MARKET NOTE

From Data to Decisions: SAP's Evolution of AI-Driven Sustainability Management

Amy Cravens

EXECUTIVE SNAPSHOT

FIGURE 1

Executive Snapshot: SAP's AI for Sustainability Solutions

In 2025, SAP has positioned AI as a foundational element of its sustainability software suite, driving intelligent automation and strategic decision-making across enterprise functions. The integration of AI with SAP's Business Data Cloud enables seamless unification of financial, operational, and sustainability data, enhancing data readiness and enabling predictive insights. IDC believes that SAP's orchestration of AI agents could transform sustainability from a reactive compliance task into a proactive, value-generating opportunity. These innovations empower organizations to automate complex processes, reduce risk, and align sustainability goals with business performance metrics.

Key Takeaways

- In 2025, SAP's AI advancements have become a core pillar of its sustainability suite with a focus on sustainable transformation through improved data readiness, process automation, and embedding AI-driven insights into decision-making.
- SAP's Business Data Cloud provides a unified sustainability data model, integrating financial, operational, and sustainability data across business lines, enabling organizations to blend disparate sources for actionable insights and improved resiliency.
- IDC feels that SAP's potential to choreograph AI agents across enterprise functions will transform sustainability management from a compliance-driven activity to a proactive, integrated discipline, linking sustainability directly to business metrics and operational execution.
- AI for sustainability has the promise of redefining organizational sustainability by delivering measurable business value, including time and cost savings, regulatory assurance, risk reduction, and competitive differentiation, positioning sustainability as a driver of efficiency, resilience, and growth rather than just a compliance requirement.

Source: IDC, 2025

November 2025, IDC #US53867025

IN THIS MARKET NOTE

In 2025, SAP's advancements in AI have emerged as a defining pillar of its broader strategy, standing alongside applications and data to define the company's core foundations. As a component of this initiative, SAP has introduced AI innovations throughout 2025 that have reshaped its sustainability suite, significantly expanding the breadth and magnitude of real-world AI use cases. SAP's approach to AI for sustainability focuses on three primary components:

- **Data readiness:** Using AI to identify gaps, improve data completeness and accuracy, and ensure auditability at scale
- **Process automation:** Leveraging AI to automate and accelerate labor-intensive tasks, reducing cost and risk
- **Amplifying expertise:** Embedding AI-driven insights into core decision processes to support new business opportunities and optimize outcomes

Through these initiatives, SAP is working to improve organization's sustainability data foundation and leverage that data to automate tasks and drive insight. AI is delivered both directly within SAP Sustainability suite applications (e.g., SAP Sustainability Control Tower, SAP S/4HANA for Product Compliance, and SAP Environmental, Health, and Safety Management) and as custom solutions that integrate across systems. This dual approach allows customers to benefit from immediate application-level intelligence while enabling tailored, enterprisewide AI solutions via SAP Business AI. Current AI features embedded in SAP's sustainability suite include:

- Emissions factor mapping for purchased goods
- Automated disclosure generation
- Information extraction and validation from supplier declarations

A key element of SAP's overall AI strategy is the use of the SAP Business Data Cloud as a centralized platform for business intelligence and AI-driven applications. This unified data foundation enables consistent, scalable deployment of AI use cases across enterprise functions. SAP plans to leverage the SAP Business Data Cloud to provide a unified sustainability data model that will integrate data across lines of business, bringing together financial, operational, and sustainability data. SAP plans to build on 2025's momentum by further advancing sustainability agents to enable operational sustainability management. This evolution marks a pivotal shift, as organizations increasingly deploy sustainability tools not just for compliance or reporting but as critical systems that drive efficiency, resilience, and competitive differentiation.

IDC'S POINT OF VIEW

Sustainability has shifted from being a compliance-driven agenda to a core element of enterprise strategy, and 2025 has marked a decisive turning point in this evolution. As the regulatory and political winds shift, organizations are determining that success in sustainability is more than meeting regulatory obligations but requires embedding sustainability into business processes, product design, and financial outcomes. AI — and increasingly agentic AI — have become central to this transformation. SAP has made significant advancement during 2025 in its AI for sustainability offerings, with progress and differentiation coalescing around three critical themes:

- Data management as the foundation
- Orchestration of AI agents across the enterprise
- Business value creation through sustainability-focused AI use cases

Data Management as the Foundation

In 2025, sustainability strategies are increasingly being built on a data foundation. While regulatory priorities and compliance frameworks continue to shift, the underlying need for accurate, contextualized data has remained constant. SAP has recognized this by making significant investments in the SAP Business Data Cloud, positioning it as the underpinning of its sustainability portfolio. The SAP Business Data Cloud functions not simply as a data repository but as a unified sustainability data layer, drawing from applications across HR, finance, supply chain, and procurement. By establishing this unified layer, organizations can blend disparate data sources to drive sustainability-relevant insights.

