# 2025 Summer report

BCS Consultancy July 2025

# The new rules of data centre growth: not if, but how



Survey data by **iX Consulting** 

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### New thinking. New era.

We're entering a pivotal moment for the data centre industry. As AI moves from buzzword to backbone, it's reshaping not just what we build, but where, how and why we build it. The infrastructure that powered the last decade of digital growth isn't enough for what comes next. From compute-heavy model training to real-time inference at the edge, new demands are emerging that call for fresh thinking, faster decisions, and more flexible and sustainable solutions. This report explores those shifts. But more importantly, it highlights where opportunity is opening up: beyond Tier 1 markets, beyond legacy systems, and beyond conventional assumptions.

#### Jim Hart

CEO BCS Consultancy



At BCS, we believe the future of infrastructure must be built not just for performance, but for resilience, flexibility and responsibility. As AI drives up energy and water use, we can't solve tomorrow's challenges with yesterday's playbook. Cooling innovations, circular economy principles and renewable energy strategies will define the providers who lead, as well as partnerships with GPU manufacturers, platform providers and telcos to deliver the integrated, AI-ready environments enterprise customers now expect.

It's our industry, and our responsibility, to lead this change. To set the bar higher. To rethink how and where we build. And to create facilities that are as intelligent and adaptive as the workloads they support.

I hope the insights from over 3000 industry professionals in this report help you ask sharper questions, explore bolder ideas and move forward with greater confidence. We have the data, next we need action.

Let's shape what comes next. Intelligently, sustainably and together.

### Sneak peek

If you only take one page with you, let it be this. Demand is rising across the board, with no sign of slowing down. But while AI is driving this surge, most organisations are still early in their adoption journey. Experimenting, not yet operating at scale. At the same time, the skills shortage is intensifying fast, particularly in design and engineering roles. The challenge now is how to keep building at pace, when pressure is growing on every front. Can the industry move fast enough to keep up?

### Top 3 trends to highlight

### Demand

92%

of respondents expect demand to rise in 2025

0

respondents anticipate a decline

50/50

Colocation and service providers are leading expansion

## Al readiness

85%

facilities are not yet ready for AI-heavy workloads

1 in 7

organisations are using AI at scale

12-15 KW

expected by 25% of respondents, reflecting a shift toward higher rack densities This report is based on insights and quotes from a survey of over 3000 industry professionals.

## Skills shortage

97%

expect talent supply to fall while demand rises

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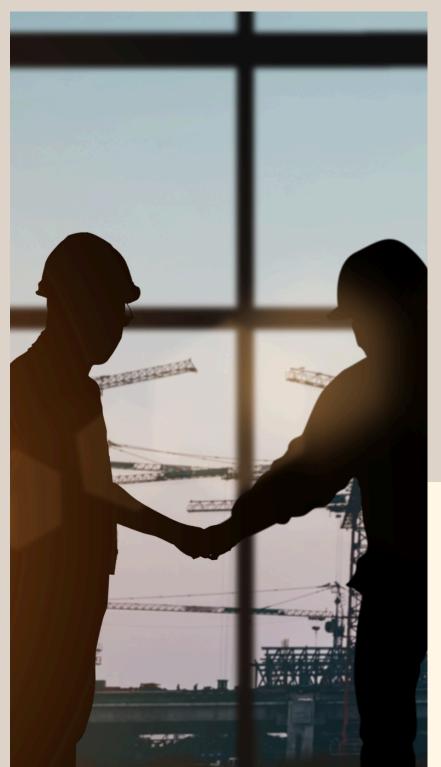
roles are consistently under pressure

58%

faced missed deadlines or client delays

## Who responded and what is interesting?

This 30th edition is Europe's most comprehensive data centre outlook, with insights from over 3000 participants, but who are they?



Technical real estate

## 6.8 million square meters

Representation of

41 countries

We surveyed

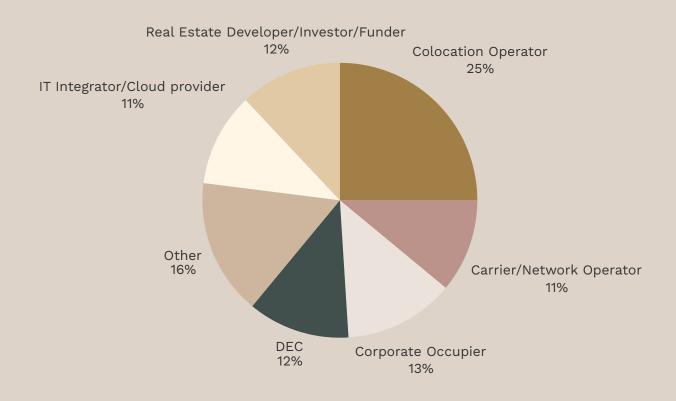
6 types of industry players

Growth is not slowing, but how data centres are being built, staffed, powered and operated is evolving fast.

