

Germany

Country Profile

This country profile is part of Foundations at risk, a research programme by Economist Impact that examines the emerging threats affecting data centres globally and evaluates country-level exposure and resilience. [Find out more](#)

Key insights

Germany is the top data-centre market in Europe and second only to the US globally, boosted by its central location and commitment to sustainable expansion.

Cybersecurity risks and energy use are high, but both **are the focus of a strong policy environment**.

A high rate of imported energy—particularly gas—necessitates that Germany follow through on its commitment to **expanding renewables use in the data-centre market** to make expansion feasible.

Key data

Scale

500+ data centres

Capacity

more than **2,730 MW** of built-out total IT load capacity

Growth

9% year on year from 2024 to 2030

Geographic hubs

Frankfurt (primary), with growth in Berlin, Munich and Hamburg

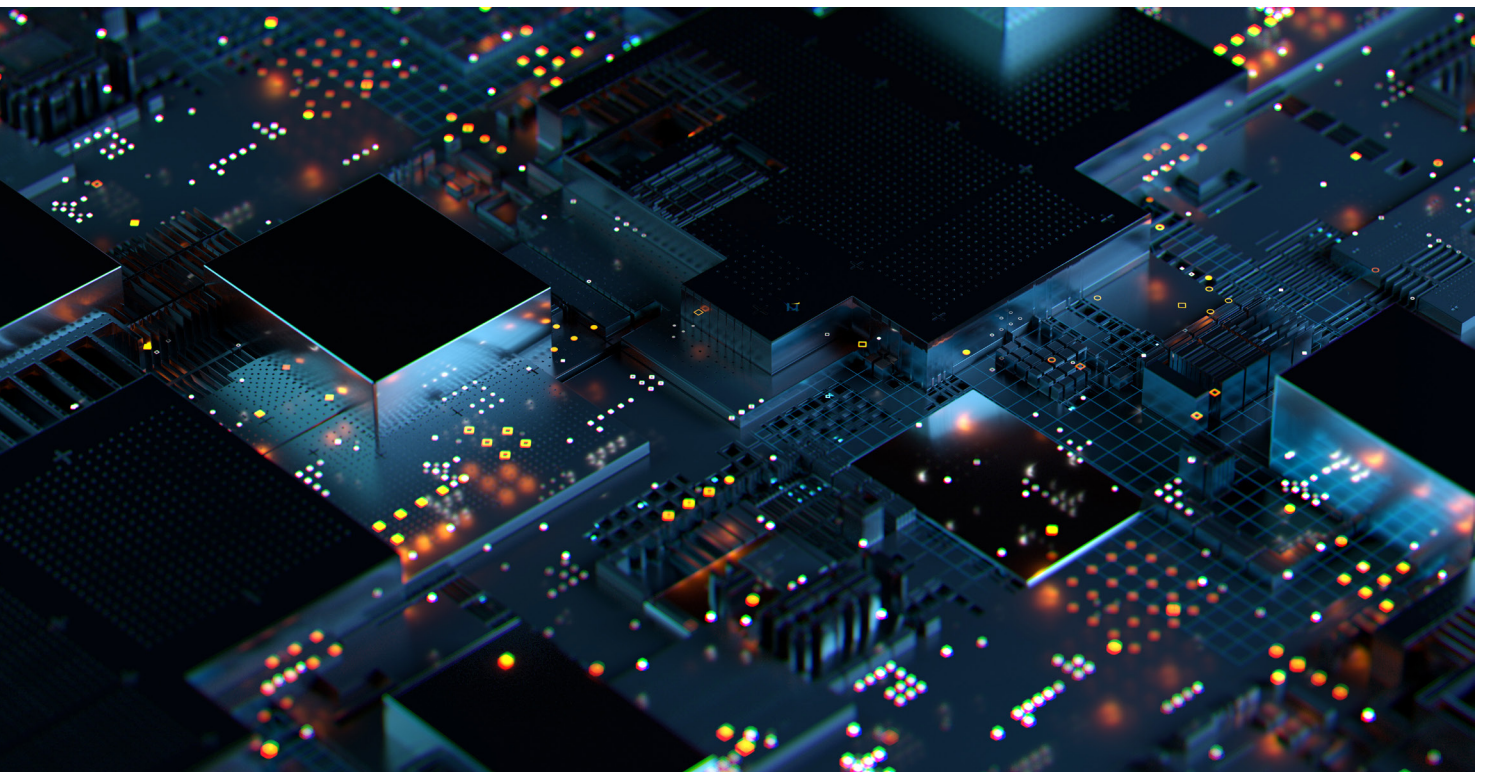


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Market overview

Germany leads the European data-centre market, anchored by Frankfurt, one of the top five global cities by data-centre capacity.