This approach is proving especially valuable in a volatile regulatory environment, where nearly 30% of organizations expect significant changes in reporting activities due to geopolitical or legislative uncertainty. The resilience of the data layer means that whether enterprises focus on compliance, decarbonization, or new initiatives such as digital product passports, the same structured data foundation can support those objectives. While often initially driven by compliance pressures, organizations are realizing that investment in data management is not specifically a compliance function but an enabler of sustainable transformation.

Orchestrating Cross-Organization AI Agents

The orchestration across enterprise functions has emerged as a differentiator for SAP's sustainability strategy. In integrating AI with the SAP Business Data Cloud and core enterprise applications, SAP has transformed sustainability management into a more proactive, scalable, and insight-driven discipline, enabling organizations to move beyond compliance and embed sustainability into everyday business decisions. Rather

than limiting AI to discrete applications, SAP has designed its approach to span business domains — finance, supply chain, HR, and operations — linking sustainability directly to business metrics. This capability marks a shift from sustainability as an isolated function toward integration with enterprise strategy and financial outcomes.

IDC believes that through this integrated approach, SAP's AI agents will eventually be able to simulate scenarios such as the carbon impact of switching energy sources, recommend sustainable sourcing alternatives, and then push those decisions back into core ERP systems. This closed-loop orchestration enables organizations to not only model potential outcomes but also embed those changes directly into business processes. This will result in a seamless connection between sustainability analysis and operational execution.

Business Value Impacts of AI for Sustainability

Another important consideration with the deployment of AI is the business value impact. AI applications for sustainability have tangible time savings benefits with customer case studies showing significant reductions in time spent producing sustainability reports. However, there are also cost savings being achieved through operational efficiencies and supply chain optimizations. For instance, in manufacturing and energy management, AI-driven efficiency improvements have shown the potential to reduce emissions while lowering operational costs, aligning environmental impact with financial performance.

Beyond time and cost efficiencies, AI-enabled sustainability also delivers value through regulatory assurance, risk reduction, and brand enhancement. Furthermore, competitive differentiation will be assisted via AI-driven sustainability platforms that increasingly deliver product-level insights, creating a premium for verifiable sustainable goods. As AI adoption matures, the ability to demonstrate carbon impact reductions, cost savings, and revenue growth from sustainable products will make sustainability not just a compliance exercise but a driver of competitive advantage.

As sustainability expectations grow more complex, enterprises will rely on AI to move beyond compliance and unlock measurable business value. SAP's three-pronged approach — integrating applications, data, and AI — demonstrates how technology can bridge sustainability and core business objectives. By establishing a strong data foundation, orchestrating AI agents across organizational functions, and delivering clear financial and operational outcomes, enterprises can transform sustainability from a cost center into a driver of competitive advantage. Companies that thrive will be those that not only report on sustainability progress but also operationalize AI-driven insights to design products, manage risks, and accelerate decarbonization at scale.

LEARN MORE

Related Research

- *SAP Sapphire 2025: Paving the Future with Your Best. Made Real. No Matter What Lies Ahead* (IDC #US53640625, June 2025)
- *SAP 1Q25: Continued Cloud Growth, Plus Data and AI, Is Enabling Businesses and the Future of Work* (IDC #US53465925, May 2025)
- *How SAP's New Business Data Cloud and Partnership with Databricks Helps with Data Management and Sovereignty Concerns* (IDC #lcUS53217025, February 2025)
- *How SAP Green Ledger Is Shaping the Future of Sustainable Business Practices* (IDC #US53200225, February 2025)
- *SAP NOW Southeast Asia 2024: AI and Sustainability Business Transformation* (IDC #AP52364424, October 2024)

Synopsis

This IDC Market Note discusses SAP's evolution of AI-driven sustainability management. In 2025, SAP's AI-enabled sustainability solutions have been positioned to enable enterprise transformation, integrating data, applications, and AI to automate processes, enhance decision-making, and deliver measurable business value. By leveraging the SAP Business Data Cloud and orchestrating AI agents across business functions, SAP will enable organizations to move beyond compliance, optimize operations, and achieve competitive differentiation through sustainability, positioning technology as a catalyst for efficiency, resilience, and growth.

ABOUT IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

Global Headquarters

140 Kendrick Street
Building B
Needham, MA 02494
USA
508.872.8200
Twitter: @IDC
blogs.idc.com
www.idc.com