

Built for what's next: designing resilience into digital infrastructure

# United Kingdom

## Country profile

## Summary

Artificial intelligence-driven demand and hyperscale investment are strengthening the United Kingdom's position as one of Europe's leading data-centre markets.

Cyber-attacks, power availability and climate resilience are emerging as the main operational challenges for the sector. Since the government designated data centres as Critical National Infrastructure, in 2024, these issues have attracted greater attention from policymakers and industry.

Resilience efforts are focused on infrastructure protection and energy resilience, supported by strong board-level oversight.

The next phase of resilience maturity will require greater attention to less visible but consequential risks, including community acceptance, technology obsolescence and compound disruptions.

## Key data

### Scale

**568**  
data centres<sup>1</sup>

### Capacity

**3,220**  
MW<sup>2</sup>

### Capacity growth

**31%**  
annual IT-load growth  
(estimated 2025–2030)<sup>3</sup>

### Geographic hubs

London is the UK's largest data centre market, accounting for 80% of national supply. Newport and Cardiff together account for a further 9%, while Manchester, the next-largest UK market cluster, accounts for just 2%.<sup>4</sup>



## About this research

Built for what's next is an Economist Enterprise research programme, sponsored by global property insurer FM. It examines how risks across energy, people and technology often come together to disrupt digital infrastructure, and how organisations can best prepare to meet those shocks.

The research is based on:

- A global survey of 1,800 data centre stakeholders across the digital infrastructure value chain from 21 countries
- Interviews with global industry experts
- An expert panel discussion

# Market overview

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## Growth trends

The UK has nearly 550 data centres and more than 3,220 MW of installed IT capacity. By 2030, it is expected to become Europe's largest colocation market by revenue. Wholesale colocation is likely to grow fastest as hyperscale companies, large businesses and government agencies increase demand for capacity. This growth is being driven by AI, the rollout of 5G networks and continued migration to cloud services.<sup>5,6</sup>

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## Investment trends

Since 2023 companies have announced more than £44.3bn (US\$59bn) of investment across 52 planned facilities, expected to come online by 2032. AI Growth Zones in Oxfordshire, north-east England and north and south Wales are attracting hyperscale and colocation investment. Amazon, Microsoft and Google remain among the market's most active investors.<sup>7,8,9,10</sup>



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## Key regulatory developments

In September 2024 the government designated data centres as Critical National Infrastructure, recognising their growing importance to the economy and public services. Changes to the National Planning Policy Framework, introduced in December 2024, require local planning authorities to consider demand for data centres when preparing development plans, helping to reduce differences in planning decisions across the country.<sup>11</sup>

The AI Growth Zones initiative, launched alongside the AI Opportunities Action Plan in 2025, identifies priority locations for AI-ready data centres and offers faster planning decisions, priority grid connections and supporting infrastructure.<sup>12,13</sup>

# Key risks

Economist Enterprise's survey found that data centre stakeholders in the UK perceive the following as the **greatest systemic risks facing the sector**:

**91%****Cyber-attacks**

Cyber-attacks are a significant concern for businesses, with exposure increasing with company size. In 2025/26, 41% of medium-sized and 48% of large UK businesses experienced cyber crime, compared with 24% of small and 17% of micro businesses, underscoring the importance of resilient digital infrastructure. The government's decision to classify data centres as Critical National Infrastructure, together with the proposed Cyber Security and Resilience Bill, requires data centre owners to strengthen cyber-security and risk management.<sup>14,15</sup>

**84%****Grid capacity constraints**

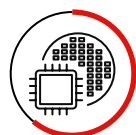
Demand for electricity is rising as new data centres come online and AI workloads expand. Data centres account for about 2.5% of national electricity demand, a share that could quadruple by 2030. Limited grid capacity and long connection delays are becoming major constraints on future development.<sup>16</sup>

**71%****Extreme weather or climate impact**

Climate change is increasing pressure on data centre infrastructure. Rising temperatures are reducing the efficiency of conventional cooling systems and increasing demand for electricity and water. The government plans to build the first new reservoirs in 30 years, but 84% of proposed data centres are in areas projected to face water stress by 2040.<sup>17,18</sup>

**69%****Investment or insurance withdrawal**

Grid constraints pose a challenge to broader market growth. Lengthy connection queues can delay data centre and other demand-side projects by years, increasing project costs and financing risks and potentially deterring investment or pushing it to other markets.<sup>19</sup>