In 2024 Germany was home to over 500 data centres, with Frankfurt accounting for nearly half of the country's information technology (IT) load capacity.¹ **The sector is expected to grow at an average of 9% each year between 2024 and 2030, to reach US\$12.8bn.**² Vacancy rates in Frankfurt are just over 5% and average rental rates are among the highest in Europe, reinforcing the need for geographic diversification across the country.³



¹ Globe Newswire. Germany Data Center Market Report 2025: New Entrants include Bluestar Data Centre, Data4, Green Mountain, Mainova WebHouse, SDC Capital Partners, STACK Infrastructure, VIRTUS Data Centres and Lidl. March 17 2025. Available at: <https://www.globenewswire.com/news-release/2025/03/17/3043862/28124/en/Germany-Data-Center-Market-Report-2025-New-Entrants-include-Bluestar-Data-Centre-Data4-Green-Mountain-Mainova-WebHouse-SDC-Capital-Partners-STACK-Infrastructure-VIRTUS-Data-Centres.html>

² Globe Newswire. Germany Data Center Market Report 2025: New Entrants include Bluestar Data Centre, Data4, Green Mountain, Mainova WebHouse, SDC Capital Partners, STACK Infrastructure, VIRTUS Data Centres and Lidl. March 17 2025. Available at: <https://www.globenewswire.com/news-release/2025/03/17/3043862/28124/en/Germany-Data-Center-Market-Report-2025-New-Entrants-include-Bluestar-Data-Centre-Data4-Green-Mountain-Mainova-WebHouse-SDC-Capital-Partners-STACK-Infrastructure-VIRTUS-Data-Centres.html>

³ CBRE. Global Data Center Trends 2025. June 24 2025. Available at: <https://www.cbre.com/insights/reports/global-data-center-trends-2025>

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Key legislation

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1

Energy Efficiency Act: mandates energy audits for large companies, requires waste-heat recovery and utilisation, especially in data centres, and introduces stricter energy efficiency standards for data centres

2

IT Security Act 2.0: strengthens IT security systems in detection and defence, mobile networks, consumer protections and security for businesses

3

Digital Strategy 2025: prioritises the development of digital capabilities and the promotion of new tools to enhance Germany's digitalisation processes

4

European Chips Act: bolsters Europe's semiconductor industry, enhances its resilience, reduces external dependencies and aims to achieve a 20% global market share in advanced chips by 2030

5

EU's NIS2 Directive: strengthens cybersecurity across the EU by expanding the original directive's scope to more critical sectors and requiring entities to implement robust risk management measures and incident reporting

6

EU Energy Efficiency Directive: legislative framework aimed at reducing energy consumption and promoting energy efficiency across various sectors, particularly data centres

Investment landscape

Germany's robust digital infrastructure, strong grid connectivity, reliable regulatory frameworks and central EU location make it a natural hub for continental and international data flows. Artificial intelligence (AI) demand, 5G roll-out and cloud adoption are driving data centre expansion, with the government facilitating further expansion through initiatives like the 5G Initiative for Germany.^{4,5} The market is particularly attractive to co-location providers, who account for over two-thirds of installed IT capacity, and hyperscalers.⁶

Environmental compliance is also tightening. The 2023 Energy Efficiency Act mandated that data centres source half their power from unsubsidised renewables by 2024 and all of it by 2027.⁷



⁴ Dotmagazine, Germany Data Center Market: Current Status and Future Growth. March 2025. Available at: <https://www.dotmagazine.online/issues/data-centers/sustainable-urban-development-and-digital-innovation-in-germany/germany-data-center-market#:~:text=Germany%27s%20data%20center%20market%20is%20on%20a%20trajectory%20of%20rapid,regulatory%20pres-sures%20and%20ESG%20commitments>.