From developers and engineers to operators and investors, our respondents are on the front lines of that evolution.

### Respondent profiles

#### Industry role breakdown



#### Total technical floorspace



### State of the market

#### 16 must know metrics.

We asked, you answered.

92%

expect demand to grow in the next 12 months

0%

believe demand will fall

100%

of developers are expanding their portfolios

95%

of colocation and network providers are scaling inhouse and outsourced space

4%

of corporates plan to grow their own data centre footprint 75%

of corporates say they will shrink internal space

66%

of colocation providers expect rising demand and falling supply

90%

of IT integrators also see demand outpacing supply

84%

have added more thirdparty managed space in the past 6 months 25%

expect rack power to reach 12–15kW this year

87%

expect their total power consumption to rise

91%

think most of their power will come from renewables within 10 years

68%

say global instability is speeding up their move to renewables 81%

are not using AI at scale yet

85%

say current facilities are not ready for AI workloads

63%

believe AI could help ease the staffing shortage

### Skills shortage unpacked

97%

of respondents say the supply of skilled professionals is falling as demand continues to rise. Design, build, and operations roles are all under strain, with labour costs, project delays, and burnout already impacting delivery. The sharpest alarm bells are coming from developers and engineering firms, many of whom now see the skills shortage as the single biggest risk to growth.

#### Role-specific concern



#### **Design roles:**

80%+ agree there's a shortage

#### **Operations:**

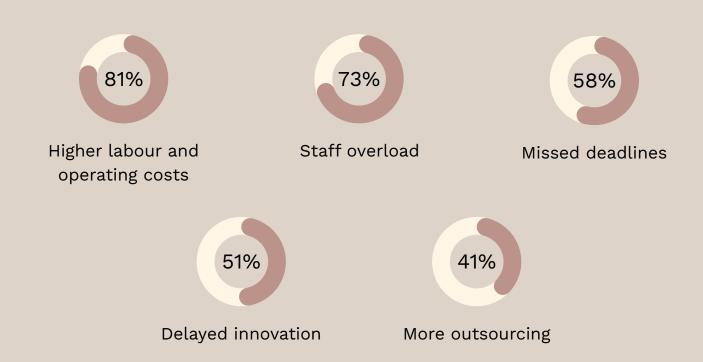
83% say they lack staff to run sites properly

#### **Build roles:**

82% see shortages (esp. site managers, engineers)

### Impact of shortage

The talent gap is no longer a future threat, it's a present risk. But how does it affect everyday work? From design to operations, teams are under growing pressure. Rising labour costs, missed deadlines and overstretched staff are already hitting project delivery. Developers and engineering firms are sounding the loudest warnings, with many viewing the skills shortage as the biggest brake on growth. Let's unpack some numbers.





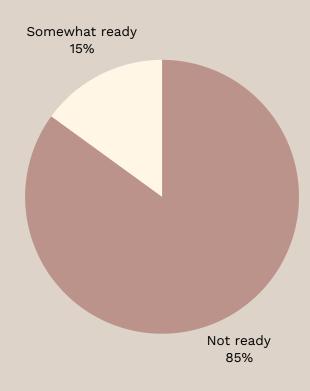
### Al readiness

#### Big hype, slow catch-up

79% say it's increasing infrastructure needs, but only a fraction are using AI extensively, and most data centres aren't yet ready for AI-heavy workloads. The tech is coming faster than the infrastructure. Still, many believe AI could ease pressure on staffing and operations. The question is; can the industry close the gap before it widens further?

"Highdensity, AIoptimised
capacity is
still the
exception,
not the
norm."

Is the current infrastructure ready for AI?



6396 believe AI could help ease pressure on staffing and ops.

### **Hybrid models**

Can your data centre handle AI's demands? From 50kW racks to edge inference, AI is rewriting the rules, demanding extreme power, cooling, and smarter, greener infrastructure. But how are operators adapting to meet these evolving demands?

### The shift to hybrid AI models

Most organisations are adopting a hybrid approach:

- Training foundational models in largescale facilities
- Running inference closer to the user, at the edge

This demands flexible infrastructure that enables:

- Seamless data movement
- Mixed-density capacity within facilities
- Dynamic workload balancing between core and edge

### Training needs scale and power

Training large AI models requires ultrahigh-density environments. Power densities can exceed 50kW per rack, far beyond traditional setups. Operators are responding with:

- Liquid cooling and immersion systems
- Substation-level power upgrades
- Segmented containment for highdensity AI racks

Given that training can last weeks or months, these environments demand extreme reliability and resilience.

