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in progress

From slogans to strategies

BSI Net Zero Barometer 2026:

Sector perspectives on progress,
priorities and trade-offs.

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Foreword

I am delighted to introduce this sector-focused edition of the sixth BSI Net Zero Barometer report.

Published in early 2026 amidst significant geopolitical tension in the global economy and growing debate over the UK government's net zero priorities, our research found that overall commitment to achieving net zero by 2050 remained remarkably resilient at 82%.

Furthermore, 81% of the companies surveyed reported that they were acting on that commitment.

Corporate action has become much more nuanced than before, as each sector translates net zero into the language of its own risks, opportunities and commercial realities.

The manufacturing and food industries are prioritizing commercial survival in response to energy, cost and climate pressures. Transportation is navigating a fragmented transition, as road electrification accelerates, while the aviation and maritime sectors grapple with technological and infrastructure hurdles. We found that healthcare faces the challenge of balancing circularity with patient safety, whilst the energy sector in the UK is focused on the government's immediate Clean Power by 2030 mandate.

In heavy manufacturing and the booming data centre sector, firms face parallel but distinct pressures on power. Manufacturers are contending with the price of industrial electricity, while data centres face delays in securing grid connections. Built environment organizations face a skills gap and the complex realities of retrofitting buildings designed for a very different climate.

One common thread runs through all these responses: corporate net zero action is moving from environmental ambition to delivering operational efficiency and long-term resilience.

Above all, the sector-focused analysis in this latest BSI net zero barometer report reveals a universal demand for support. The vast majority of businesses (91%) in the survey say they want clearer guidance, practical tools and credible frameworks to help them progress.

This is exactly where best practice consensus standards are most effective, providing organizations everywhere with the clarity and confidence to invest in their own transition pathway.



Scott Steedman CBE,
Director-General, Standards, BSI



Recap: Key findings from businesses surveyed for 2026 BSI Net Zero Barometer.

82%

are committed to net zero emissions by 2050.

53%

have changed how they promote climate actions due to increasing climate scepticism.

81%

have taken (or are currently in the process of taking) action towards net zero.

91%

are interested in receiving support and 88% want greater financial incentives from government.

80%

recognize that failing to prepare for climate change has severe long-term consequences.

30%

agree strongly that government has a clear and realistic plan to meet the UK's net zero goals.

37%

say cost savings and operational efficiencies are the most prevalent drivers of net zero action.

54%

have published formal commitments to net zero (or are doing so).

91%

face barriers to net zero action, with financial cost the challenge cited most often.

38%

have either extended, paused or abandoned net zero targets.

The sector perspectives

Building on the key findings of the 2026 Net Zero Barometer Report, this paper takes an in-depth look at a number of key sectors. It draws on the research data to make comparisons and highlight differences between sectors. In-depth interviews with BSI's sector specialists reflect on the results and offer their insights and recommendations.



Our experts and their views:



Abbey Dorian
Head of Energy, BSI



Emily Field
Food Sector Lead, BSI



Anthony Burd
Director of Built Environment, BSI



Nick Fleming
Director of Transport and Mobility, BSI



Ben Sheridan
High Value Manufacturing Sector Lead, BSI



Rob Turpin
Head of Healthcare, BSI



Courtney Soulsby
Global Director Healthcare and Life Sciences, BSI



Dr Laura Bishop
Digital Sector Lead, AI and Cyber Security, BSI



1.

Energy:

The 2030 sprint and the national security mandate

There's no net zero without clean energy. So, tackling grid constraints, investment pressures and energy security challenges are of national significance.



Sector snapshot: Where are we now?

The UK energy sector is a global front-runner when it comes to incentivizing decarbonization and sustainability. Roughly £30 billion is committed annually through to 2030 to build out clean power, and domestic policy commitment remains consistent.

However, the conversation within the industry has fundamentally shifted away from the broad ambition of net zero by 2050. Now, focus is on the government's national mission: Clean Power 2030. This targets at least 95% electrification from clean sources, with a 5% natural gas allowance for periods of catastrophic grid instability.

As the sector acts as critical national infrastructure, it operates under a unique regulatory framework. Rather than relying solely on market forces, the transition is legally mandated by the Office of Gas and Electricity Markets (Ofgem) through strict licensing conditions and price controls. This framework obligates major utilities and network operators to invest heavily in decarbonization as a condition of operation. Effectively, this gives the sector a 20-year head start on many other industries.

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It's the last 5% of decarbonization that is the hardest. Getting to 50% or 80% clean power is comparatively straightforward; getting from 95% to 100% is exceptionally challenging.

Abbey Dorian
Head of Energy, BSI



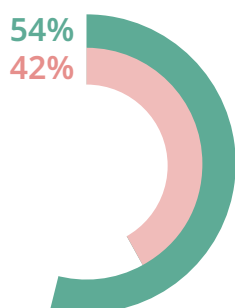
The data picture



Energy businesses surveyed

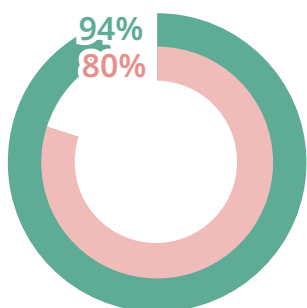


Average across all sectors surveyed



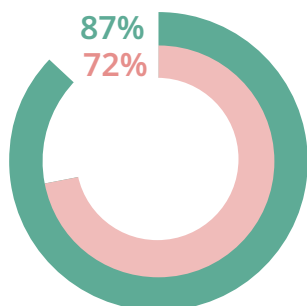
High commitment, but evidence of boardroom friction

While **54%** of firms surveyed are “very committed” to net zero (compared to **42%** across all sectors), execution is causing friction. **32%** cite a lack of senior management buy-in as an active barrier. This might reflect a structural tension between long-term sustainability targets and the operational pressures of strict price caps.



Driven by long-term resilience

94% of energy firms surveyed are concerned about future costs. They recognize that preparing for climate change is vital for their future business resilience. This is the highest of any sector surveyed, versus the average of **80%** measured across all sectors in the survey.



Protecting prior investments

87% believe reducing net zero efforts now will risk losing prior investments and increasing future costs, exceeding the average of **72%** across all sectors. This is a clear driver of momentum.



96%

77%

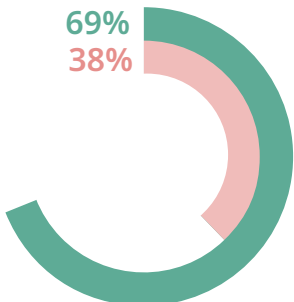


89%

72%

Highest levels of data confidence

Alongside AI & IT and pharma, the energy sector has the highest confidence in both its own emissions data (**96%** vs. a **77%** average across sectors) and that of its supply chain (**89%** vs. **72%**). Accuracy is driven by strict regulatory licensing mandates and the ongoing transition to standardized, machine-readable data systems like the Ofgem-mandated Common Information Model.

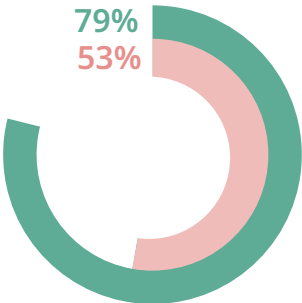


69%

38%

Target recalibration

69% of energy firms surveyed have extended, paused, or dropped their net zero targets. This is well over the average proportion of **38%**. This might well reflect the sector's exposure to volatile global politics, supply-chain risks and practical domestic bottlenecks.

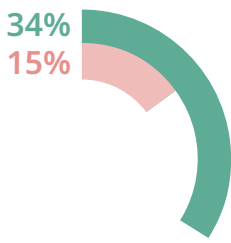


79%

53%

The communications pivot

79% admit to changing how they communicate climate action due to rising climate scepticism (much higher than the average measured across all sectors of **53%**). This reflects the volatility described above.



34%

15%

Internal pressure to act

Staff pressure is a uniquely high driver for net zero action in energy (**34%**), second only to cost savings and operational efficiencies. This is more than double the total proportion of **15%** overall.



Key barriers & pressures

Despite being a front-runner, the sector faces distinct and complex hurdles that threaten to slow momentum:

- ! **The data bottleneck:** Ambition for a decentralized, digitalized grid is being restricted by siloed data capture and sharing practices. To plan effectively, operators need an accurate picture of where to reinforce the grid and connect new projects. Ofgem mandated the use of the Common Information Model in 2025 to standardize how energy assets communicate in a machine-readable format. Implementation across distribution networks and software vendors has been far more time intensive and complex than initially anticipated.
- ! **The circularity straitjacket:** As first-generation renewable assets (particularly wind turbines) come offline in 5 to 10 years, there is a massive recycling challenge. Without clear guidance on the transfer of legal liability, usable materials cannot be repurposed safely. Perfectly good components are sent to landfill. Hesitancy to disclose this waste and suffer reputational damage has created a data void slowing investment in circular supply chains.
- ! **Geopolitical vulnerability:** Without a natural endowment in critical minerals, the UK relies heavily on global supply chains, particularly China, for the production and refinement of the materials for renewable technologies, like solar photovoltaic systems and wind turbines. This makes UK energy firms hyper-sensitive to geopolitics, which may cause price spikes in essential materials or, in worst case scenarios, trade restrictions. It might be why 69% of energy firms surveyed have recently recalibrated or extended their net zero timelines.

