IBM LinuxONE: Efficiency Reimagined

The Future of Sustainable Data Centers Starts Here

Rethinking Efficiency in the Age of Data Explosion

Data centers today consume between 200 and 250 TWh of energy — nearly the same as the entire electricity use of Australia.

Reducing that impact isn't just about going green; it's about re-engineering efficiency itself. IBM LinuxONE systems redefine what sustainable performance looks like — delivering maximum workload density, minimal energy use, and exceptional reliability.



Where Sustainability Meets Performance

IBM's collaboration with **Carnegie Mellon University** revealed that more than **90 percent**of a server's lifetime carbon footprint occurs
during its **use phase.**

That's why improving energy efficiency inside the data center — not just at procurement or disposal — is the key to meaningful carbon reduction.

LinuxONE is designed precisely for that mission:

- Up to 75 percent lower energy consumption
- **67 percent less floor space** than comparable x86 environments
- 99.99999% (8 nines) availability for critical workloads







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A Real-World Transformation

A leading Asia–Pacific insurance company consolidated **55 x86 servers** onto a single LinuxONE system, achieving:

- 70% less energy usage
- 90% lower software licensing costs
- 75% less data-center space

The result: a more scalable, resilient infrastructure — and a decisive step toward their sustainability goals.

Built for Modern Resilience

LinuxONE integrates seamlessly with other IBM technologies to deliver unmatched resiliency and uptime:

- **IBM GDPS**® for automated system recovery and replication
- IBM DS8000® Series Storage with ultra-low latency and cyber-resilient architecture
- IBM Spectrum Virtualize HyperSwap® for continuous data availability

Together, they create an infrastructure that is efficient, secure, and future-ready.



Efficiency That Drives Business Growth

Sustainability is no longer just a compliance metric — it's a growth strategy. With LinuxONE, IT teams can control costs, meet ESG targets, and scale operations without compromise.

From hybrid-cloud integration to on-prem performance, LinuxONE helps organizations do more with less — power, space, and time.

Start Building Your Sustainable Infrastructure

Watch the Demo: <u>IBM LinuxONE Emperor 4 – Building a Sustainable</u> Infrastructure