**61%****Limited critical minerals, semiconductors or cloud vendors**

Growing demand for AI-related semiconductors, alongside geopolitical tensions and restrictions on critical materials, is putting pressure on global technology supply chains. Constraints on semiconductor production could lead to higher costs, longer lead times and disruption to technology infrastructure projects.<sup>20</sup>

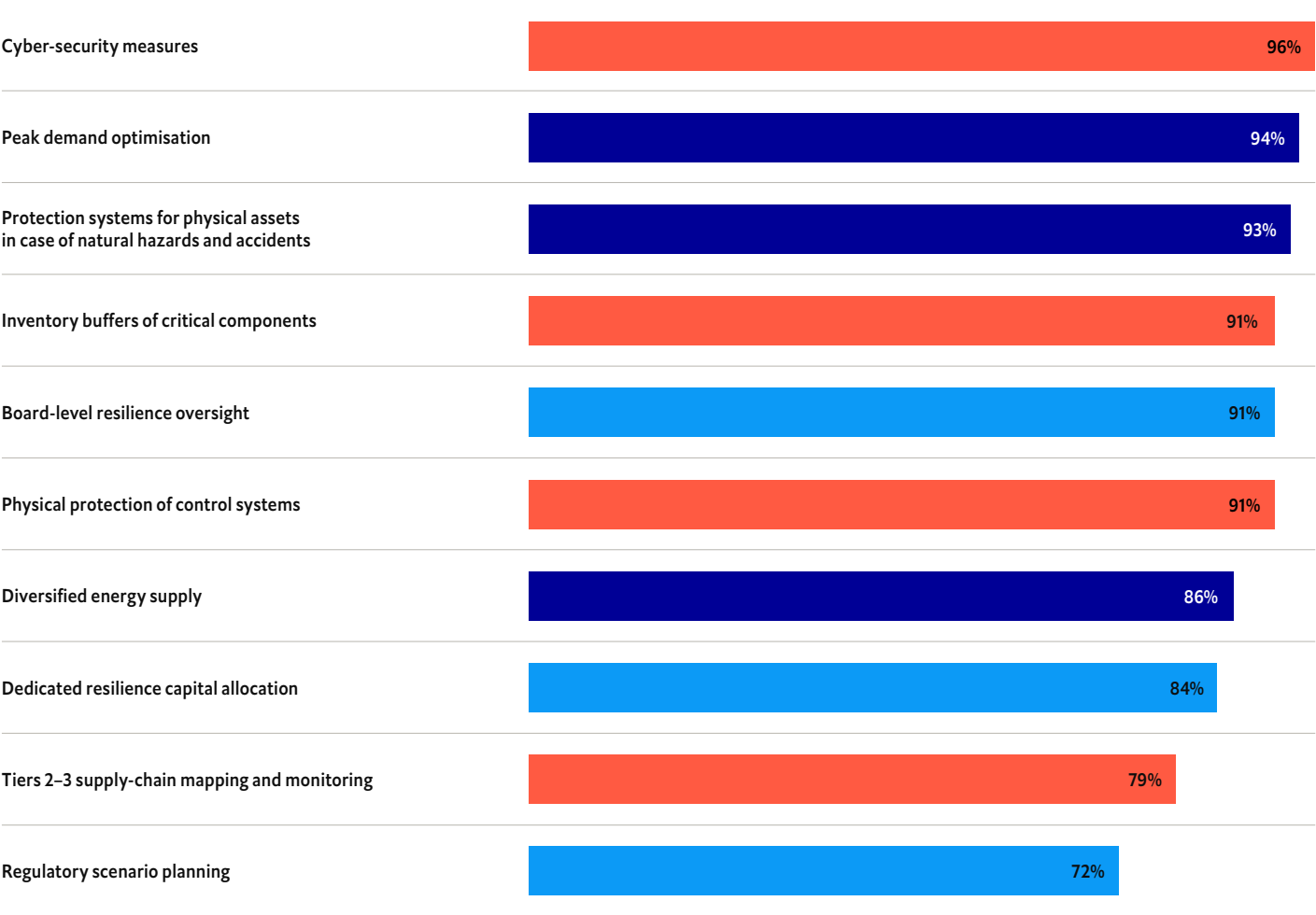
Source: Economist Enterprise survey, February-April 2026



# Resilience measures

## Top 10 resilience measures adopted by data centre stakeholders in the UK

■ Energy and environment   ■ Governance and human capital   ■ Technology and supply-chain digital infrastructure



Source: Economist Enterprise survey, February-April 2026

### Key takeaway

In the UK, resilience focuses on protecting critical infrastructure from operational and physical disruption. Businesses prioritise cyber-security, infrastructure protection and energy resilience. Many also report stronger board oversight and dedicated investment. In contrast, fewer respondents use regulatory scenario planning, suggesting greater attention to immediate risks than to longer-term regulatory change.