“

We have grand ambitions for a decarbonized, digitalized grid, but we are relying on outdated data and an incomplete picture of what the UK needs.

Abbey Dorian,
Head of Energy, BSI



Drivers and opportunities for progress

- ✓ **National security and technical viability:** The ultimate driver for the level of pace and innovation in the energy sector is not solely environmental ambition, but the need to keep the lights on while the UK navigates an unstable global situation and unprecedented growth and complexity in energy assets.
- ✓ **Decentralization at the grid edge:** Immediate opportunities lie in distributed energy resources. If more consumers use plug-in solar, electric vehicles, and residential batteries they will become active grid participants and can reap the financial rewards for participating directly in the clean power mission. This shifts the UK from traditional centralized power generation toward a modern, decentralized network.



Looking ahead: The next 12-24 months

The energy sector is entering a dash to reach the 2030 clean power target. Whilst achieving 90-95% clean power is deemed feasible with unprecedented levels of investment, 100% is viewed more sceptically.

The final sprint to 2030 will be defined by ruthless pragmatism to guarantee both decarbonization and unwavering national energy security.

So, the next two years will see a recalibration of technology backing. Government risk appetite may shrink, favouring proven, established technologies. Fledgling technologies (such as geothermal energy, or broad applications of hydrogen) not proven at scale by mid-2027 may well lose financial backing. Hydrogen is a good example of this strategic investment switching gears, with the focus pivoting strictly to heavy transport.

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Ultimately, this is critical national infrastructure. If we hit record levels of clean power but suffer a major blackout, nobody will remember the carbon intensity that day. They'll remember the lights going out. Performance and resilience have to be delivered in parallel to sustainability.

Abbey Dorian,
Head of Energy, BSI

2.

Built environment:

The economic weathervane

Navigating the challenge of c.25 million existing homes while bridging the embodied carbon policy gap.



Sector snapshot: Where are we now?

The built environment is an economic weathervane for the broader net zero transition, pivoting rapidly in response to the prevailing financial and political climate. As the sector is highly capital-intensive and extremely fragmented, any macroeconomic shift (from interest rates to supply chain costs) registers almost immediately.

Progress is being made, but the sector is currently off the necessary trajectory. Highly exposed to fluctuating interest rates, land values, and the increasing costs of materials, there has been a cooling off in net zero investment. While the construction of new builds is broadly conforming to tighter regulations, the undeniable challenge lies in the retrofit of the UK's c.25 million existing homes.



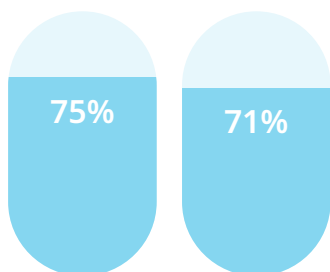
The data picture



Built environment businesses

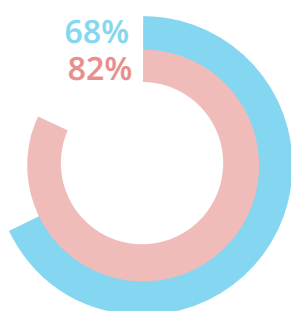


Average across all sectors surveyed



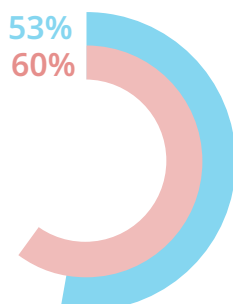
Protecting long-term assets

75% of firms believe reducing net zero efforts risks losing prior investments, and **71%** see climate preparation as vital. The sector's heavy shift toward climate adaptation is driven by the physical need to protect infrastructure and built assets designed to last 50 to 100 years.



A cautious outlook

While **68%** of firms are optimistic about prospects for the next 12 months, it places them well below the average proportion of **82%** measured across all sectors.



A sceptical view of 2050

Along with healthcare, confidence in achieving net zero by 2050 is the survey's lowest: **53%** versus the **60%** all-sector average.

27%

Cost

27%

Competing growth priorities

27%

Uncertainty over how to take action

Triple hurdles

Firms face a mix of financial, practical and capability barriers to net zero action. Cost remains important (**27%**), but respondents are just as likely to cite competing growth priorities and uncertainty over how to take action. The latter is a likely brake on the challenge of retrofitting the UK's c.25 million existing, poorly insulated, legacy homes.

42%

36%

A strong appetite for upskilling

To bridge internal capability gaps, **42%** of firms surveyed show a strong interest in net zero training programmes and workshops. This exceeds the **36%** cross-sector average figure.

42%

53%

Holding firm on communications

Only **42%** admit to changing how they communicate climate action, lower than the total proportion of **53%**. The sector might be less affected by changing public and political debates around net zero, although recent heat waves might re-ignite conversations.

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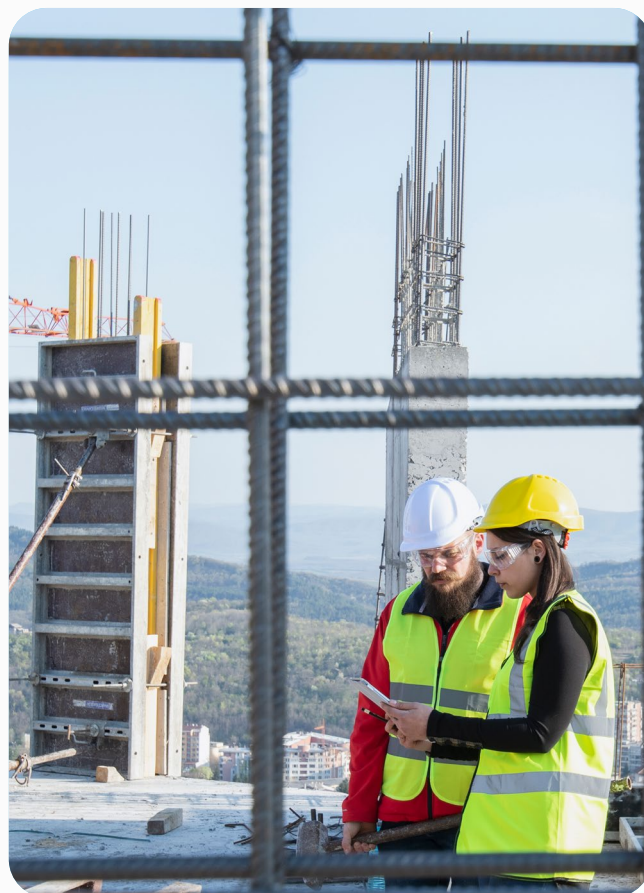
Whether your currency is carbon abated or pounds saved, the most effective solutions are often the same. Upgrading energy efficiency helps society, combats fuel poverty, and provides energy resilience.

Anthony Burd
Director of Built Environment, BSI



Key barriers & pressures

- ! **The policy gap:** While operational carbon (energy used in buildings) is regulated via national building regulations, there is no equivalent regulation for embodied carbon (the carbon footprint of manufacturing and transporting building materials). Measures are, however, being explored to promote growth of the market for low carbon products.
- ! **Split incentives:** Developers face high upfront costs for installing premium energy efficiency measures, but the long-term financial benefits (cheaper energy bills) are reaped by the eventual occupants or renters. This can diminish the commercial incentive to over-deliver on sustainability.
- ! **The skills deficit:** The sector is highly fragmented, with a complex lattice of tier-one contractors and smaller SMEs. The reduced availability of migrant labour following Brexit, combined with the highly technical installation requirements for new technologies (like heat pumps), has created a severe skills bottleneck.



Drivers and opportunities for progress

- ✓ **The whole-life carbon reality:** Up to 80% of total business costs for a building occur over its operational lifetime. So, whole-life carbon assessments – supported by Life Cycle Assessment (LCA) standards like the BS EN ISO 14040 series – are essential to account for and manage a building's true impact long after the construction phase.
- ✓ **Cost abatement and resilience:** Up-to-date net zero efforts can help to reduce operational costs. For example, upgrading thermal efficiency combats fuel poverty and insulates the UK against global energy price shocks. Also, prioritizing climate resilience (for example, building infrastructure to withstand extreme weather) better ensures that long-term assets remain viable.
- ✓ **Standardizing best practice:** Tools like PAS 2080 - Carbon Management in Buildings and Infrastructure and emerging standards for low-carbon concrete and circularity are allowing procurement teams to demand higher performance beyond regulatory minimums.



Looking ahead: The next 12-24 months

The sector will likely continue to experience peaks and troughs tied directly to the national economic backdrop. While some major homebuilders have stopped buying new land and started to slow construction work in progress due to combined regulatory demands and material costs, net zero momentum remains. The key to acceleration will be widespread upskilling and the integration of embodied carbon limits into conditions of contract and building regulations.