⁵ German Federal Government, 5G Strategy for Germany. Available at: https://www.bmv.de/SharedDocs/EN/publications/5g-strategy-for-germany.pdf?__blob=publicationFile

⁶ German Data Center Association. Data Center Impact Report Germany 2024. Available at: <https://www.germandatacenters.com/en/data-center-impact-report-germany-2024/>

⁷ Dotmagazine, Germany Data Center Market: Current Status and Future Growth. March 2025. Available at: <https://www.dotmagazine.online/issues/data-centers/sustainable-urban-development-and-digital-innovation-in-germany/germany-data-center-market#:~:text=Germany%27s%20data%20center%20market%20is%20on%20a%20trajectory%20of%20rapid,regulatory%20pres-sures%20and%20ESG%20commitments>

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Key Risks

Physical

Data centres in Germany account for about 3% of national electricity use.⁸ Despite renewables accounting for over 50% of electricity, the rest comes from fossil fuels imported from other European countries.^{9, 10} This constraint could limit capacity, especially given the 2023 Energy Efficiency Act's renewables mandate.

Policy

Germany's prominence as an EU connectivity hub elevates its cyber risk. EIU rates Germany's cyber-attack risk as very high threat exposure, but strong safeguarding measures and a robust policy environment make it unlikely that Germany will succumb to this risk.¹¹

Geopolitical

High reliance on imported energy—especially gas—leaves Germany vulnerable to geopolitical shocks. Although the mix has shifted since early 2022 to rely more heavily on Norway, import dependence remains among the country's biggest vulnerabilities.¹² Germany relies on imported semiconductors and critical minerals from Taiwan, South Korea and the US.¹³ The National Semiconductor Strategy and the EU Chips Act aim to expand domestic and European production and reduce supply-chain risk.^{14, 15}



⁸ Clean Energy Wire. Most liquid natural gas coming into Germany through state-owned North Sea terminals – dpa. February 7 2025. Available at: <https://www.cleanenergywire.org/news/most-liquid-natural-gas-coming-germany-through-state-owned-north-sea-terminals-dpa#:~:text=Before%20the%20war%2C%20Russia%20was,into%20the%20country%20in%202024.>

⁹ Clean Energy Wire. Most liquid natural gas coming into Germany through state-owned North Sea terminals – dpa. February 7 2025. Available at: <https://www.cleanenergywire.org/news/most-liquid-natural-gas-coming-germany-through-state-owned-north-sea-terminals-dpa#:~:text=Before%20the%20war%2C%20Russia%20was,into%20the%20country%20in%202024.>

¹⁰ Clean Energy Wire. Germany covers 52 percent of electricity consumption with renewables so far this year. September 29 2023 Available at: <https://www.cleanenergywire.org/news/germany-covers-52-percent-electricity-consumption-renewables-so-far-year>

¹¹ Economist Intelligence Unit. Operational risk. Available at: <https://viewpoint.eiu.com/analysis/risk/XG/DE/operational-risk>

¹² Clean Energy Wire. Germany, EU remain heavily dependent on imported fossil fuels. April 3 2024. Available at: <https://www.cleanenergywire.org/factsheets/germanys-dependence-imported-fossil-fuels#:~:text=Germany%20is%20among%20the%20world%27s,imports%2C%20according%20to%20the%20BGR>

¹³ Economist Impact research

¹⁴ Germany Trade & Invest. The German Semiconductor Market. Available at: https://www.gtai.de/resource/blob/934980/e3c8f5128cdb3e7eac279522164bd773/20241211_FS_Semiconductor_WEB.pdf

¹⁵ European Commission. European Chips Act. Available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europe-an-chips-act_en

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Action Points for Leadership

Commit to renewables

Focus on converting all data centres to 100% unsubsidised renewables to both ensure compliance with the 2023 Energy Efficiency Act and protect against geopolitical shocks.

Diversify geographically

Capitalise on Germany's robust digital infrastructure and regulatory clarity by expanding into cities outside Frankfurt, including Berlin, Munich and Hamburg.

Fortify cyber defences

Maintain continuous monitoring and incident readiness to align with Federal Office for Information Security (BSI) guidance and IT Security Act 2.0 requirements.

Support component manufacturing

Capitalise on EU and national subsidies to strengthen domestic semiconductor and critical-components capacity.