# Priority actions

## Least-adopted resilience measures and underestimated risks among data centre stakeholders

| Risks                                   | Measures                                                                  |
|-----------------------------------------|---------------------------------------------------------------------------|
| Limited land availability<br>3%         | Multi-cloud, multi-vendor and network redundancy<br>6%                    |
| Community backlash<br>5%                | Community engagement<br>12%                                               |
| Water scarcity affecting cooling<br>10% | Geographic diversification<br>13%                                         |
| Technology obsolescence<br>13%          | Compound shock simulation and rehearsal<br>16%                            |
|                                         | Modular, retrofit-ready infrastructure design<br>20%                      |
|                                         | Resilient and resource-efficient design and construction standards<br>24% |
|                                         | Asset-life and obsolescence stress-testing<br>24%                         |

Source: Economist Enterprise survey, February-April 2026

### Building community support

Survey respondents rank community opposition among the sector’s lowest risks (5%). Yet growing scrutiny of land use, energy demand, water use and environmental impacts suggests this issue deserves more attention. Only 12% of respondents report using community engagement as part of their resilience strategy. Early engagement with local authorities and transparent communication of economic benefits and infrastructure impacts will be critical to maintaining public support.

### Key actions:

- 1 Establish joint planning forums between operators, utilities, local authorities, investors, tenants and communities.
- 2 Publish transparent data on projected energy, water, land-use, noise and local economic impacts.
- 3 Conduct community-impact assessments alongside site selection and expansion decisions.
- 4 Include community opposition and permitting delays in resilience and scenario-testing exercises.

### Build future-ready infrastructure

Only 13% of respondents identify technological obsolescence as a major risk. Yet rapid advances in AI, cooling systems and quantum computing could shorten asset lifecycles and increase the risk of stranded assets. Few respondents report using modular designs (20%) or testing assets against obsolescence risks (24%).

### Key actions:

- 1 Set shared design assumptions for future rack density, cooling, power, building structure and security needs before capital is committed.
- 2 Use asset-life stress tests to compare retrofit costs, downtime and residual value under multiple technology and building-design pathways.
- 3 Align owners, tenants, technology vendors, insurers and investors on upgrade triggers and funding responsibilities.
- 4 Build modular power, cooling and data-network pathways into new and refurbished facilities.
- 5 Develop the engineering, operational-technology and cyber capabilities needed to operate, maintain and upgrade evolving infrastructure.

## Improve preparedness for compound disruptions

Survey responses suggest that organisations focus more on individual risks than on cascading disruptions. Few respondents report using compound-shock exercises (16%), geographic diversification (13%) or multi-cloud and multi-vendor redundancy (6%). Yet cyber-attacks, grid constraints, equipment shortages and extreme weather can quickly cascade across infrastructure and services.

### Key actions:

**1**

**Map dependencies across power, cooling, cloud, networks, suppliers, insurers and public authorities.**

**2**

**Stakeholders, including tenants, operators, investors and infrastructure providers, should conduct joint exercises that combine cyber incidents with power shortages, heat stress or critical-component delays.**

**3**

**Define cross-functional crisis roles and escalation paths for operators, tenants, utilities and infrastructure providers and public agencies.**

**4**

**Use exercise findings to update maintenance and testing schedules, critical spares, contracts, recovery assumptions, staff training and capital plans.**

## Conclusion

British data-centre stakeholders have established strong foundations in cyber security, energy reliability and governance. However, the next stage of resilience maturity will require greater attention to stakeholder trust, adaptable infrastructure and complex risk management. As digital infrastructure becomes more interconnected, resilience planning must extend beyond individual risks to consider how energy, technology, climate and supply-chain disruptions interact and amplify operational impacts.

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