KPMG

Sustainable AI is the new performance frontier

KPMG global research reveals how organizations are balancing cost, risk, regulation, and environmental stewardship—and why a unified AI sustainability strategy is now a competitive advantage.

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Foreword

A recent conversation around my extended family's dinner table centered not on current events or travels, but on a topic of interest once unusual for the average person: data centers.

Artificial intelligence is transforming the world faster than any technology in recent memory, reshaping how we operate, innovate, and compete. Yet this acceleration brings a defining paradox: AI is driving new efficiencies, insights, and social benefits while simultaneously placing unprecedented pressure on our energy systems, infrastructure, natural resources, and people. Communities in the US and around the world are raising concerns about proposed data center developments, and my own hometown in northeastern Pennsylvania is no exception.

Their concerns are grounded in data. Across industries, from consumer products to healthcare, AI use is set to skyrocket. More than 7 in 10 global CEOs say AI is a top investment priority. And nearly the same percentage plan to spend between 10 percent and 20 percent of their budget on AI in the next 12 months.[1]

The speed and scope of burgeoning corporate AI use will require data center operators, including hyperscalers and cloud providers, to significantly expand capacity, power, and cooling. AI workloads in data centers alone will more than triple by 2027 compared to today.[2] Left unmanaged, the water and energy requirements for escalating AI use risk outpacing available resources.

At the same time, AI holds extraordinary potential to accelerate climate action by enabling real-time emissions reductions and optimizing grids, buildings, supply chains, and natural resource management. AI is a powerful tool that organizations can use to measure their progress against sustainability goals. Yet in these still-early days, leaders need deeper insights into the ramifications of their own organizations' AI expansion. AI can only scale sustainably when environmental performance is built into its architecture, governance, and partnerships—not bolted on later.

> "AI's environmental footprint is not a side effect. It is a strategic risk that requires immediate, coordinated action."

This moment demands clear-eyed leadership. Executives must recognize that AI's environmental footprint is not a side effect. It is a strategic risk that requires immediate, coordinated action. That means growing the business with sustainability front of mind, partnering with providers that share values, and using AI to help lessen the technology's own footprint.

From our everyday work here at KPMG, we believe that AI's promise and impact are real. Leaders who act now to address AI's environmental costs head-on will be the ones who unlock its full potential while protecting our communities, our ecosystems, and our futures.

Maura Hodge
KPMG US
Sustainability Leader

[1] KPMG 2025 Global CEO Outlook, KPMG International, 2026.

[2] KPMG LLP, "AI's dual promise: Enabling positive climate outcomes and powering the energy transition," 2025.

Introduction

It's a truth universally acknowledged that artificial intelligence is a resource-hungry technology in a resource-constrained world.[3] Less understood is how powerfully AI can advance climate goals by exposing resource waste, optimizing production and logistics, and transforming sustainability measurement into real-time management.[4] For corporate sustainability leaders, the question isn't whether to slow AI adoption, but how to scale it so that environmental, financial, and operational performance reinforce one another.

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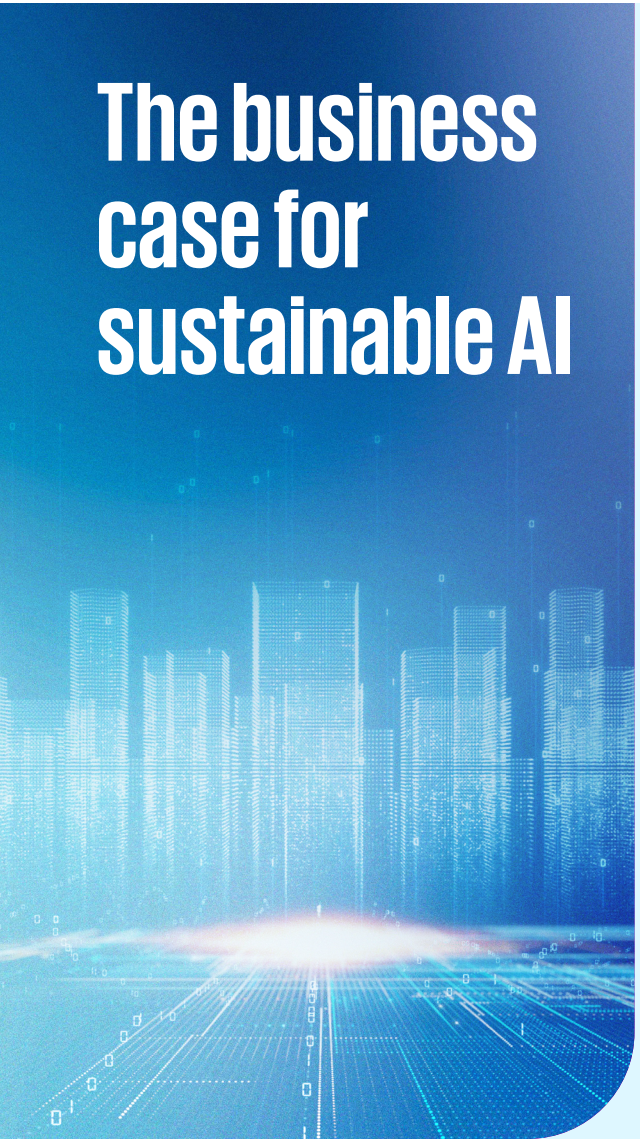
Companies today face a defining challenge: balancing environmental and community commitments with the relentless pressure to innovate. A new KPMG LLP survey of 350 technology, sustainability, strategy, and operations executives shows that this tension is reshaping how organizations across sectors approach both innovation and environmental responsibility. From their responses, one message is clear: AI and sustainability aren't competing priorities but instead reinforce each other. We learned that leading companies are designing AI programs with efficiency and environmental impact in mind—building infrastructure that accounts for cost and carbon, selecting technology partners who prioritize sustainability in their design philosophy, and adopting green information technology (Green IT) practices that ensure AI tools are developed and deployed responsibly.

