking our green technology potential: Conclusions and Recommendations

It is evident that Government and industry are coalescing around the opportunities offered by green technology and the potential for UK manufacturing to become a global leader in this space. The Industrial Strategy indicates the Government’s clear support for the climate ambitions of the sector, laying out a suite of policies that encourage investment into green technologies.

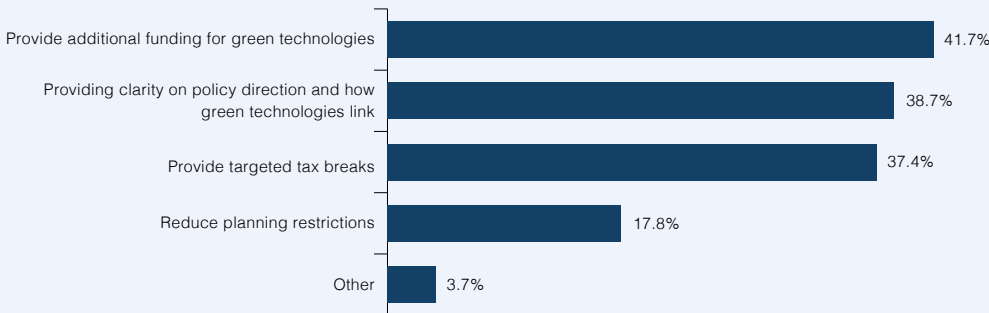
The recommendations from manufacturers set out in this report mirror the challenges identified throughout our research. There is a clear desire for additional funding to support the transition, which the Government has begun to address through recent investment packages for ‘frontier’ technologies in the Industrial Strategy. However, additional growth could be realised by tackling the costs of business, and, if energy costs can be addressed over an extended period, this would act as an enabler to greater investments into green technology.

The transition can be further supported by demystifying green technology and providing greater clarity on

implementation of policies outlined in the Industrial Strategy. This can be addressed by better knowledge sharing from Government, creating easily accessible resources to aid adoption, and through building a skilled workforce to provide the necessary expertise for new technologies.

Furthermore, manufacturers want to see a regulatory environment that allows easy adoption of green technologies. There is a practical reality that underpins any innovation drive and building of new technologies with space becoming an additional concern. Manufacturers need to feel that they have an environment that will allow them to take those next steps.

Chart 6: Funding indicating opportunities to open doors
% of companies identifying what Government could do to increase uptake



Source: Make UK Green Tech Survey 2025

To unleash this potential, we would welcome Government action to:

Finance green technology:

– Ensure that businesses have access to finance that can accelerate adoption of green technologies:

- Businesses need access to capital to invest and grow. By removing the barriers to accessing finance for manufacturers, there could be a £9.2 billion increase in total investment in capital and R&D across the sector.³⁸
- Government should implement a targeted exemption for investments in green technologies from business rates, removing a major disincentive for manufacturers. At present, manufacturers that install energy-efficient machinery such as on-site solar energy panels, wind turbines, or low-carbon heating systems can face higher rateable values because this new capital stock increases to nominal value of the factory, penalising firms for “doing the right thing” by investing in net zero technologies.
- Government should expand the R&D tax relief to include capital equipment relating to industrial automation and decarbonisation and expand full expensing capital allowances to allow for the leasing of capital and upcycling of secondhand plant & machinery.
- The biggest challenge to access is awareness and understanding of existing financial support. While better signposting and campaigning can help, digital technologies should be used to address the root of the problem, micro-targeting businesses with relevant support at the time they are most likely to need it.
- The latest industry research shows that manufacturers’ investment intentions for the year ahead are acutely suppressed.³⁹ Investment in green technologies will likely slow as a result, at a time when the UK’s industrial base needs to accelerate its green technology adoption to ensure future competitiveness. The Government should de-risk private sector financing through enhanced lender guarantees to ensure appropriate finance is made available for the adoption of green technologies.

