Green Data Centres Market Analysis 2025–2031 | Top Companies & Future Outlook By DataM Intelligence

The Global Green Data Centres Market was valued at US$ 57.84 billion in 2023 and is projected to Hit US$ 160.87 Billion by 2031, growing at an 18.87% CAGR.

Green Data Centres Market

AUSTIN, TX, UNITED STATES, May 21, 2025 /EINPresswire.com/ -- Green Data Centres Market Report – 2025 Outlook

Market Overview

As Data consumption continues to soar globally, the demand for energy-efficient and environmentally responsible data infrastructure has never been more urgent. The Green Data Centres Market has emerged as a crucial solution to reducing carbon footprints while supporting the explosion of digital services. These facilities are designed with energy efficiency at their core employing advanced cooling techniques, renewable energy sources, and resource-efficient IT infrastructure.

> The U.S. Green Data Centres Market is set for massive growth, driven by renewable energy adoption and AI-led cooling projected to exceed USD 159.8 Billion by 2030."
>
> *DataM Intelligence*

DataMint Intelligence forecasts show that the global market is experiencing a robust upward trajectory, driven by growing regulatory pressure, the corporate push toward net-zero emissions, and rising consumer awareness about sustainability. Notably, companies across the spectrum from hyperscalers to colocation providers are investing in innovative green technologies to maintain competitiveness while ensuring compliance with ESG standards.

Market Growth and Value Outlook

Global Green Data Centres Market Size reached US$ 57.84 billion in 2023 and is expected to reach US$ 160.87 billion by 2031, growing with a CAGR of 18.87% during the forecast period 2024-2031. This growth is largely fueled by a combination of technological advancements, government incentives, and increasing operational cost savings through sustainable energy use and resource optimization.

Key technologies driving this transformation include liquid cooling systems, AI-driven energy optimization, and the deployment of solar, wind, and hydro-powered data centres. In particular, cloud computing and edge computing continue to amplify demand for low-latency, high-performance, and green infrastructure.

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Regional Outlook

North America
North America continues to dominate the green data centre landscape, with the United States leading the way in terms of installations, innovation, and sustainability initiatives. Driven by aggressive targets set by major cloud players, many data centres in the region are operating with 100% renewable energy. Data centre hubs such as Virginia, Oregon, and Arizona are witnessing a surge in green builds supported by state-level energy incentives.

Europe
Europe is progressing rapidly, thanks to strong policy support from the European Union. The Climate Neutral Data Centre Pact, signed by numerous European providers, aims for full carbon neutrality by 2030. Countries like the Netherlands, Germany, and Sweden are key leaders in this space. Additionally, rising electricity prices and strict energy compliance requirements are pushing operators toward energy-efficient solutions.

Asia-Pacific
Asia-Pacific is an emerging hotspot. Countries like China, India, Japan, and Singapore are investing in green data centres to manage growing data volumes and comply with new environmental regulations. Government-backed smart city projects and digital transformation initiatives are further fueling the demand.

Latest News of USA
In 2025, the U.S. green data centre market witnessed a landmark development with Microsoft announcing the launch of its most energy-efficient data campus in Washington State. This facility will run entirely on solar and hydroelectric energy, equipped with AI-optimized cooling systems. Furthermore, Amazon Web Services (AWS) has initiated a partnership with local utilities to ensure renewable energy access for its new data centres in Texas and Ohio.

The Federal Government has also unveiled a new "Green Cloud Infrastructure Fund," aimed at supporting small and mid-size data centre operators in adopting sustainable practices. The fund covers grants for retrofitting existing infrastructure with advanced HVAC systems and energy-efficient hardware.

Latest News of Japan
Japan continues to solidify its commitment to digital sustainability. In early 2025, NTT Communications announced the completion of a large-scale green data centre in Osaka that utilizes geothermal cooling and hydrogen-powered backup systems, an industry-first in Asia. Additionally, Fujitsu launched a roadmap to achieve zero carbon data centres by 2030, beginning with its new Tokyo facility built with low-carbon cement and advanced energy recovery systems.

To support nationwide adoption, the Japanese Ministry of Internal Affairs and Communications rolled out tax incentives for green IT investments, including rebates on green servers, liquid cooling, and energy monitoring platforms. The government has also introduced a compliance benchmark, urging all new hyperscale projects to meet minimum efficiency targets set under the revised Green Growth Strategy.

Competitive Landscape

Key players in the green data centre space are actively reshaping their strategies to gain a sustainable edge. Companies such as

Fujitsu Ltd.
Digital Realty Trust
Cisco Systems, Inc.
Dell Technologies, Inc.
Equinix, Inc.
Siemens AG
General Electric
Hewlett Packard Enterprise Company
Huawei Technologies Co., Ltd.
Hitachi, Ltd.
International Business Machines Corporation (IBM)
Schneider Electric

Market Segmented By:

By Component: Solution, Service

By Enterprise Size: Large Enterprises, Small & Medium Enterprises (SMEs)

By End-use: BFSI, Media and Entertainment, Retail, IT & Telecom, Healthcare, Manufacturing,

Government & Defense, Others

By Region Based on: North America, Latin America, Europe, Asia Pacific, Middle East, and Africa

Key Developments of 2025

AI-Driven Cooling Systems: Several companies, including startups, introduced AI-powered smart cooling systems in 2025. These systems predict temperature shifts and optimize air circulation, helping to reduce energy usage by up to 30%.

Circular IT Practices: Refurbishment and reuse of data centre equipment gained momentum. Major operators implemented circular economy models to extend hardware life cycles and reduce electronic waste.

Hydrogen Backup Generators: Data centres in regions with unstable power grids have started adopting hydrogen fuel cells as a clean alternative to diesel generators. This shift is being led by operators in Japan, South Korea, and the Nordic countries.

Modular Green Data Centres: 2025 saw a rise in modular, pre-fabricated green data centre units, especially in remote locations and Tier 2 cities. These units are easier to deploy, scalable, and highly energy-efficient, with solar panel integration and low-power UPS systems.

Green Bonds & ESG Financing: Financial institutions showed strong support for green data centre expansion. Several large providers raised funds through green bonds, with investors increasingly favoring ESG-compliant infrastructure.

Zero-Water Cooling: A breakthrough in cooling technology this year allowed data centres in arid regions to operate without the use of freshwater, relying on advanced phase-change materials and air-to-air cooling systems.

Conclusion
The Green Data Centres Market is no longer a niche segment; it is the future of digital infrastructure. With global climate goals becoming more ambitious and energy regulations tightening, stakeholders are under growing pressure to innovate. As we look toward 2026, sustainability will not only be a differentiator it will be the foundation of resilience, scalability, and long-term profitability in the data centre world.

Data Center Construction Market Size, Share By 2031

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