

# Global Green IT Market - 2025 -2032

<https://marketpublishers.com/r/G243EB8BB328EN.html>

Date: October 2025

Pages: 180

Price: US\$ 4,350.00 (Single User License)

ID: G243EB8BB328EN

## Abstracts

### Green IT Market Overview

Global Green IT Market reached US\$ 27.98 billion in 2024 and is expected to reach US\$ 90.41 billion by 2032, growing with a CAGR of 15.79% during the forecast period 2025-2032.

Green IT signifies a crucial shift in the design, operation, and disposal of information technology systems, prioritizing environmental stewardship. Originating from the 1992 initiation of the US EPA's Energy Star program, Green IT has developed into a complex field, including energy-efficient technology, virtualization, cloud computing, and data center reconfiguration.

The aim is to minimize hazardous material utilization while optimizing energy efficiency and ensuring responsible disposal. The pursuit of carbon neutrality by multinational corporations has heightened the significance of Green IT. Initiatives such as Salesforce's 'Green Code' and Singapore's US\$30 million Green Computing Funding Initiative (January 2024) highlight its strategic significance.

The worldwide regulatory environment, including the European CSRD and China's limitations on high-consumption data centers, is bolstering market momentum. With the expansion of IT infrastructure, the necessity for sustainable practices escalates, establishing Green IT as an essential facilitator in the global sustainability initiative.

### Green IT Market Trend

A nascent yet undervalued trend in Green IT is the emphasis on software efficiency. Historically, hardware has been seen as the principal energy user; however, attention is now turning to the impact of inefficient programming on IT's carbon footprint. During

SCOPE 2024, Luc Brandts, CEO of Software Improvement Group, emphasized the need of source code optimization as a fundamental element of sustainable IT. The shift towards standardized green coding methods advocated by firms such as IBM signifies the industry's transition from hardware-focused solutions to comprehensive sustainability strategies.

The increase in worldwide software usage has rendered efficient programming essential for corporate sustainability initiatives. This trend is expediting the creation of innovative eco-centric software solutions and redefining developer duties. Simultaneously, organizations are implementing sophisticated frameworks for digital sustainability, integrating IT operations with overarching environmental, social, and governance (ESG) objectives. This convergence is creating a dynamic, adaptive, and environmentally aware IT ecosystem.

## Green IT Market Dynamics

### Regulatory imperatives and carbon-neutral objectives propel adoption

A significant catalyst for the Green IT market is the increasing regulatory pressure in major global economies. The US Department of Energy estimates that data centers account for around 2% of national electricity use, a fact that has led to increased regulatory scrutiny. Legislation such as the EU's Corporate Sustainability Reporting Directive (CSRD), the UK's Sustainable Disclosure Regulation (SDR), and climate disclosure regulations from the US SEC are transforming compliance frameworks.

Non-EU companies with yearly revenues above €150 million in the EU are required to comply with the CSRD, thereby expanding its jurisdictional scope. Singapore and Japan have implemented carbon taxes and digital sustainability funding in Asia, such as IMDA's US\$30 million Green Computing Initiative.

China's initiatives to limit energy-intensive data centers demonstrate analogous strategic objectives. The regulatory requirements, combined with increasing customer demand for ecologically responsible companies, are urging businesses to adopt Green IT. The incorporation of renewable energy and energy-efficient infrastructure is now imperative for company sustainability and regulatory compliance.

### Financial obstacles and obsolete systems impede adoption

The extensive implementation of Green IT is obstructed by outdated technologies and

substantial initial expenses. Numerous businesses, particularly small and medium-sized enterprises, encounter budgetary limitations that render the move to energy-efficient hardware or the renovation of data centers economically difficult.

Improvements related to sustainable cooling systems, virtualization infrastructure, and renewable energy sources typically require significant capital investment, with returns on investment materializing only in the long run. Furthermore, current legacy systems may lack compatibility with contemporary Green IT architectures, necessitating complete system overhauls. The proficiency necessary to execute and oversee such transformations, especially in intricate IT settings, constitutes an additional constraint.