– Address long-term concerns over the cost of energy:

- The announcement of a British Industrial Competitiveness Scheme in the Industrial Strategy aims to address immediate cost concerns, and the Government has begun the process of codesigning longer-term improvements via the Network Charging Compensation scheme (NCC) consultation. We welcome these moves, and encourage the government to accelerate delivery: we eagerly await confirmation of the detail of how the British Industry Competitiveness scheme will be delivered. We would encourage the Government to aim for implementation in 2026 and to extend eligibility to a broader spectrum of manufacturers.
- A scheme of this nature can only exist as a temporary measure, particularly within a volatile market environment. Government must move fast to ensure that reforms are addressing the core components, driving high energy prices to accelerate electrification and the transition to a renewables-led system. By addressing the long-term trajectory of the electricity market, manufacturers will be able to more effectively take strategic decisions related to their business operations which, when coupled with cheaper energy prices, could accelerate the adoption of energy efficient technology and greater investment. It may be beneficial for Government to consider how to apply a customer-centric approach to the strategic planning aspects of REMA, including industry in discussions at all levels.

³⁸The Growth Mission: A Blueprint for Scaling Up SME Manufacturers | Make UK

³⁹Manufacturing Outlook 2025 Q2 | Make UK

Manufacturing a sustainable future

– capitalising on green technologies

Demystifying green technology and building knowledge:

– Establish a skills pipeline that is prepared for the advent of green technology and can contribute to the Fourth Industrial Revolution:

- In its early work, Skills England has rightly recognised that training providers need the capacity to deliver high-quality, high-value training in engineering and clean energy jobs. The first step towards this should be urgently reviewing funding bands for critical apprenticeship standards, ensuring that the right training is available in the right places for businesses to invest in, as called for by Make UK's Industrial Strategy Skills Commission.
- Apprenticeship course content should be regularly updated to include new technology, ensuring a talented future workforce with the relevant skills and expertise to implement and improve the latest green innovations, allowing companies to grow to their maximum potential.
- Government should consider how to ensure that educational programmes are kept current and forward-looking, ready to adapt to new and emerging technologies, for example, in EV battery development. The Industrial Strategy's commitment to incorporating short courses into the evolving Growth and Skills Levy provides an opportunity to focus flexible training options on green and digital skills.
- As manufacturers look to reduce their carbon footprint by increasing efficiency, Government could explore methods to increase digital literacy amongst the existing workforce, whose skills will be relied upon to implement the AI and technological revolution in industry. Supporting more employers to access flexible upskilling options, such as Skills Bootcamps, through the Growth and Skills Levy would help to address this.

– Expand and Evolve the Made Smarter Adoption Programme

- The Made Smarter Adoption programme has proven effective in supporting SMEs with expert advice, skills development, and access to technology. To maintain momentum, Government may wish to set out a long-term commitment to fund and enhance the impact of digital adoption in achieving net zero, including using generative AI. This can help to increase efficiency, as our research demonstrates, with Generative AI being used in a machine that makes gypsum to create a lighter and more energy efficient machine.⁴⁰

Breaking down regulatory barriers:

– Ensuring green technology is in scope of the Planning and Infrastructure Bill

- The Government should use the Planning and Infrastructure Bill to break down barriers extending beyond 'big ticket' changes, such as grid connections, and support individual manufacturers who are installing new green technology.



⁴⁰Future Factories Powered by AI | Make UK

Appendix:

Industrial Strategy and green technologies

Renewable Energy

Through the [Clean Energy sector plan](#), the Government has shown considerable appetite in building renewable energy capacity in the UK. They have prioritised several ‘frontier clean energy industries’ with funding to over £30 billion per year by 2035.⁴¹ It further adds that solar, bioenergy storage including Long Duration Energy Storage, heat networks, and smart technologies are “also vital” for the clean energy mission but are not among the frontier industries.

Importantly, the strategy has positioned manufacturing at the heart of the clean power revolution with state-owned energy company [Great British Energy](#) being allotted a further £700 million to help to build manufacturing facilities in the UK for key components like floating offshore platforms, electric cables and hydrogen infrastructure. By pumping investment into the national production of renewable energy technologies, this presents a prime opportunity for manufacturers to be central to the clean energy transition and able to take advantage of abundant low-cost renewable energy.