#### The sustainability factor

Al is also raising the bar for energy strategy. In response, data centre operators are:

- Investing in renewables and PPAs
- Improving PUE through cooling and optimisation
- Using AI to manage energy more efficiently

87%

expect their overall power consumption to rise in the next 3 years; 59% expect it to rise significantly

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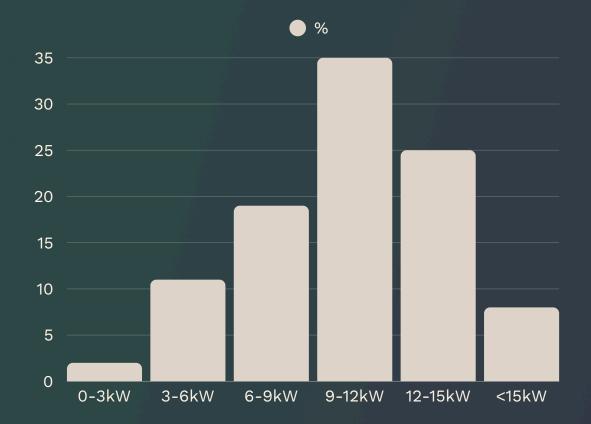
### **Power & rack density**

#### AI raising the heat

As AI adoption accelerates, the infrastructure behind it is under growing strain. Training and deploying AI models is power-hungry, and the impact is now being felt across data centre operations. 87% of respondents expect their power consumption to rise in the next three years, with 25% predicting rack densities will hit 12–15kW. Some are even preparing for 15kW+ environments.

These shifts are driven by the demands of high-performance compute (HPC) and AI workloads, which require new cooling approaches, denser hardware configurations, and smarter energy management. Traditional rack configurations are no longer enough. The industry is moving toward a high-density future, whether it's ready or not.

## How rack density expectations are shifting upward?



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### The nuclear option

#### Is nuclear our answer?

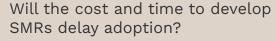
With AI workloads driving up power demand, the industry is exploring every possible energy source, including nuclear.

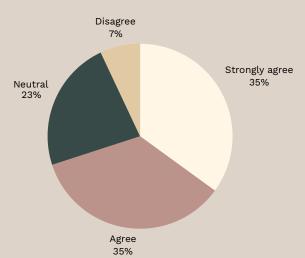
75% of respondents support nuclear power as part of the data centre energy mix. But there's realism too: 70% say small modular reactors (SMRs) won't be ready this decade, and 60% worry that public opinion could hold progress back.

Nuclear offers stable, low-carbon energy at scale, but infrastructure, regulation, and perception remain major hurdles. While interest is growing, it's clear that nuclear is seen as a long-term solution, not a nearterm fix.

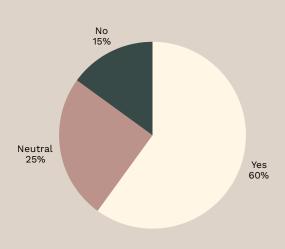
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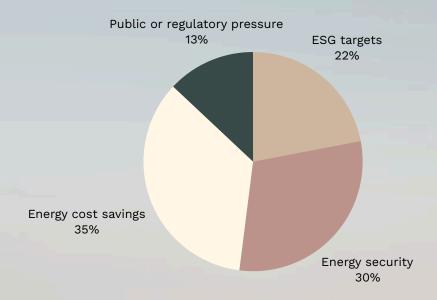
Is public opinion a barrier to nuclear adoption?



### Sustainability

Data centre leaders are no longer asking if they'll move to renewables, only how fast. 91% of respondents expect at least 90% of their power to come from renewable sources within the next decade. And it's not just ESG pressure. 68% say global events like energy price spikes, war, and supply risks have pushed them to accelerate the shift. This signals a clear realignment of long-term energy strategy, with sustainability, cost stability, and energy independence now top priorities.

### What's driving your switch to renewables?



Will your power be 90%+ renewable by 2035?

91%

of respondents say they expect to source 90% or more of their power from renewables within 10 years.



### The pace setters

3 countries leading the shift

#### **Nordics**

The Nordics remain the leader in sustainability. Abundant green energy and cold climate drive efficiency. Al-ready campuses are under development.

#### So what?

Operators in the region are already aligned with 90%+ renewable energy targets and benefit from naturally low PUE, making the Nordics a prime example of sustainable infrastructure in action.

### **Spain**

Madrid is booming with hyperscaler investment. Solar energy is a key factor driving renewable adoption.