Moreover, a deficiency of uniform standards for green software development and hardware optimization persists, resulting in inconsistencies in implementation and assessment. Despite governmental incentives and financial initiatives, such as Singapore's GCFI, numerous firms continue to exercise caution regarding substantial Green IT commitments, apprehensive about potential operational disruptions and budgetary excesses.

### Green IT Market Segment Analysis

The global green IT market is segmented based on type, deployment, end-user, and region.

### IT and telecommunications driving sustainability through green IT

The IT and Telecommunications sector is one of the most proactive in implementing Green IT solutions due to its extensive digital infrastructure and considerable energy requirements. Prominent telecommunications companies and IT enterprises are adopting virtualized systems, energy-efficient data centers, and cloud-first strategies to reduce environmental impact. This sector leads in green software development, exemplified by efforts such as Salesforce's "Green Code," which advocates for sustainable software lifecycle standards.

The heightened dependence on data transmission, 5G technology, and interconnected devices intensifies the industry's necessity to regulate energy use. To satisfy stakeholder expectations and comply with emerging legislation such as the CSRD, IT and telecommunications firms are incorporating renewable energy sources, namely solar and wind, into their infrastructure. Collaborations with ESG-oriented software providers, exemplified as IBM's 2023 partnership with SL Green Realty Corp,

underscore the industry's commitment to sustainability. As digital infrastructure expands, Green IT will continue to be a fundamental component in mitigating emissions and ensuring compliance.

## Green IT Market Geographical Share

Europe stands as a leader in this industry, driven by regulation

Europe leads the worldwide Green IT initiative, driven by a robust legal framework and corporate sustainability requirements. The EU's Green Deal and Corporate Sustainability Reporting Directive (CSRD) are fundamental, compelling corporations to implement effective IT systems and shift towards a circular economy.

The CSRD's extraterritorial scope encompasses non-EU enterprises with annual revenues exceeding €150 million derived from the Union, necessitating compliance from global entities. Countries such as the UK are bolstering these endeavors through initiatives like the Sustainable Disclosure Regulation (SDR), while Scotland's aspiration to establish itself as a green data center hub illustrates regional leadership.

European enterprises are significantly investing in green computing, not alone to adhere to rules but also to enhance ESG credentials and meet the expectations of environmentally concerned stakeholders. The region's focus on incorporating renewable energy sources into IT operations is reinforcing its status as a Green IT innovation center.

## Sustainability Analysis

Green IT is propelled by a changing array of technologies designed to reduce the carbon footprint of IT operations. Innovations at the hardware level encompass energy-efficient servers, sophisticated cooling systems, and low-power storage arrays. Software tools for carbon accounting, energy monitoring, and code optimization are increasingly gaining prominence. Technologies like virtualization, cloud computing, and software-defined infrastructure are essential for enhancing resource efficiency and minimizing redundant tasks. Significant advancements encompass IBM's collaborations on sustainability-oriented software, facilitating the implementation and adherence to ESG strategies.

Governmental programs such as the Green Computing Funding Initiative (GCFI), launched in Singapore in January 2024, are fostering the collaborative development of

digital sustainability solutions. The use of AI-driven energy optimization and real-time data is augmenting Green IT solutions. As organizations move towards net-zero objectives, Green IT will become further intertwined with comprehensive digital transformation initiatives, necessitating that CIOs and CTOs incorporate sustainability into fundamental IT strategy.

### Green IT Market Major Players

The major global players in the market include Accenture, Amazon Web Services, Inc., Cisco Systems, Inc., Dell Inc., Google, Hewlett Packard Enterprise Development LP, IBM Corporation, Infosys Limited, Microsoft, Wipro.

### Key Developments

In September 2024, IBM Corporation, the United Nations Development Programme (UNDP), and the United Nations' agency for international development jointly introduced a new interactive energy model on the global GeoHub platform of UNDP. These innovative solutions utilize a variety of technologies, including the IBM Watsonx AI platform and data and AI platform, to enable users of all levels, from community and national policymakers to the general public, to analyze intricate energy challenges using advanced AI.