The ‘frontier industries’ have been identified as:

Wind (onshore and offshore)

The Government is placing wind as a strategic priority in the Industrial Strategy, understanding the role it has in powering the future whilst also tapping into domestic manufacturing to place the UK at the centre of the supply chain. The strategy demonstrates that the UK has the potential to be a global technology leader in this space and presents an opportunity for manufacturers that must be seized.

Offshore

- The strategy has noted that the UK has existing supply chain strengths, with offshore wind exports already worth over £2 billion a year, but highlights that there is potential to go further as technology could play an important role alongside harnessing domestic manufacturing.⁴²
- The sector’s Industrial Growth Plan (IGP)⁴³ sets out the UK’s opportunity to be a global technology leader in advanced turbine technology, industrialised foundations and substructures, electrical systems and cables, smart environmental services and next generation installation and operations and maintenance.
- The Clean Energy Supply Chain Fund established under Great British Energy has announced £300 million of funding for offshore wind.
- Enabling the Crown Estate to use increased investment powers created through The Crown Estate Act 2025 to support supply chain and port infrastructure. This will support £400 million of capital to the sector: £50 million through the Supply Chain Accelerator Programme supporting early-stage project development, and up to £350 million of capital funding in the medium term through the Supply Chain Investment Programme.

Onshore

- The Government estimates that the onshore wind sector could support up to 45,000 direct and indirect jobs in the UK by 2030 with installed capacity planned to almost double by 2030.⁴⁴
- In order to capitalise on this, Government will be publishing an onshore wind strategy in the future.

⁴¹Industrial Strategy: Clean Energy Industries Sector Plan

⁴²Industrial Strategy: Clean Energy Industries Sector Plan

⁴³Offshore wind Industrial Growth Plan

⁴⁴Job estimates for wind generation by 2030: methodology note - GOV.UK

Nuclear (fission and fusion)

The Industrial Strategy, alongside the Spending Review, has shown that appetite for nuclear power is high in Government. It is presented as an opportunity for new investment and creating an export market. Although this is an area that requires specialist skills and has been dominated by foreign competitors in the past, recently we have seen domestic manufacturing entering the field, with Rolls-Royce taking a leading role in being named the selected technology provider for the Great British Nuclear (GBN) small modular reactor (SMR) competition.

Fission

- Government is taking an active role in bringing nuclear assets to market with a comprehensive package of measures that will promote private investment, encourage new market entrants, reduce costs and timelines, and support exports.
- Government plans to seize the opportunities presented by Small Modular Reactors (SMRs) and Advanced Modular Reactors (AMRs). With many of the components fabricated in a factory environment and then transported to site, these technologies create significant R&D, manufacturing and logistics opportunities.
- Government has announced significant investment in the nuclear sector, with £14.2 billion for Sizewell C alongside over £2.5 billion as part of the SMR programme.

Fusion

- The UK's world-leading fusion energy programme is an example of how the UK can turn exceptional R&D into real economic growth. The Government has highlighted plans to spend £2.5 billion over five years to lead the global race for fusion energy as part of its move to double investment in clean energy industries.

New technologies (Carbon Capture Utilisation and Storage, Hydrogen and Heat Pumps)

The Government has highlighted Carbon Capture Utilisation and Storage (CCUS) and Hydrogen as emerging sectors, whilst acknowledging their high upfront costs and uncertainty which may dampen investment. This aims to provide certainty, seeking to drive down costs whilst maximising growth opportunities, enabling the UK to capitalise on a first-mover advantage with clear deployment plans and a strong offer for domestic manufacturing.

With movement into new technologies such as nuclear, hydrogen and CCUS, the Government must commit to building our skilled workforce. The Industrial Strategy has highlighted the continued use of the Skills Plan, and this will provide the investment and coordination required to ensure that the UK has the skilled workforce needed to remain at the forefront of nuclear innovation. This will be complemented by cross-cutting actions across clean energy sectors to be set out in the Clean Energy Workforce Strategy. We strongly urge Government to put consideration into how the pipeline of talent needs to look to transition to a UK-wide embrace of green technology.