While only around 20% of a building's total cost is incurred during design and construction, approximately 80% is spent over its operational lifetime. Taking a whole-life carbon approach enables better decisions at the earliest stages, when they have the greatest long-term impact.

Anthony Burd,
Director of Built Environment, BSI

3.

Transport and mobility:

The fragmented fleet

The dual track of rapid road electrification, complex heavy-transport challenges, and the pivot to climate adaptation.



Sector snapshot: Where are we now?

Transport presents a highly fragmented picture, with different modes moving toward net zero at entirely different speeds. Road transport (specifically the passenger car market) is surging ahead, supported by expanding charging infrastructure and consumer demand.

Sales of battery electric vehicles (BEVs) continue to climb, capturing roughly 25% of the UK annual new car market. Public transport like bus and rail is also pushing forward, despite grid capacity constraints and only 40% rail network electrification. However, scaling a similar transition across heavy goods vehicles (HGVs), aviation, and maritime introduces considerable technical, infrastructural, and safety challenges.

While road fleets are transitioning, maritime and aviation lag behind. Both face long asset lifecycles (where retrofitting isn't commercially viable), slow commercialization of alternative fuels, and challenges in scaling production. Nevertheless, early R&D investments are beginning to flow, like the £448 million UK SHORE funding, which aims to accelerate zero-emission vessels.

“

It's a fragmented picture. Road transport is absolutely out in front... but when you scale up to aviation and maritime, you face immense technical and safety barriers.

Nick Fleming
Director of Transport and Mobility, BSI



The data picture

- Transport and mobility businesses surveyed
- Average across all sectors surveyed

88%

77%

84%

72%

Above-average confidence

Transport is more confident than average in its emissions data (**88%**) and supply chain reporting (**84%**). This exceeds the total proportions of **77%** and **72%** respectively.

80%

69%

80%

70%

Policy optimism

Transport is more likely than average to share positive attitudes about government net zero policy and its ability to facilitate the 2050 goal. **80%** of firms agreed that the government has a clear, realistic plan versus a **69%** total average. **80%** also agree that government policies will make it easier to reach net zero versus **70%** of all sectors asked about the same point.

A horizontal bar chart with two bars. The top bar is blue and labeled '91%'. The bottom bar is red and labeled '80%'. Both bars have a lighter shade of their respective colors at the end, indicating a comparison or range.

A horizontal bar chart with two bars. The top bar is blue and labeled '79%'. The bottom bar is red and labeled '72%'. Both bars have a lighter shade of their respective colors at the end, indicating a comparison or range.

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A horizontal bar chart with two bars. The top bar is blue and labeled '79%'. The bottom bar is red and labeled '72%'. Both bars have a lighter shade of their respective colors at the end, indicating a comparison or range.

A heightened sense of risk

91% of transport firms surveyed are concerned about future costs and business resilience if they fail to prepare for climate change (compared to **80%** across all sectors surveyed). Additionally, **79%** believe climate change could actively disrupt their supply chains, again in excess of the **72%** recorded as an average across all sectors. This concern reflects the sector's extreme physical vulnerability to unpredictable and severe weather.

A circular chart with a blue segment representing 84% of the total. The number '84%' is written inside the blue segment.

Protecting investments

84% of firms surveyed believe that reducing net zero efforts now means losing prior investments and wasting money. Transitioning fleets (e.g., electric buses or heavy goods vehicles) requires massive upfront capital expenditure; slowing down now would turn these multi-year outlays into stranded, costly assets before they can balance the books.

A horizontal bar chart with two bars. The top bar is blue and labeled '36%'. The bottom bar is red and labeled '19%'. Both bars have a lighter shade of their respective colors at the end, indicating a comparison or range.

A horizontal bar chart with two bars. The top bar is blue and labeled '26%'. The bottom bar is red and labeled '22%'. Both bars have a lighter shade of their respective colors at the end, indicating a comparison or range.

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A horizontal bar chart with two bars. The top bar is blue and labeled '26%'. The bottom bar is red and labeled '22%'. Both bars have a lighter shade of their respective colors at the end, indicating a comparison or range.

The data blind spot

While the sector is highly confident in its own emissions reporting at the moment, supply chain visibility and data availability are major future concerns. **36%** of transport firms expect supply chain visibility and data availability to impact their net zero progress over the next 12 months, versus **19%** across all sectors surveyed. **26%** currently cite a lack of visibility over supply chain partners' actions as a barrier to taking action (compared to **22%** total).



Key barriers & pressures

- ! **Infrastructure bottlenecks:** Designing an electric HGV is only half the battle. Scaling the supporting infrastructure and fuel supply presents huge hurdles. Across road transport, electrification is being constrained by infrastructure requirements: charging 20 electric double-decker buses simultaneously in a city centre requires significant grid capacity and robust fire safety measures. While for HGVs the lack of heavy-duty charging infrastructure on major routes is severely limiting adoption. Meanwhile, for aviation, the sheer volume of alternative fuels required is daunting. Current annual Sustainable Aviation Fuel (SAF) production of roughly 2.4 million tonnes is just 0.5% of the volume needed to hit 2050 net zero targets.
- ! **Safety vs. innovation:** In aviation and maritime, the safety culture is absolute. The transition to new propulsion systems or Sustainable Aviation Fuels (SAFs) must not introduce any new risk, which naturally delays adoption. Any fresh risks introduced by new technology are also affecting the speed of transition for buses and HGVs. Battery fire risks are one example.
- ! **The skills gap:** Maintaining an EV battery system or hydrogen fuel cell requires different skills to an internal combustion engine. This is creating a severe shortage of qualified aftermarket technicians.



You can throw a lot of money at designing electric ships or trucks, but if the infrastructure like port shore power or highway charging isn't there, you've only solved half the problem.

Nick Fleming
Director of Transport and Mobility, BSI



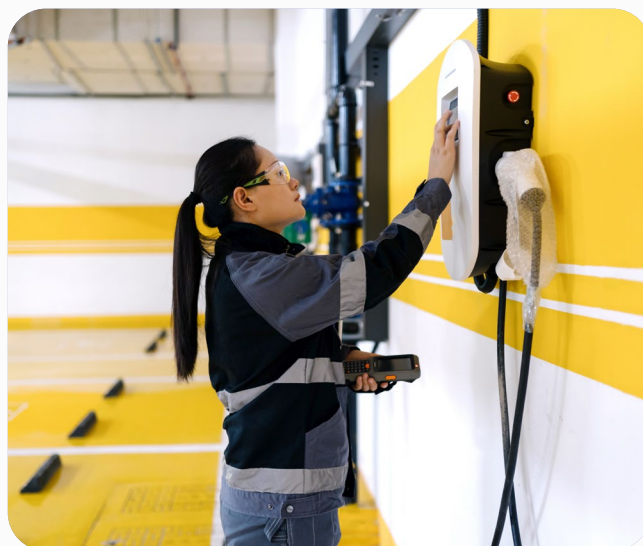
Drivers and opportunities for progress

- ✓ **Carrot and stick policy:** The sector is making progress via a combination of strict regulation (e.g., the Zero Emission Vehicle (ZEV) mandate, International Maritime Organization framework) and powerful government subsidies (for example, the £1 billion grant for zero-emission trucks and fleet depot charging).
- ✓ **Climate adaptation:** Net zero is no longer just about mitigation; it's about keeping transport moving. Protecting transport networks from extreme weather is driving considerable investment into systemic infrastructure resilience.
- ✓ **Supply chain transparency and multi-modal freight:** Major manufacturers like Volvo and BMW now demand lower carbon across their supply chains. This turns Scope 3 emissions into a competitive advantage for suppliers. Consequently, many are rapidly adopting digital tracking across freight routes. Standards like BS EN ISO 14083 help freight forwarders accurately quantify carbon footprint across complex, multi-stage supply chains.
- ✓ **The circularity prize (recycling vs. remanufacturing):** The automotive and aerospace sectors are seizing the opportunity to increase their use of recycled materials. However, the ultimate commercial opportunity lies in true component remanufacturing. But taking a complex component apart and rebuilding it to be equally safe and reliable introduces profound safety challenges. Solutions through robust standards will unlock massive supply chain resilience.



Looking ahead: The next 12-24 months

Future success demands systems-thinking across all modes, including road transport with its infrastructure challenges. Transport, energy, and the built environment can no longer operate in silos. They must collaborate to ensure vehicles, charging infrastructure, and energy networks are genuinely interoperable. For road users, this means streamlining the consumer experience by resolving fragmented payment apps, ensuring physical accessibility, and unlocking vehicle-to-grid charging. Across maritime and aviation, the immediate future relies on cross-sector learning alongside pre-standardization work to de-risk investments into emerging fuels like methanol, ammonia, and hydrogen.





4.

Pharmaceuticals:

The climate-health nexus

Navigating strict regulation while driving global product-level transparency



Sector snapshot: Where are we now?