#### So what?

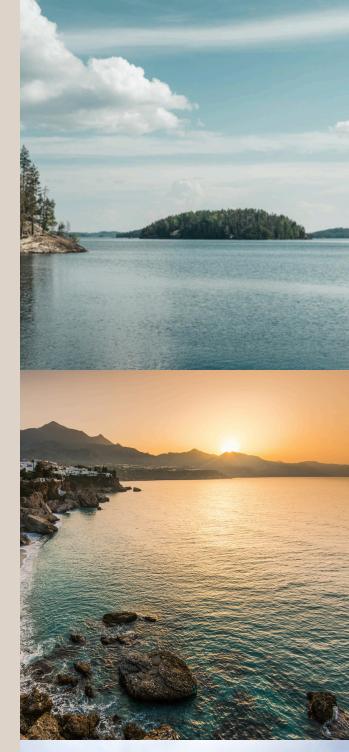
Spain is emerging as a renewable hub for southern Europe, with solar playing a central role in both attraction and energy strategy.

#### **Ireland**

Growing pressure from policy and public opinion to limit fossil-based capacity expansion.

#### So what?

In Ireland, sustainability is no longer optional. Policy constraints are accelerating the shift to green energy, even ahead of operator preference.





### Geopolitics at the gate

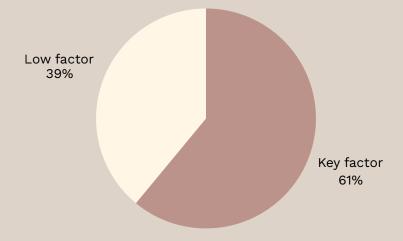
How policy & perception are reshaping infrastructure

From unstable tariffs to warzone supply chains, 2025 is a reminder that data centres don't exist in a vacuum.

Political uncertainty, especially from global players like the US, is changing how operators plan, invest, and choose where to build. And it's not just governments but public opinion is now one of the topranked barriers to nuclear energy and even AI expansion.

"We're watching Washington as closely as we're watching power pricing. Political volatility now shapes where and how we build."

How important is political/social stability when choosing a data centre location?



Notably, the 61% figure nearly doubled compared to last winter's results, showing rising geopolitical concern across the industry.



# What's moving faster than expected: 5 trends to watch

#### **Hybrid model adoption**

Significant rise across all groups

More operators than expected now use a mix of in-house and third-party solutions. Hybrid is becoming the default, faster than predicted.

#### AI not yet in full use

Only 14% use AI extensively

Despite the hype and infrastructure demand, most organisations are still in early-stage adoption, AI is more promise than practice for now.

### Public opinion holding back nuclear

60% say perception could delay adoption

We expected regulatory or technical barriers, but sentiment is emerging as the bigger obstacle to innovation.

### Corporates exiting self-managed DCs

Only 4% expanding, 75% reducing

The pace of exit is faster than we've seen in previous surveys. Corporates are pulling back hard from internal builds.

### Skills shortage worsening quickly

61% → 94% of DEC firms report acute shortage (in 6 months)

This is one of the sharpest changes in sentiment we've tracked, showing the crisis is escalating faster than anticipated.

### Regional insights

What's shaping local markets across Europe?

#### UK

AI demand soaring but skills gap tightening, especially in London.

#### **Austria**

Punching above its weight, Vienna is rising as a key node.

#### **Poland**

Fastest growth in CEE, lead by Warsaw's expanding market.

### **Spain**

Powered by sun, Madrid is attracting hyperscaler attention.

### Germany

Energy innovation meets increasing regulation pressure.

### Italy

Land access in Milan and Rome improving expansion prospects.

#### **Nordics**

Still benchmark in sustainability and grid efficiency.

"Spain is among the top markets where operators cite renewables, especially solar, as a key factor in expansion plans."

### The new rules of growth

Europe's data centre market is growing fast — but not without tension. AI, energy and talent are reshaping how the industry builds and operates.

Demand is rising, expectations are shifting, and the pressure to deliver smarter, more sustainable infrastructure keeps building. Operators, investors and end users alike are navigating a period of transformation, where success hinges on adaptability, innovation and execution.

#### Making it possible

At BCS Consultancy, we work across the full lifecycle of data centre, utilities, logistics, and advanced manufacturing projects, helping clients turn insight into action, and strategy into delivery. This report reflects what we see on the ground every day: a market shifting fast, driven by AI, sustainability, and changing demand models. Whether you're scaling into new regions, rethinking infrastructure for AI, or navigating hybrid delivery, we're here to help.

We're the global data centre consultancy trusted by the world's leading operators, developers, and energy-intensive industries.

Talk to us about your next move.



The global data centre consultancy