

Helping data centres improve their green credentials and become more sustainable

Peter Dempsey, Axis Communications, explains how trusted partnerships, the use of renewable materials and the right technology can lead to greener and more sustainable data centre operations.

Digital transformation and the growth of cloud infrastructure and services has led to exponential growth in the use of data centres. The global *green* data centre market is expected to reach \$142.8 billion by 2026 at a near 20% CAGR¹. For those data centres, getting it right means being able to offer robust and highly secure storage while optimising energy efficiency to ensure low environmental impact. This is particularly critical in light of the Climate Neutral Data Centre Pact's commitment to make data centres climate neutral by 2030². With sustainability so high on the agenda, working smarter to minimise the impact of operations and reduce carbon footprint is a key priority.

Yet for many data centres, becoming sufficiently sustainable demands a considerable rethink about how to improve operations in order to become greener. Concerns turn to the vast amount of energy used and heat generated and how to address the impact on the environment quickly. Understandably, there is a mounting pressure on data centres that are not already operating in accordance with sustainable initiatives to become much more focused on meeting their green targets. For the data centre manager, the challenge is to improve sustainability while continuing to offer the best service.

Sustainable frameworks and trusted supply chains

Embracing more ethical ways of operating and demonstrating a greater awareness of the impact that positive actions can have for the environment will attract businesses with a similar commitment to sustainability³. But this necessitates adherence to specific guidelines to evidence such a commitment. Working to international frameworks and standards such as the UN Global Compact, of which Axis is a signatory⁴, can play a role in helping companies achieve the UN's sustainability development goals (SDGs)⁵ as well as offering proof that a business is demonstrating commitment beyond mere words.

Indeed, adherence to internationally recognised frameworks also speaks of shared values. With a closer focus than ever on driving cost efficiencies, accessing high-tech skills, improving service

¹ <https://www.kbvresearch.com/green-data-center-market/>

² <https://www.climateutraldatacentre.net/>

³ <https://on24static.akamaized.net/event/26/52/12/7/rt/1/documents/resourceList1601294964064/99821008210sustainabilityreport451researchen211601294962692.pdf>

⁴ <https://www.unglobalcompact.org/what-is-gc/participants/1056-Axis-Communications-AB>

⁵ <https://www.axis.com/about-axis/sustainability>

⁶ <https://www.axis.com/solutions/zipstream>

delivery and driving innovation, the need for partnership working is key. As organisations seek closer working alliances, all stakeholders in the supply chain should be aligned around core values to build trust.

Moreover, in an age of digital transformation comes the need to protect systems from cyber attack. With security being such a primary focus to ensure smooth, secure and continuous operation, it is imperative that partnerships are forged with suppliers that not only understand the key concerns relating to sustainability, but can also demonstrate the highest levels of physical and cybersecurity knowledge and compliance. This might include accreditations such as ISO 27001 and Cyber Essentials Plus.

Reducing carbon footprint and achieving green targets

Data centres use a considerable amount of power and generate high levels of heat, causing concern among green-focused data centre managers. While there is no simple, quick solution, data centre operatives need to be looking forensically at the systems, products and materials used in order to make small, but incremental gains towards reducing carbon footprint and achieving sustainable targets. This might include sourcing vendors for whom manufacturing with low-power consumption in mind is a priority.

For example, the use of edge-based analytics within Axis' network surveillance cameras, which facilitates the processing of video data within the device itself, means that on-camera decisions result in a reduction in the bandwidth and power consumption that would be associated with the constant transfer of data back and forth across a network for processing. Axis Zipstream⁶ technology improves bandwidth and storage requirements by an average of 50%, further supporting a greener business agenda.

The materials used within systems and products should also be a consideration. Axis' cameras are already free of BFRs and CFRs, the brominated and chlorinated flame retardants traditionally used in such devices that have been identified as toxic. In addition, Axis' latest solutions are PVC-free, a move which helps to halt the distribution of 'microplastics' into the environment that can sadly find their way back into the food chain. The use of renewable biodegradable plastics to help protect natural resources forms part of a commitment for all of Axis' products to become 100% PVC-free by 2025.

Axis helps data centres improve their sustainability posture by offering innovative solutions that deliver the highest security with the lowest environmental impact. Our technology increases automation and delivers greater security while relying on fewer resources. Careful selection of materials and a commitment to reduce waste in our processes demonstrates that we are serious about our responsibility through the whole chain of production. This is our commitment to support data centres in meeting their green targets while innovating for a smarter, safer and more sustainable world.

Learn more about Axis' solutions for data centres:

<https://www.axis.com/en-gb/solutions/solutions-by-industry/data-centers>