Globally, the broader healthcare sector accounts for roughly 5% of global greenhouse gas emissions (more than aviation or shipping).

Significantly though, the net zero transition in the pharmaceutical sector is driven by the reality that climate change has a negative effect on the industry's goal of population health.

Rising global temperatures drive an increase in vector-borne diseases and exacerbate the spread of antimicrobial resistance (AMR).

This direct conflict explains why the pharmaceutical sector occupies such a unique and highly advanced position in the net zero transition today. Driven by the climate-health nexus, the sector is demonstrating exceptional global collaboration on net zero. UK-headquartered firms like AstraZeneca and GSK are actively leading global health task forces under the Sustainable Markets Initiative (SMI). The aim is to systematically decarbonize their supply chains.

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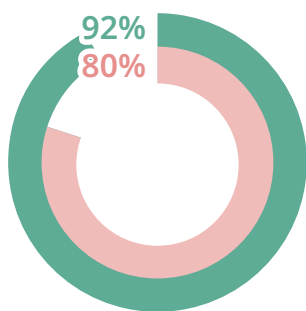
The connection between climate and health is incredibly strong, and that's what's driving the sector to really coalesce. It is rare to see this level of collaboration across stakeholder groups in many other industries.

Courtney Soulsby
Director of Healthcare and Life Sciences, BSI



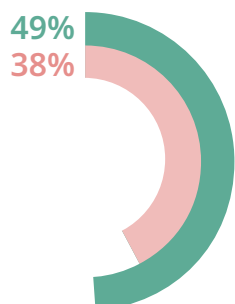
The data picture

- Pharmaceutical businesses surveyed
- Average across all sectors surveyed



A heightened sense of risk

92% of pharma firms are concerned about future costs and resilience if they fail to prepare adequately for climate change. Much higher than the **80%** across all sectors surveyed. This fear is grounded in immediate operational threats. For example, pharmaceutical manufacturing is heavily reliant on high-quality water. Facilities in drought-stricken areas of Europe (such as Spain) have faced ultimatums to cut water usage.



Highly committed but volatile

While pharma firms are amongst the most committed to achieving net zero by 2050 (**98%** fairly or very committed), **49%** have recently altered, paused, or dropped their targets. This compares to the overall proportion of **38%** across all sectors in the survey, indicating a high degree of strategic re-calibration.



96%



77%



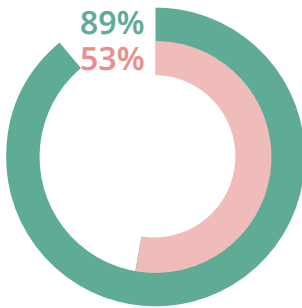
93%



72%

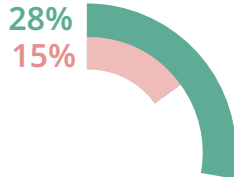
Data confidence

The sector displays the highest levels of confidence in its own emissions data (**96%** vs. **77%** total). Reporting from its complex supply chains shows a similar trend (**93%** vs. **72%**).



The communications pivot

The sector is highly risk-averse – **89%** of pharma firms have changed how they communicate climate action due to rising climate scepticism. This is the highest of any sector surveyed, and well above the total proportion of **53%**.



Staff pressure as a catalyst

Internal expectations are a relatively strong driver for action – **28%** of firms cite staff pressure as a key reason for action. This comfortably exceeds the total level across all sectors of **15%**. This reflects a workforce that acutely understands how environmental degradation and rising global temperatures directly compromise public health.



Key barriers & pressures

! The regulatory framework: Getting a pharmaceutical product to market is a very expensive process. Reducing the emissions associated with an existing product is also fraught with risk. For example, changing a manufacturing process, substituting a material, or switching packaging requires new regulatory approvals that could threaten a company's market authorization licence.

! Barriers slow momentum: While cost is most often cited as the primary barrier to net zero action for other sectors, pharma's biggest challenges centre on three other factors. They are accessing transition finance, gaining visibility across complex supply chains, and developing the specialist skills needed to deliver decarbonization.

! Scope 3 stickiness: While other sectors can mandate that their suppliers decarbonize or lose their contracts, pharma lacks this lever. Suppliers are explicitly named on regulatory approval licenses, and so are difficult to substitute. As a result, reducing Scope 3 emissions can be a more complex and lengthier process in pharma versus other sectors.

! The capability gap: Like many other sectors, a lack of internal skills and specialized knowledge is cited as an additional barrier to executing complex net zero transition plans.

! Waste avoidance over true circularity: While other industries are pushing for true circularity, the pharma sector (much like medical devices), has structural requirements to decontaminate and sterilize products before re-use. Consequently, rather than true circularity, the industry is currently focusing on establishing take-back schemes at the end of a drug delivery device's life, representing a pragmatic shift toward waste avoidance.

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Getting a product to market is a very costly exercise. The uniqueness of the pharma and medical device sectors is that suppliers are named directly on the regulatory approval process, making them incredibly sticky. You can't simply substitute suppliers because they aren't decarbonizing easily, as reapproval for changes to your process or materials is really difficult and threatens your market authorization licence.

Courtney Soulsby
Director of Healthcare and Life Sciences, BSI



Drivers and opportunities for progress

- ✓ **The procurement lever:** Healthcare systems in Europe and licence holders are now actively enforcing environmental criteria, with net zero requirements sometimes weighted as heavily as 30% in procurement tenders.
- ✓ **Emissions at a product level:** The sector is shifting away from broad organizational emissions reporting and increasingly examining product-level carbon footprint data. Standards like PAS 2090 help industry and health systems to calculate the emissions as well as other environmental impacts of individual products across their lifecycle.
- ✓ **Capitalizing on technological advancements:** A focus on innovation is a major opportunity to overcome strict manufacturing constraints. 57% of pharma firms cite new technological advancements as a primary driver for updating and evolving their net zero transition plans, significantly higher than 36% across all sectors surveyed.
- ✓ **The investor community:** Unlike many other sectors, the transition in pharma is being heavily driven by the investor community, with sustainability and environmental engagement now prominent in quarterly investor reports. This plays a major role in maintaining momentum.



Looking ahead: The next 12-24 months

Over the next few years, the pharmaceutical sector will have to navigate complex geopolitical tensions. The US remains by far the most lucrative market, but it is highly decentralized and currently seeing significant political pushback against sustainability criteria. Companies will have to carefully balance this US market friction against the strict, sustainability-incentivized procurement rules of Europe and the NHS.

Domestically, however, the UK is actively positioning itself as a leader in sustainable medicine. The government's industrial growth strategy focuses heavily on life sciences. Innovate UK's multi-year funding programmes (such as the Sustainable Medicines Manufacturing Innovation Programme - SMMIP) are designed specifically to anchor sustainable pharmaceutical manufacturing and R&D firmly within the UK.



5.

Healthcare and medical devices:

The value vs. safety dilemma

Embedding sustainability into the non-negotiable priorities of patient care and safety.



Sector snapshot: Where are we now?

The NHS has successfully transitioned its net zero ambitions from ad hoc or bolt-on projects to deeply embedded operational requirements. For the medical device SMEs that supply the health service, sustainability is no longer optional, but a fundamental procurement gatekeeper.

Crucially, this influence now extends far beyond the UK. NHS England's net zero supplier roadmap is actively shaping global procurement scope and standards. As the secretariat for the World Health Organization's (WHO) Alliance for Transformative Action on Climate and Health (ATACH), NHS England is actively driving green procurement standards forward. Through this leadership role, its own net zero supplier roadmap is being used as the foundation to establish a blueprint for global health systems.

Despite this progress, the sector will continue to wrestle with the twin inter-connected challenges: how to reduce the environmental footprint of healthcare without ever compromising individual patient safety.

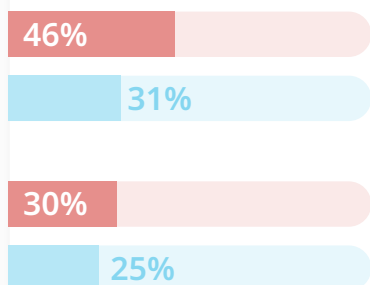
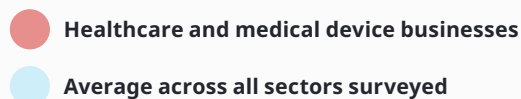
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Because the healthcare system is so vast and unwieldy, trying to solve everything at once is impossible. The breakthrough won't come from trying to boil the ocean. It will come from targeting three or four high-impact, specific areas – like single-use plastics – where we can standardize circular approaches without compromising care.

Rob Turpin
Head of Healthcare Sector, BSI

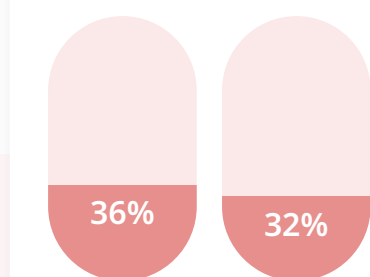


The data picture



The cost barrier

In the face of growing pressure to decarbonize healthcare supply chains, healthcare & medical device firms face particularly acute financial constraints. Cost is by far the primary barrier to action for **46%** of the sector, which is notably higher than the level of **31%** across all sectors surveyed. This is compounded by a lack of available financing to invest in technology, cited by **30%** of the sector – **5%** above the average.