In May 2024, Dell Inc., the Dell AI Factory, offered customers access to a comprehensive AI portfolio. This portfolio included devices, data centers, cloud infrastructure, and an open ecosystem of technology partners to facilitate the development of customized AI applications. Dell's end-to-end AI portfolio, which encompasses servers, client devices, storage, networking forms, and data protection, is the foundation of this offering and is available through Dell APEX subscription or purchase.

In March 2024, Hewlett Packard Enterprise Development LP made an investment in Greenly. This company specializes in the development of carbon accounting software for small and medium-sized enterprises. Hewlett Packard Enterprise Development LP regards Greenly's software as a valuable resource for assisting enterprise clients in the implementation of sustainable IT infrastructure strategies.

### Why Choose DataM?

**Data-Driven Insights:** Dive into detailed analyses with granular insights such as pricing, market shares and value chain evaluations, enriched by interviews with industry leaders and disruptors.

**Post-Purchase Support and Expert Analyst Consultations:** As a valued client, gain direct access to our expert analysts for personalized advice and strategic guidance, tailored to your specific needs and challenges.

**White Papers and Case Studies:** Benefit quarterly from our in-depth studies related to your purchased titles, tailored to refine your operational and marketing strategies for maximum impact.

**Annual Updates on Purchased Reports:** As an existing customer, enjoy the privilege of annual updates to your reports, ensuring you stay abreast of the latest market insights and technological advancements. Terms and conditions apply.

**Specialized Focus on Emerging Markets:** DataM differentiates itself by delivering in-depth, specialized insights specifically for emerging markets, rather than offering generalized geographic overviews. This approach equips our clients with a nuanced understanding and actionable intelligence that are essential for navigating and succeeding in high-growth regions.

**Value of DataM Reports:** Our reports offer specialized insights tailored to the latest trends and specific business inquiries. This personalized approach provides a deeper, strategic perspective, ensuring you receive the precise information necessary to make informed decisions. These insights complement and go beyond what is typically available in generic databases.

## Target Audience 2024

Manufacturers/ Buyers

Industry Investors/Investment Bankers

Research Professionals

Emerging Companies



## Contents

### **1. METHODOLOGY AND SCOPE**

- 1.1. Research Methodology
- 1.2. Research Objective and Scope of the Report

### **2. DEFINITION AND OVERVIEW**

### **3. EXECUTIVE SUMMARY**

- 3.1. Snippet by Type
- 3.2. Snippet by Deployment
- 3.3. Snippet by End-user
- 3.4. Snippet by Region

### **4. DYNAMICS**

- 4.1. Impacting Factors
  - 4.1.1. Drivers
    - 4.1.1.1. Regulatory imperatives and carbon-neutral objectives propel adoption
  - 4.1.2. Restraints
    - 4.1.2.1. Financial obstacles and obsolete systems impede adoption
  - 4.1.3. Opportunity
  - 4.1.4. Impact Analysis

### **5. INDUSTRY ANALYSIS**

- 5.1. Porter's Five Force Analysis
- 5.2. Supply Chain Analysis
- 5.3. Pricing Analysis
- 5.4. Regulatory and Compliance Analysis
- 5.5. Sustainability Analysis
- 5.6. DMI Opinion

### **6. BY TYPE**

- 6.1. Introduction
  - 6.1.1. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type

- 6.1.2. Market Attractiveness Index, By Type
- 6.2. Software\*
  - 6.2.1. Introduction
  - 6.2.2. Market Size Analysis and Y-o-Y Growth Analysis (%)
- 6.3. Services

## **7. BY DEPLOYMENT**

- 7.1. Introduction
  - 7.1.1. Market Size Analysis and Y-o-Y Growth Analysis (%), By Deployment
  - 7.1.2. Market Attractiveness Index, By Deployment
- 7.2. Cloud\*
  - 7.2.1. Introduction
  - 7.2.2. Market Size Analysis and Y-o-Y Growth Analysis (%)
- 7.3. On-premises