Hydrogen

- The focus is on delivering certainty for deployment through Hydrogen Allocation Rounds (HARs). The first round commits over £400 million of private capital between 2024 – 2026. This will also be used to drive down costs and promote adoption of hydrogen as an alternative fuel type.
- There is also a commitment to establishing the UK's first regional hydrogen network from 2031, which will be supported by over £500 million for hydrogen infrastructure. This network will facilitate the production, storage and transportation of low-carbon hydrogen to support its use in key sectors locally.

CCUS

- The Government is providing further certainty by backing two UK CCUS in this Spending Review, allocating £9.4 billion to supporting the Acorn and Viking Clusters.
- There will be further work in finding viability of CCUS in markets such as incorporation into the UK ETS.

Heat pumps

- To invest in UK production, companies need greater confidence in demand for heat pumps. The Government recently announced £13.2 billion of public investment for the Warm Homes Plan over the Spending Review Period, including £5 billion of financial transactions. This investment will be allocated across schemes that support the roll out of heat pumps, alongside energy efficiency.
- The Government has placed some focus onto heat pumps, aiming to increase demand alongside a new Heat Pump Investment Accelerator Competition (HPIAC), providing funding for heat pump manufacturers to increase capacity.

Innovation

The Industrial Strategy highlights the potential that advanced manufacturing has in driving innovation, and this has been underpinned by an £86 billion investment into UK R&D, targeted towards the IS-8, leveraging private investment in cutting-edge research technologies. With the focus Government has placed on net zero throughout the strategy, we can see this as a space that manufacturers with interests in green technology can engage with.

Made Smarter Innovation

- Early outcomes from the programme indicate positive impacts on productivity and sustainability. For instance, projects funded under the Sustainable Smart Factory competition are estimated to create 1,000 jobs within three years and reduce manufacturing carbon dioxide emissions by 300,000 tonnes annually, equivalent to taking nearly 65,000 cars off the road.⁴⁵

Electrification

The Industrial Strategy has focused on addressing high energy costs as a priority which will be an enabler to further electrification throughout the economy. However, there is further investment that manufacturers can take advantage of to start pursuing further electrification in their operations.

Our research indicated that 28% of surveyed members were unsure on the ability of electricity networks to supply necessary developments. It is therefore helpful to see that the Government has placed high importance on improving grid connections, understanding that the UK must build twice as much new transmission infrastructure by 2030 than in the previous decade to ensure greater industrial electrification.

To facilitate this, the Government is utilising the:

Connections Accelerator Service (by end of 2025)

- This will support demand projects, prioritising those with high economic value and job creation. It intends to streamline grid access and reduce delays.

Planning & Infrastructure Bill

- Introducing new powers to use strategic documents (such as the Industrial Strategy) to inform connection allocations, reserve grid capacity for strategically important projects, and streamline regulatory processes.

The investment in the grid can act as an enabler to industry electrification, meaning that manufacturers can support local grid constraints through a combination of onsite renewables, onsite electricity and thermal storage and flexibility mechanisms. This indicates how clever policy interventions can establish a mutually beneficial use of green technology.

Circular Economy

The information from the Government on the circular economy remains sparse, though it has noted that promoting resource efficiency and encouraging the re-use, repair and recycling of materials and products will be an essential facet of the next 10 years of delivery for the Industrial Strategy.⁴⁶ There is a circular economy strategy due in Autumn 2025, and we hope that this provides oversight on how the Government wants industry to engage with the concept. This remains an area of untapped potential and, without clear policy action, we risk being overtaken by international competitors.

⁴⁵UK Digital Manufacturing advice & innovation | Made Smarter

⁴⁶The UK's Modern Industrial Strategy

About



Make UK is backing manufacturing – helping our sector to engineer a digital, global and green future. From the First Industrial Revolution to the emergence of the Fourth, the manufacturing sector has been the UK's economic engine and the world's workshop. The 20,000 manufacturers we represent have created the new technologies of today and are designing the innovations of tomorrow. By investing in their people, they continue to compete on a global stage, providing the solutions to the world's biggest challenges. Together, manufacturing is changing, adapting and transforming to meet the future needs of the UK economy. A forward-thinking, bold and versatile sector, manufacturers are engineering their own future.

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