Procurement and efficiency drivers

Cost savings and operational efficiencies were the most commonly cited drivers for pursuing net zero action (selected by **36%** of firms surveyed). Furthermore, the wider transition is heavily shaped by immediate financial realities. **32%** of firms are actively adjusting their plans in response to economic factors like the price of energy and the cost of doing business.



Key barriers & pressures

! **The single-use dependency:** Nearly 48% of all medical devices used in the UK are single-use. Transitioning these to reusable formats requires bolting on intensive, costly, and potentially chemically harmful decontamination and sterilization processes.

! **Patient outcome vs. planetary health:** The healthcare system is structurally designed to prioritize individual patient outcomes. Identifying where to draw the line between a life-saving medical intervention and its broader environmental harm remains a yet-to-be resolved ethical and operational dilemma.

! **Regulatory blind spots:** Global medical device regulations focus rigidly on clinical safety and performance. Currently, there is little integration of sustainability metrics within international safety compliance, making innovation difficult to audit or enforce globally.





Drivers and opportunities for progress

- ✓ **Procurement power:** The absolute driver for action in the UK is NHS tendering. Device manufacturers will innovate specifically to ensure they meet the sustainability criteria required to secure major national contracts.
- ✓ **Targeted circularity:** Rather than a blanket approach, the biggest opportunities lie in targeted strategies tailored to specific product types. These could range from high-volume, lower-risk items for remanufacturing or recycling (e.g., surgical gowns) to complex equipment like CT scanners. The NHS will need to determine where the greatest environmental and operational impacts lie.
- ✓ **Decarbonizing the NHS estate:** For healthcare providers, a primary opportunity is the physical infrastructure. The NHS is focusing heavily on its own facilities, leveraging a major new-build hospital programme to transition away from old, energy-inefficient, and crumbling buildings to purpose-built, greener estates.
- ✓ **Exporting the NHS blueprint:** The UK is actively leading the way in global healthcare decarbonization. NHS England's net zero supplier roadmap is shaping global procurement standards through the World Health Organization's ATACH programme. This means domestic progress to meet these green criteria presents a massive opportunity. There is a chance to establish the blueprint for how international health systems will reduce their environmental footprints.
- ✓ **Digital and remote care models:** Beyond physical products, providers are driving sustainability by rethinking how care is delivered. For example, deploying electric ambulance fleets and utilizing telehealth and online appointments to significantly reduce the emissions associated with patient travel.



Looking ahead: The next 12-24 months

The sector is likely to stay on its current path, with suppliers adapting to NHS procurement rules as standard practice. However, with 95% of medical device companies selling internationally, there is a looming market risk. The UK is fully aware that if requirements become too burdensome, some international medical device firms may shift focus to less demanding markets, potentially reducing choice for the NHS.

The long-term goal is global harmonization. By shifting sustainability from a localized procurement hurdle into a universal regulatory standard, the industry can overcome fragmented national policies and establish low-carbon guidelines shared by all.

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At the moment, everything is stacked toward the individual patient's outcome. Trying to balance the health of one patient against the health of the planet is an incredibly difficult line to draw.

Rob Turpin
Head of Healthcare Sector, BSI



6.

Food and agriculture:

Securing the supply chain

Prioritizing systemic resilience, nature, and food security in a volatile global market.



Sector snapshot: Where are we now?

While businesses are investing in regenerative agriculture and climate-resilient supply chains, the sector remains off-track on its net zero ambitions. Since 2015, GHG emissions from the UK food system have fallen by just 14%, leaving the sector well short of the Courtauld Commitment 2030 target of a 50% reduction by 2030.

Yet this shortfall has prompted a broader rethink of what a successful transition looks like. Rather than focusing solely on carbon emissions, the industry is increasingly framing climate action through interconnected challenges. Namely, food security, supply chain resilience, nature restoration and adaptation to a changing climate. In a world of geopolitical instability, extreme weather and resource pressure, resilience is becoming as important a measure of progress as emissions reduction itself.

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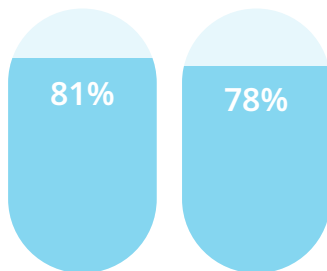
The narrative has broadened beyond net zero alone. Climate action is no longer just about reducing emissions; it's also about strengthening food security, restoring nature, building resilient supply chains, and creating systems that can thrive in an uncertain future.

Emily Field
Food Sector Lead, BSI



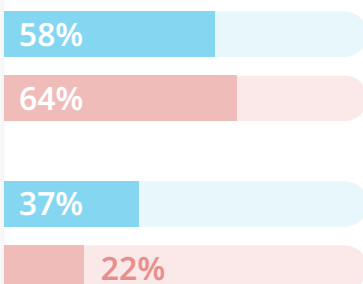
The data picture

- Food and agriculture businesses surveyed
- Average across all sectors surveyed



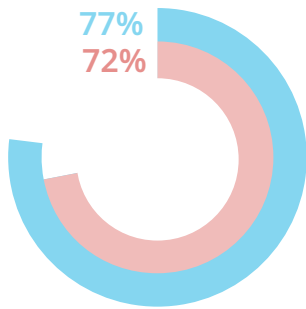
High awareness

81% of agri-food firms are actively concerned about future costs and business resilience if they fail to prepare for climate change. **78%** recognize that climate change directly threatens their supply chains, which is broadly consistent with overall levels.



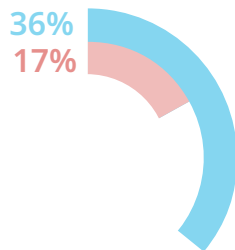
The confidence and clarity deficit

Despite high awareness, translating intent into action remains a major hurdle. Only **58%** of agri-food businesses report having a clear pathway to net zero (vs. **64%** total). **37%** are “not at all confident” they can achieve it without disproportionate financial strain. This is nearly double the **22%** level across all sectors surveyed.



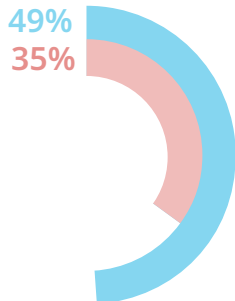
Protecting the transition

77% of the sector believe that reducing their net zero efforts now would risk losing prior investments and actively increase future costs. This is broadly consistent with the total proportion of **72%**.



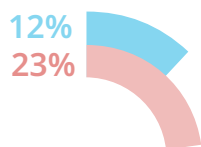
Driven by physical reality

Mitigating climate-related risks (e.g. floods, droughts) is uniquely prevalent as a primary driver for action. The contrast is stark: **36%** compared to **17%** across all sectors surveyed. This level of concern is leading the sector to pivot heavily toward climate adaptation and water infrastructure resilience.



The cost-of-doing-business barrier

Macroeconomic pressures and political shifts are a major brake on investment. Nearly half (**49%**) of businesses strongly agree that the general cost of doing business is already too high to absorb net zero costs (vs. a **35%** average across all sectors surveyed). This is compounded by policy uncertainty, with **79%** saying that shifting targets make it difficult to commit capital.



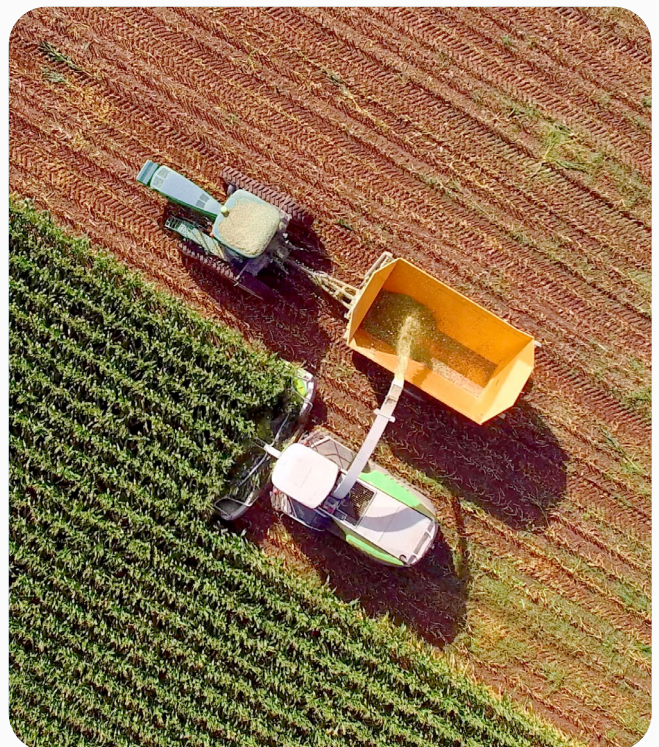
The Scope 3 data bottleneck

Because the sector relies on complex supply chains, measuring progress is difficult. Only **12%** of firms have established a comprehensive emissions baseline that includes Scope 1, 2, and 3 data (half the total average of **23%**). Also, just **11%** of agri-food businesses report their net zero progress in a standardized way.