## **8. BY END-USER**

- 8.1. Introduction
  - 8.1.1. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-user
  - 8.1.2. Market Attractiveness Index, By End-user
- 8.2. IT & Telecommunications\*
  - 8.2.1. Introduction
  - 8.2.2. Market Size Analysis and Y-o-Y Growth Analysis (%)
- 8.3. BFSI
- 8.4. Healthcare & Life Sciences
- 8.5. Manufacturing
- 8.6. Retail
- 8.7. Government & Public Sectors
- 8.8. Energy & Utilities
- 8.9. Others

## **9. BY REGION**

- 9.1. Introduction
  - 9.1.1. Market Size Analysis and Y-o-Y Growth Analysis (%), By Region
  - 9.1.2. Market Attractiveness Index, By Region
- 9.2. North America
  - 9.2.1. Introduction

### 9.2.2. Key Region-Specific Dynamics

#### 9.2.3. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type

#### 9.2.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Deployment

#### 9.2.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-user

#### 9.2.6. Market Size Analysis and Y-o-Y Growth Analysis (%), By Country

##### 9.2.6.1. US

##### 9.2.6.2. Canada

##### 9.2.6.3. Mexico

### 9.3. Europe

#### 9.3.1. Introduction

#### 9.3.2. Key Region-Specific Dynamics

#### 9.3.3. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type

#### 9.3.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Deployment

#### 9.3.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-user

#### 9.3.6. Market Size Analysis and Y-o-Y Growth Analysis (%), By Country

##### 9.3.6.1. Germany

##### 9.3.6.2. UK

##### 9.3.6.3. France

##### 9.3.6.4. Italy

##### 9.3.6.5. Spain

##### 9.3.6.6. Rest of Europe

### 9.4. South America

#### 9.4.1. Introduction

#### 9.4.2. Key Region-Specific Dynamics

#### 9.4.3. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type

#### 9.4.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Deployment

#### 9.4.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-user

#### 9.4.6. Market Size Analysis and Y-o-Y Growth Analysis (%), By Country

##### 9.4.6.1. Brazil

##### 9.4.6.2. Argentina

##### 9.4.6.3. Rest of South America

### 9.5. Asia-Pacific

#### 9.5.1. Introduction

#### 9.5.2. Key Region-Specific Dynamics

#### 9.5.3. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type

#### 9.5.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Deployment

#### 9.5.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-user

#### 9.5.6. Market Size Analysis and Y-o-Y Growth Analysis (%), By Country

##### 9.5.6.1. China

- 9.5.6.2. India
- 9.5.6.3. Japan
- 9.5.6.4. Australia
- 9.5.6.5. Rest of Asia-Pacific

## 9.6. Middle East and Africa

- 9.6.1. Introduction
- 9.6.2. Key Region-Specific Dynamics
- 9.6.3. Market Size Analysis and Y-o-Y Growth Analysis (%), By Type
- 9.6.4. Market Size Analysis and Y-o-Y Growth Analysis (%), By Deployment
- 9.6.5. Market Size Analysis and Y-o-Y Growth Analysis (%), By End-user

## 10. COMPETITIVE LANDSCAPE

- 10.1. Competitive Scenario
- 10.2. Market Positioning/Share Analysis
- 10.3. Mergers and Acquisitions Analysis

## 11. COMPANY PROFILES

- 11.1. Accenture\*
  - 11.1.1. Company Overview
  - 11.1.2. Product Portfolio and Description
  - 11.1.3. Financial Overview
  - 11.1.4. Key Developments
- 11.2. Amazon Web Services, Inc.
- 11.3. Cisco Systems, Inc.
- 11.4. Dell Inc.
- 11.5. Google
- 11.6. Hewlett Packard Enterprise Development LP
- 11.7. IBM Corporation
- 11.8. Infosys Limited
- 11.9. Microsoft
- 11.10. Wipro (\*LIST NOT EXHAUSTIVE)

## 12. APPENDIX

- 12.1. About Us and Services
- 12.2. Contact Us

## I would like to order

Product name: Global Green IT Market - 2025 -2032

Product link: <https://marketpublishers.com/r/G243EB8BB328EN.html>

Price: US\$ 4,350.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G243EB8BB328EN.html>