

As Cooling Becomes Critical Infrastructure, is it Time to Rethink How we Deliver it?

1 hour ago



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The UK's relationship with cooling is changing. For decades, heating has rightly dominated conversations around energy management and building performance. Cooling, meanwhile, has often been viewed as a seasonal requirement rather than a year-round strategic priority. But with temperatures rising and the increasing frequency of heatwaves, that mindset is beginning to shift.

Today, cooling is increasingly critical to operational resilience across a wide range of sectors. From hospitals and universities to supermarkets and data centres, organisations depend on reliable cooling systems to protect people, assets and business continuity. As demand continues to grow, with [research](#) indicating a 45% increase by 2050, cooling is becoming an increasingly important part of the UK's energy challenge.

Cooling demand is rising

Heatwaves provide a clear illustration of why this matters. In retail environments for example, a poorly maintained air conditioning system can quickly result in significant financial losses. Something as simple as a blocked filter can reduce performance when cooling is needed most, putting temperature-sensitive products at risk. For healthcare providers, effective cooling is vital in supporting patient wellbeing, protects critical medicines and helps maintain safe environments for staff and visitors.

What was once considered more of a comfort issue is quickly becoming a business continuity issue. Organisations are recognising that reliable cooling is essential to maintaining safe, productive and resilient working environments during periods of extreme heat.

The growing pressure on energy infrastructure

The challenge extends beyond individual buildings. Cooling demand typically increases during periods when electricity networks are already under pressure. As air conditioning and refrigeration systems work harder, electricity consumption rises sharply, often creating peaks in demand. At the same time, extreme heat can affect the performance of substations, transformers and overhead power lines, creating additional strain on the infrastructure required to deliver energy.

This growing link between cooling demand and grid resilience is becoming increasingly harder to ignore. The UK is simultaneously electrifying transport, industry and heating while also supporting rapid growth in digital infrastructure. Data centres in particular are creating significant new cooling requirements as organisations expand their use of cloud computing and AI technologies. These facilities depend on constant, highly reliable cooling to maintain performance and prevent disruption.

A case for Cooling as a Service

Against this backdrop, organisations must find ways to meet rising cooling requirements without undermining their sustainability ambitions. Simply increasing cooling capacity is unlikely to be the answer. Instead, there is growing need to focus on smarter, more efficient ways of delivering cooling services. This raises an important question: should we begin treating cooling in the same way we treat energy and heating, through service-based models that focus on outcomes rather than assets?

The concept of Cooling as a Service is already gaining traction in some international markets. In India, Cooling as a Service and district cooling schemes are being deployed in developments such as GIFT City in Gujarat and Tata Intellion Park in Gurugram. Similar models have become well established across parts of the Middle East, particularly in cities like Dubai, where district cooling networks are increasingly treated as core infrastructure for urban developments. Rather than purchasing and managing cooling infrastructure outright, organisations pay for the cooling performance they require, while providers take responsibility for system efficiency, maintenance and optimisation.

Such an approach can create several benefits. It encourages continuous performance improvement, supports predictive maintenance, reduces the likelihood of failures during extreme weather and can help organisations access more efficient technologies without significant upfront investment. Most importantly, it aligns operational resilience with energy efficiency objectives.

Preparing for a warmer future

As the UK adapts to a warmer climate and extreme weather continues to become the 'new normal', supported by research from the [Met Office](#), cooling can no longer be considered a secondary building service. It is becoming essential infrastructure that underpins productivity, public services and economic growth. The organisations that plan for this now, through better maintenance, smarter technologies and innovative delivery models, will be best placed to remain resilient while continuing their journey towards net zero.