Key barriers & pressures

- ! **Volatile input costs:** Spikes in inflation, fertilizer, and fuel costs have decimated profit margins. For farmers and smaller producers, investing in long-term sustainability initiatives is impossible whilst navigating immediate financial survival.
- ! **The data and verification gap:** Measuring Scope 3 emissions across highly fragmented, global agricultural supply chains is challenging. A lack of harmonized data makes it hard to verify sustainable practices.
- ! **The yield lag:** Transitioning to regenerative farming practices can require significant upfront investment and create short-term economic uncertainty. Access to financial support, including subsidies and transition finance, can help farmers manage this period and de-risk adoption.





Drivers and opportunities for progress

- ✓ **Tackling waste:** Reducing food waste is the most powerful lever for the sector to slash emissions, and reap the immediate commercial benefits of cost-savings and efficiency (backed by the upcoming ISO 20001 standard on food waste management).
- ✓ **Subsidies and nature markets:** UK government interventions (like the Sustainable Farming Incentive (SFI)) and emerging private nature markets (underpinned by standards such as BSI Flex 701 v2.0) are providing critical new revenue streams. These are welcome financial rewards for farmers' nature-based solutions.
- ✓ **Policy and regulation:** Clear regulatory signals help align market incentives with sustainability outcomes. By establishing common expectations across supply chains, regulation can reduce competitive distortions, increase transparency, and accelerate investment in more resilient and sustainable food systems.
- ✓ **Significant funding and investment in data-driven farming:** Accelerating the use of AI and technology provides the evidence needed for precise, data-driven decision-making. This simultaneously boosts crop productivity, drives operational efficiency, and accelerates adoption of more sustainable practices.
- ✓ **The silver lining of inflation:** While volatile input costs (fertilizer, fuel) are an existential pressure, they also act as a powerful commercial catalyst. High costs are actively driving adoption of regenerative farming practices to reduce reliance on expensive chemical inputs.



Looking ahead: The next 12-24 months

There is likely to be a reframing of the net zero agenda. The sector is moving rapidly towards holistic systems-thinking, realizing that carbon emissions cannot be siloed from soil health, water infrastructure resilience, and biodiversity. Future reporting and standard setting will increasingly focus on the intersection of planetary health and population health. Additionally, targeted agricultural interventions, such as upcoming government-backed standards, will support the reduction of GHG emissions from the sector.

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The future of food will depend on a more holistic understanding of the interconnected systems that underpin it. From agricultural production and supply chains to consumption and food waste, building resilience will require coordinated action across the whole system, supported by common frameworks and standards.

Emily Field
Food Sector Lead, BSI

7.

Manufacturing:

The existential cost challenge

Navigating the threat of energy prices by retooling net zero as a route to operational efficiency.



Sector snapshot: Where are we now?

The UK manufacturing sector faces intense economic headwinds, primarily driven by industrial electricity prices, undermining competitiveness. Currently, these are up to four times higher than in the US, three times higher than in China and between 25-50% higher than the EU average.

For many heavy manufacturers, extreme energy prices pose an existential threat. So, survival and maintaining global competitiveness are the immediate near-term priorities, eclipsing net zero ambitions. Certain highly energy-intensive processes (e.g., steel and aluminium production) are seeing offshoring to regions with cheaper power.

However, for those manufacturers still actively pursuing net zero, the focus is squarely on long-term resilience and operational efficiency. Environmental actions like on-site solar panels are being made to diversify supply and manage overall operational costs. Beyond direct efficiency savings, the other major driver for decarbonization is supply chain compliance. Manufacturers are investing in net zero to ensure they meet the rigorous procurement requirements to win contracts and retain their place on supplier listings.



The data picture



Manufacturing businesses surveyed



Average across all sectors surveyed

78%

80%

50%

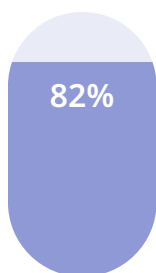
The momentum vs. cost collision

78% of firms agree it's vital to maintain net zero momentum. This intent clashes with financial reality. **80%** state that the general cost of doing business is already too high to absorb net zero costs. Only **50%** believe deep decarbonization is achievable without a disproportionate financial impact on their business.

54%
46%

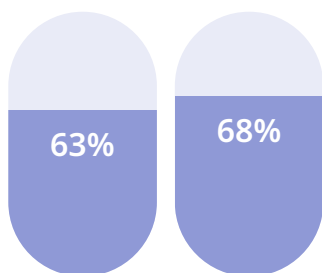
Leaning forward on investment

Despite these economic headwinds, manufacturing firms are actively committing capital rather than scaling back. Over half of firms surveyed (**54%**) expect to increase their net zero investments over the next 12 months (outstripping the level of **46%** expressed across all sectors together). Only **14%** expect to decrease funding.



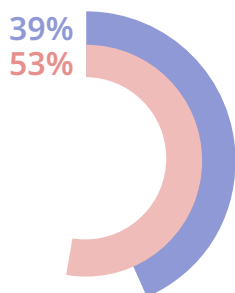
Disproportionate industry strain

The operational friction of making this transition under current conditions is severe. **82%** of firms surveyed report that reaching net zero is adding noticeable pressure to their industry's turnover and profit margins.



The pathway and clarity gap

High investment intent is outpacing practical readiness. **63%** of manufacturers are confident they will eventually hit their net zero timelines. However, just **68%** fully understand the specific actions required.



Reputation takes a backseat

For those implementing green initiatives, commercial reality trumps public relations. Only **39%** of those surveyed have altered their sustainability communications due to greenwashing fears – below the total level of **53%**. This suggests decarbonization is being driven by operational efficiency and supply chain compliance, not brand reputation.



Key barriers & pressures

- ! **High energy costs:** Because renewable grid integration requires vast infrastructure upgrades (like battery storage and rotational inertia systems), system costs are rising. It makes the UK an uncompetitive landscape for energy-intensive manufacturing, slowing inward investment.
- ! **The ROI deficit:** Implementing carbon-reduction technologies increases short-term operational costs for manufacturers. In a hyper-competitive global market, investments without a clear, immediate financial return are a hard sell.
- ! **Reporting complexity:** Accurate carbon emissions reporting is fiercely difficult. Many small and medium manufacturers lack the internal expertise to execute precise measurement, resulting in highly uncertain data and scepticism towards the process.
- ! **Political uncertainty:** Because decarbonization requires long-term, capital-intensive investments, political instability is a major brake on progress. 53% of firms would consider abandoning net zero pursuits if that persists.

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Faced with these extreme energy pressures, manufacturers make a rational decision: they can either sell up, shut down, or move operations offshore. If that means survival, that is what we will see.

Ben Sheridan
High Value Manufacturing Sector Lead, BSI



Drivers and opportunities for progress

- ✓ **The appetite for support:** Despite economic headwinds, there remains a strong underlying appetite for action if the right policy levers are pulled. For manufacturing specifically, there is a disproportionately high demand for guidance on gaining net zero certification. If policymakers can make financial and practical support clearer and more accessible, manufacturers are ready to play their part.
- ✓ **Lean management:** The sector will readily adopt any initiative that demonstrably reduces electricity consumption and increases efficiency. Installing solar panels or optimizing digital processes (e.g., the Made Smarter initiative) are typical cost-reduction mechanisms.
- ✓ **Supply chain survival:** A reputation for sustainability is secondary to delivering products on time, to spec, and at the right price. Manufacturers will comply with net zero reporting and standards primarily when it is a hard requirement to remain on a customer's procurement list.



Looking ahead: The next 12-24 months

High energy prices and short-term existential pressures are likely to dampen overall net zero momentum. However, manufacturers remain willing to invest with two provisos: that they are provided with the right support; and that the transition is framed firmly through the lens of long-term operational resilience. Policymakers and industry leaders will need to heavily incentivize decarbonization or risk a loss of the manufacturing base as companies make commercial choices about offshoring.

The sector also faces a broader infrastructural challenge. Accelerating electrification, compounded by the UK's push for AI and advanced computing, is placing unprecedented demand on the grid. Without action to modernize grid capacity and lower industrial tariffs, escalating power constraints risk undermining both the UK's digital and manufacturing ambitions.





8.

AI and ICT:

The enabler and the infrastructure bottleneck

Navigating the realities of rapid digital expansion, grid constraints, and human-centric innovation.



Sector snapshot: Where are we now?

