

Data centers are getting hungrier

Data centers have always been power-hungry, but the advance of AI is pushing electricity consumption to new heights.

As growing power demands meet increasing regulatory pressure for energy efficiency, data center costs and risks are rising.

Data center electricity demand is growing fast



Source: International Energy Agency, 2025

165%

growth in global electricity demand from data centers by 2030¹

40%

of existing AI data centers will be operationally constrained by power availability by 2027²

30-40%

of data center costs go to power consumption³

Sources: 1Goldman Sachs Research, 2025 | 2Gartner, 2024 | 3Capgemini internal estimates, 2025

Smaller carbon footprint...

Optimizing data center sustainability isn't just the right thing to do, it's the smart thing to do. Lower emissions and greater energy efficiency make compliance simpler while reducing costs.

But for a successful journey to a more sustainable data center, you need to understand where you're starting from. A sustainability assessment is a vital first step.

...bigger business impact

Sustainability is a core part of Capgemini's business strategy – and we know how to practice what we preach.

Our Data Center Sustainability Assessment draws on all our experience to provide expert support at every step from initial discovery to ongoing outcomes, as you create a more sustainable and cost-effective infrastructure.



Start your sustainability journey the right way

Capgemini's comprehensive Data Center Sustainability Assessment guides you toward **reduced environmental impact, simplified compliance, and cost savings.**

Four stages to a more sustainable and efficient data center



Discovery and assessment

- Check all physical infrastructure, rack layouts, Power Distribution Units (PDUs), Data Center Infrastructure Management (DCIM), and telemetry
- Identify zombie equipment for removal or repurposing
- Review cabling and network layout for optimization
- Confirm energy sources such as hydro, solar, nuclear, and others



Strategy and design

- Design the integration of the Capgemini Data Center Sustainability tool with your infrastructure
- Identify carbon footprint elements (Power Usage Effectiveness (PUE) values, electricity consumption)
- Ensure a strategic approach to sustainability and efficiency



Implementation

- Deploy the Capgemini Data Center Sustainability Assessment Framework
- Ensure the solution supports compliance with relevant regulations
- Provide visibility into energy usage across devices
- Track and report the carbon footprint generated by each IT asset
- Provide energy usage and carbon footprint insights dashboard

4

Outcomes and reports

- Identify high CO2 devices and monitor performance
- Generate actionable insights and provide live data on electricity consumption
- Create data center heat maps to visualize heat distribution and identify areas for cooling improvement
- Deliver the insights needed to complete Energy Efficiency Directive (EED)
 -mandated data center reporting
- Generate compliance reports

Siemens strengthens its sustainability leadership

Capgemini's Data Center Sustainability Assessment enabled Siemens Corporate IT to:

- Make data-driven decisions on sustainability enhancements
- Continuously improve sustainability practices with less manual workload
- Strengthen compliance with emerging regulations

SIEMENS



Our Merlin data center sets the gold standard for IT infrastructure sustainability.

75% less water consumption than a typical data center

1.08 PUE – market-leading energy efficiency

53,000 metric tons of estimated CO2e savings per module over 20 years

With this strategic, end-to-end approach, we help you to

- Identify sources of high emissions and power consumption
- Select the right energy efficiency solutions
- Establish baseline metrics and project potential reductions

- Gain real-time insights into sustainability performance
- Continuously improve sustainability and efficiency
- Demonstrate and report on your efficiency and sustainability gains

4 | Data center sustainability assessment

Capgemini leads the way in sustainability

Capgemini has been recognized by credible analysts and platforms for our achievements in sustainability and related offerings.

We have been recognized as a 'leader' in

Avasant Data Center Managed Services 2023-2024 RadarView

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IDC MarketScape: Worldwide Carbon Management and Net-Zero Services 2025 Vendor Assessment

Everest Group Sustainable IT Services PEAK Matrix Assessment 2025

PEAK LEADER







The Carbon Disclosure Project (CDP) placed us on its prestigious A-list for 2024, highlighting our sustainability leadership



We retained our a Platinum Medal for sustainability achievement by EcoVardis in 2025, ranking us in the top 1% of companies it assessed

Join the sustainability leaders

Let's create your strategic plan for reducing emissions and costs, simplifying compliance, and building a vital competitive advantage for your brand.

Gain the benefits of sustainability leadership



Improve energy efficiency



Streamline regulatory compliance



Reduce operating costs



Contribute to net-zero and Environmental, Social, Governance (ESG) goals

Accelerate your journey to carbon-neutral infrastructure with Capgemini

Connect with our experts today.



About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, generative AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2024 global revenues of €22.1 billion.

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