The rapid expansion of AI is both one of the greatest tools for achieving net zero and one of the most significant energy challenges of our generation. The sector is unusually well equipped for the first of those: AI and ICT firms work in complex data, which is exactly what credible net zero reporting demands. That shows in the survey, where the sector combines the highest confidence in its own commercial prospects of any sector with well-developed transition planning

However, the sector is currently grappling with both a sense of responsibility and a dual identity. On the one hand, AI serves as an enabler. It has the potential to help optimize energy grids, simulate climate risks, and accelerate scientific breakthroughs. On the other, data centres are placing unprecedented demands on physical infrastructure and energy networks.

To reconcile these tensions, the sector's perspective is evolving. Increasingly, the conversation is shifting from developing technology simply because it's possible. Rather, it's about aligning technology with human well-being, sustainability and resilience. Effectively, it's about ensuring that the technology of tomorrow doesn't degrade the world of today.

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Trustworthy data is fundamental to effective climate action, and AI is the enabler that can deliver it. It is the superhero in this story, but it must first answer its own environmental questions if we're to protect our future.

Dr Laura Bishop
Digital Sector Lead, AI & Cyber Security, BSI



The data picture



AI and ICT businesses surveyed



Average across all sectors surveyed

95%

96%

Unmatched optimism and high net zero commitment

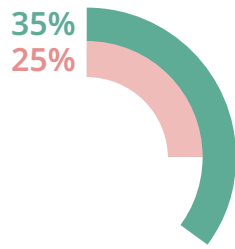
95% of AI and ICT businesses surveyed express confidence in commercial success for the next 12 months, the highest of any sector surveyed. They also have amongst the highest levels of commitment (**96%**) to reaching net zero by 2050, only surpassed by the energy and pharma sectors.

92%

84%

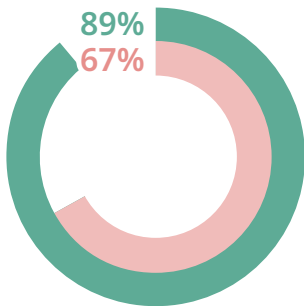
Data confidence and maturity

The sector displays one of the highest degrees of confidence in its own emissions reporting (**92%**) and in that of its supply chain partners (**84%**).



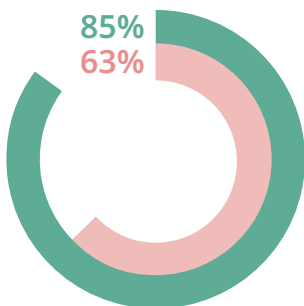
Investor-driven action

35% of ICT and AI firms identify stakeholder expectations or market pressures as a critical motivator for net zero action, compared to a Average across all surveyed businesses of **25%**.



Proactive carbon auditing

89% of AI and ICT businesses surveyed already have processes in place (or are actively working on them) to track the carbon footprint of their AI-powered systems. This compares to a Average across all surveyed businesses of just **67%**.



Tracking water consumption

Similarly, **85%** of AI and ICT businesses report having mechanisms in place (or under development) to monitor the water impact of their AI technologies, compared to a Average across all surveyed businesses of **63%**.



Key barriers & pressures

- ! **The clean energy bottleneck:** While the sector's transition depends on access to clean energy, grid capacity constraints and connection delays are jeopardizing progress. With energy requirements for AI computing ballooning every year, securing reliable power has become a bottleneck. To bypass grid delays, more than 100 UK datacentre applications have requested direct connections to the gas grid. This allows developers to generate on-site power rather than wait for clean electricity. Ultimately, this capacity bottleneck risks driving a regression to fossil fuels or forcing facilities overseas.
- ! **Measurement standardization challenges:** Although data confidence is high, the lack of consistent, harmonized measurement methodologies for Scope 3 emissions remains a hurdle.
- ! **Friction caused by competing priorities:** The sector is caught in a paradox. It needs to answer its own environmental questions before it can effectively serve as a decarbonization tool for other industries. Because the technology is expanding at such an exponential rate, developers are forced to build carbon and water auditing systems on an ever-shifting architecture. In short, their energy and water demands are growing faster than their ability to measure and reduce them.
- ! **Skills and resource gaps for smaller players:** Unlike larger tech players with their own sustainability functions, smaller firms and startups face a dual skills gap. They lack both the specialized environmental expertise to execute complex net zero transitions and the resources to fund dedicated sustainability officers.



Drivers and opportunities for progress

- ✓ **AI as the enabler for wider sector transitions:** Perhaps the greatest opportunity lies in supporting other industries to reach net zero. For example, by using AI and robotics to create “self-driving labs” that run 24 hours a day, research timelines could shrink from decades to years. Similarly, using AI to build highly detailed virtual models (digital twins) of factories or transport networks has enormous potential. This might provide the ability to simulate operations to predict maintenance needs or optimize logistics well in advance.
- ✓ **Efficiency through Small Language Models (SLMs):** Rather than relying on power-hungry Large Language Models (LLMs), in some areas there is a shift toward task-specific Small Language Models (SLMs). Because SLMs are small enough to run locally on consumer devices, they could drastically reduce energy and water burdens. While direct benefits might be cost-effectiveness, low latency and enhanced user privacy, reduced emissions would also be a very welcome by-product.
- ✓ **Targeted cooling innovations:** Datacentre operators are actively innovating in cooling technologies. The world’s first wind-powered underwater datacentre came online earlier this year. If successful, this kind of technology has the potential to dramatically reduce water and energy requirements.



Looking ahead: The next 12-24 months

The next two years will be defined by how the UK navigates the massive power requirements of advanced computing and its domestic Clean Power 2030 goals.

In the immediate term, tech companies and policymakers will need to explore transitional energy solutions to keep the UK's digital infrastructure competitive. This includes active discussions around co-locating Small Modular Reactors (SMRs) directly within datacentres to supply constant baseload power and sell excess electricity back to the grid. Commercial implementation of this could still be a decade or more away.

On a policy front, the restructuring of UK government departments is expected to bring significant changes. The standalone tech department has been dissolved, with science folded into the expanded Business Department. Meanwhile, primary AI governance has moved to the Cabinet Office to drive cross-government reform. This signals that sustainable digital infrastructure and AI are now central pillars of the national growth strategy.



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What's the point of all this rapid technological innovation if we're not ultimately using it to leave behind a better, more resilient world for the societies that come after us? That's what needs to lead our national strategy.

Dr Laura Bishop
Digital Sector Lead, AI & Cyber Security, BSI



9.

Conclusion and key takeaways:

A pragmatic path forward



The pathway to 2050 is not linear. As different sectors move from target-setting to implementation, they are colliding with complex, operational challenges.

To maintain momentum, policymakers and industry leaders will need to collaboratively address four cross-sector realities:

1 Cost can be a catalyst, not just a barrier:

While transition costs remain the most widely cited obstacle, net zero is increasingly being assessed through an economic lens. Cost savings and operational efficiencies are now the most common drivers of action, cited by 37% of businesses who have taken action. From leaner manufacturing processes to fleet electrification, decarbonization is becoming a tool for commercial survival and long-term resilience.

2 Closing the skills gap will open opportunity:

Willingness is no longer enough; businesses need the specialist skills to act. Amongst those mentioning barriers to action, very close to a quarter (24%) cite a lack of internal skills and knowledge as a major bottleneck, from retrofitting millions of homes to maintaining hydrogen fuel cells and battery management systems. Closing this gap will be one of the defining operational challenges of the next decade.

3 Systemic thinking can reap broader rewards:

Across the economy, businesses are recognizing that carbon reduction cannot be treated in isolation. In agriculture, net zero thinking is expanding to include soil health, food security and water resilience. In transport and the built environment, action is shifting toward climate adaptation and infrastructure resilience. Circularity challenges – from end-of-life wind turbines to remanufactured automotive components – will also be vital to reducing supply chain vulnerability.

4 There is a clear mandate for support:

Businesses are showing ingenuity and pragmatism, but they cannot carry the transition alone. With 91% seeking help to make progress and 88% calling for greater financial incentives, the case for stable policy, targeted subsidies and practical support is clear.

While the road to 2050 is becoming more complex, this year's [BSI Net Zero Barometer Report](#) provides cause for optimism. UK businesses are no longer treating net zero as a distant compliance exercise, but as a core part of long-term commercial viability and national resilience.

No industry can meet this challenge in isolation. It will require continued cross-sector effort and systemic collaboration. Shared standards provide the framework to build the trust, comparability and market alignment needed to turn ambition into action.



The role of standards

Standards provide common, verifiable approaches for measuring carbon, managing energy, tracking progress and comparing performance across suppliers, sectors and markets.

They remove guesswork from the transition, offering the independently verified proof and shared language of trust that investors, supply chains and customers increasingly expect. In a volatile policy and economic environment, they also provide a stable reference point for what good looks like.

Standards help scale innovation safely by making new approaches consistent, repeatable and trusted. They allow pilots to move more quickly into mainstream adoption while helping buyers, suppliers, logistics providers, manufacturers and public bodies work from the same evidence base.

Finally, standards act as a translation layer between government ambition and corporate reality, offering continuity beyond short-term political cycles.

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As a National Standards Body, we effectively bridge the gap between broad, ambitious, and ambiguous policy objectives and real-world implementation for industry.

Abbey Dorian
Head of Energy, BSI

Standards in action

Across the UK economy, specialized standards are currently being deployed to overcome complex sector-specific hurdles and build a level playing field for green innovation. Here are just a few examples:



Built Environment:

To address the monumental challenge of whole-life carbon, standards like PAS 2080 - Carbon Management in Buildings and Infrastructure are providing the framework to assess carbon impact across the entire lifetime of a project. Meanwhile, PAS 2035 continues to set the standard for the systemic retrofitting of existing domestic homes.



Agriculture & Food:

Recognizing that tackling waste is one of the most powerful levers for emission reduction, the upcoming BS ISO 20001 standard will provide an international framework for managing and measuring food waste. Concurrently, BSI is engaging closely with the government to develop standards that support emerging nature markets and targeted agricultural interventions, such as the reduction of methane emissions from livestock.



Transport and Mobility:

To tackle the complexity of Scope 3 supply chain emissions, BS EN ISO 14083 is enabling freight forwarders and multi-modal logistics companies to accurately quantify their carbon footprints across complex, multi-stage chains of operation.



Energy:

Moving from physical infrastructure to data, BSI has been instrumental in the governance of the Common Information Model – a set of standards mandated by Ofgem that allows different energy assets to share grid data in a uniform, machine-readable format to unlock a truly digitalized grid. Concurrently, new product standards are being developed to anchor investment into physical green technologies, from the BS EN 61400 series extending the lifecycle of wind turbines, to new product standards for space-saving heat batteries.



Pharmaceuticals & Healthcare:

Shifting away from broad organizational reporting, PAS 2090 is helping industry and health systems collaboratively calculate the precise, product-level carbon footprint of individual medical items and medicines across their lifecycle.

An important international net zero standard: ISO 14060 – The world's first independently verifiable international standard for net zero transition planning

The ISO net zero standard (ISO 14060) will provide a universal baseline for delivering and demonstrating credible net zero transition planning progress. This will help to bring consistency to a fragmented governance landscape by aligning global best practice in one international standard for organizations.

Based on the ISO Net Zero Guidelines, ISO 14060 is being developed as a full, verifiable International Standard. It will support organizations of all sizes and sectors with credible transition planning, science-based pathways, emissions reduction across Scopes 1, 2 and 3, and greater transparency, accountability and trust.

Whether you are preparing net zero transition plans, exploring how ISO 14060 could support your transition planning journey, or simply want to stay informed, register your interest to receive updates, future guidance and resources.



About BSI

As the UK's National Standards Body, we provide solutions to support government policies, tackle future challenges and deliver trust for the benefit of all sectors and society. By instilling best practices across all industries, we open market access and trade, drive innovation and strengthen consumer trust.

We bring together a community of over 12,000 experts, striving to create positive change through our development of purpose-driven standards and services. By giving a voice to consumers and providing best practice to solve collective issues, we are shaping a safe and sustainable society that is ready to tackle the challenges of tomorrow.

BSI is the UK member of the international standards body (ISO) and contributes UK expertise to many areas of international standards development. These include those which are specifically for climate and the environment like the forthcoming ISO net zero standard (ISO 14060).

ISO comprises more than 170 National Member Bodies around the world. Its standards follow the World Trade Organization (WTO's) principles for avoiding Technical Barriers to Trade.

About this research

A combination of desk research, qualitative research and quantitative research was used to produce this report.

The primary quantitative fieldwork for the Net Zero Barometer was conducted in early 2026. This sector-specific report was published in September 2026. It reflects the political and business environment captured during that original research period, while providing updated context on developments occurring between the initial findings and this publication.

In total, 1,004 senior decision makers from UK-based businesses (including owners, C-suite individuals and directors) were surveyed across a range of business sizes, sectors and regions.

Targets were set and successfully met to enable reliable analysis by business size and by BSI's key sectors/sectors of interest.

Following fieldwork, the data was weighted against ONS UK Business data 2025 to ensure that all "total" figures are based on a nationally representative profile of UK businesses by size.

However, the sample only included respondents from businesses operating in BSI's current key sectors/sectors of interest. Therefore, sector analysis in effect compares BSI's key sectors/sectors of interest with each other, rather than with all UK sectors. As a result, the extent to which these sectors are attitudinally and behaviourally similar to, or different from, businesses in other UK sectors is not known.

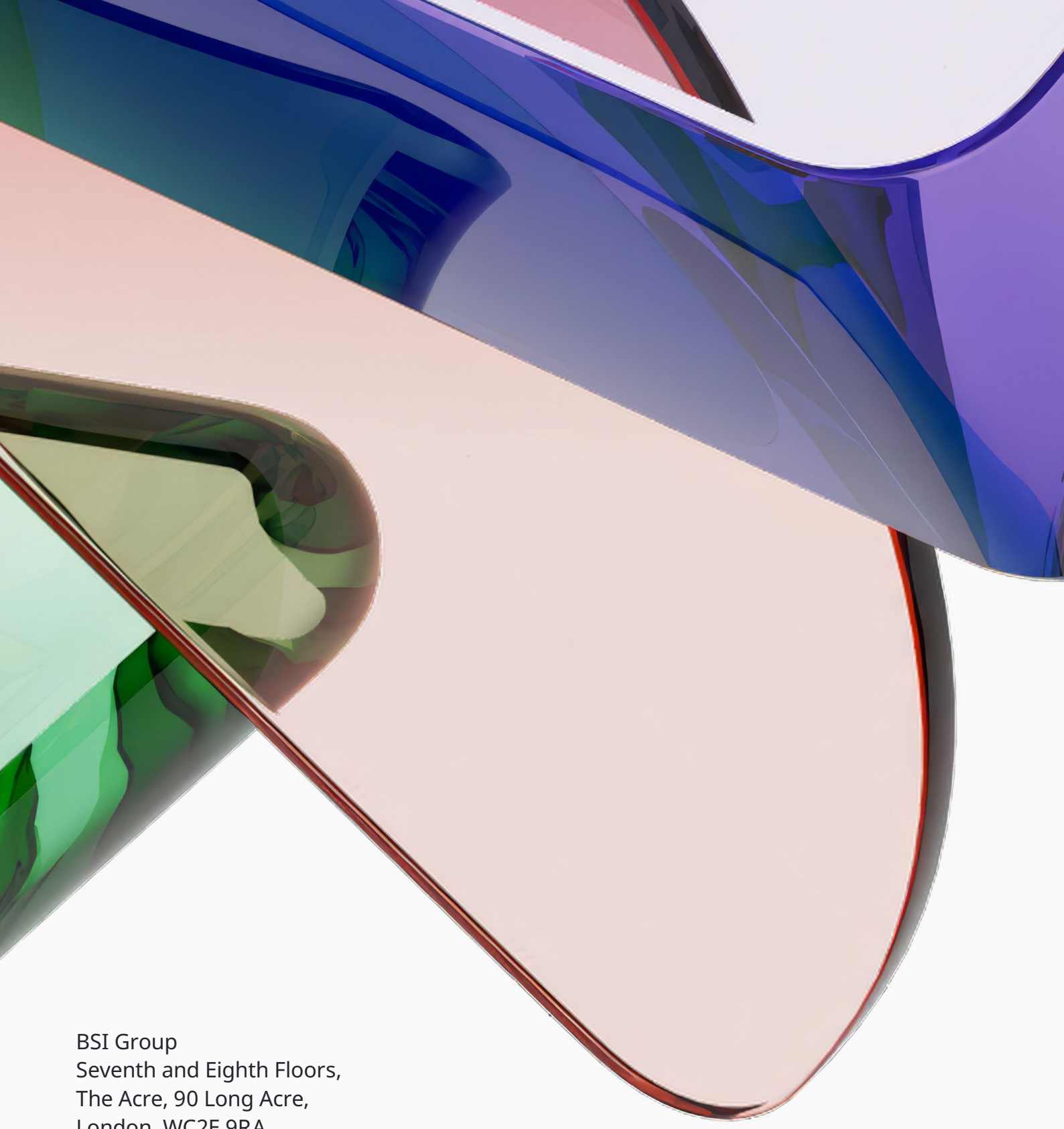
Further, in many cases, respondents were shown lists of possible actions, drivers and barriers, which may have influenced responses. The analysis is therefore largely based on those lists and does not capture every possible action, driver and barrier.

This is the sixth Net Zero Barometer. Previous editions also surveyed around 1,000 senior decision makers from UK-based businesses across different sizes and sectors. The methodology and questions have evolved over time, with additional questions added to understand business progress. Since the survey does not track the exact same businesses every year, this should not be treated as a longitudinal study.

Finally, the quantitative fieldwork was conducted before the Iran war and its effects on global fossil fuel supply chains had occurred.

While the data captures pre-existing concerns around energy security and the cost of living following effects from the Ukraine war, it does not reflect the full impact of the more recent conflict on business sentiment.





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