This paper presents our research findings and offers a path to a unified AI strategy where sustainability is embedded from design through deployment. Written for sustainability leaders at organizations that are using AI to improve internal operations or their products and services, we will show how leading organizations are rethinking partnerships, modernizing digital infrastructure, strengthening governance, and improving measurement to ensure AI delivers efficiency, resilience, and environmental performance. Drawing on real executive experience, we highlight where companies are making progress, the gaps that remain, and the practical steps that can turn sustainable AI from an aspiration into a durable competitive advantage.

[3] Casey Crownhart and James O'Donnell, "We did the math on AI's energy footprint. Here's the story you haven't heard," MIT Technology Review, May 20, 2025.

[4] Mike Hayes, et al., "AI's dual promise: Enabling positive climate outcomes and powering the energy transition," KPMG International, November 2025.

The business case for sustainable AI



"Sustainable AI" refers to the practice of designing and implementing AI solutions that are energy-efficient, reduce carbon emissions, and support a cleaner environment. The core idea is to balance technological advancement with sustainable practices to mitigate the environmental impact of AI. At the center of this effort is Green IT, which makes every stage of the tech lifecycle more sustainable through more efficient software, cleaner infrastructure, smart hardware management, and circular practices. Because AI touches every function across an organization, Green IT provides the operational backbone that enables companies to scale AI responsibly.

Sustainable AI recognizes a growing reality: Even when companies don't own the infrastructure behind their AI systems, their use of AI still drives energy, water, resource consumption, and cost. Aligning sustainable AI with cloud financial management helps teams reduce waste, avoid overspend, and improve return on investment (ROI). With AI adoption accelerating rapidly—organizations deployed 11 times more models to production in 2025 than in 2024, per one large industry dataset—the associated impact will only intensify.[5] Now is the moment for leaders to prepare, mitigating risks while amplifying AI's benefits.

> AI and sustainability aren't competing priorities—they reinforce each other when designed with cost, carbon, and efficiency in mind."

By adopting sustainable AI strategies, organizations can:

Reduce costs

When scaled the right way, AI tools can also identify operational waste, optimize logistics, and improve asset utilization, including AI workloads themselves. For example, selecting more efficient AI models can reduce usage-based cloud and compute bills. Understanding the impact of AI on your sustainability strategy early on helps organizations avoid expensive rework as partners, governance, and reporting requirements evolve.

Improve ROI

AI's financial potential is growing: 86 percent of CEOs expect returns within three years, up sharply from 21 percent the year prior.[6] But those returns depend on managing AI's cost profile. Sustainable AI contemplates how each dollar invested can produce greater value through more efficient resource use, lower operating costs, and improved performance. Continuous AI-powered feedback loops provide the mechanism needed to prioritize high-ROI use cases, quantify financial outcomes, and track changes over time.

[5] Databricks Staff, "State of AI: Enterprise Adoption & Growth Trends," Databricks, November 28, 2025.
[6] KPMG 2025 Global CEO Outlook, KPMG International, 2026.

Mitigate risks

Using AI sustainably helps companies protect themselves from rising operational, regulatory, financial, and reputational threats. As sustainability reporting expectations expand, most organizations will see an increase in Scope 2 or 3 emissions tied to AI use, making it essential to understand impact hotspots across the value chain now. And, although power-related outages, community resistance, and resource scarcity are primarily the concern of data center operators, these risks cascade to AI customers via service availability, capacity constraints, and cost pass-throughs. Even with disaster recovery plans in place, failovers can raise latency, costs, and emissions. Thoughtful technology partner selection and strong Green IT practices help reduce these vulnerabilities.

Stakeholder scrutiny is also increasing. In the US, the global epicenter of AI development, most Americans express concern about AI's environmental footprint and are more worried about AI emissions than those tied to cryptocurrencies, meat production, or air travel.[7] Employees, customers, and investors are watching how organizations deploy AI—and sustainable AI strengthens trust, culture, and credibility.

Drive competitive advantage

Employees from the Millennial, Gen Z, and early Gen Alpha generations will soon make up more than 80 percent of the advanced-economy workforce, and increasingly they are asking how AI use aligns with their company's sustainability commitments.[8] Companies that act boldly on sustainability, equity, and well-being will have a clear advantage in the competition for talent.

Transparency also strengthens brand differentiation while keeping costs front-of-mind. Customers and investors will expect clear reporting on AI usage, environmental impacts, and mitigation strategies. Leaders must be able to explain how AI adoption accelerates rather than undermines their overarching strategic goals.

The right approach ensures AI growth strengthens sustainability performance. Scaling AI faster than environmental oversight creates operational, financial, regulatory, and reputational risks. In the rush to adopt AI, leaders should pause to ask: *How are we measuring impact? How does AI affect our emissions reporting? And how will we communicate this to stakeholders?*

Against this backdrop, our survey reveals how leading organizations—and the technology partners they choose—are beginning to put sustainable AI into practice.

[7] Jennifer McDermott and Linley Sanders, "What Americans think about the environmental impact of AI, according to a new poll," Associated Press, October 23, 2025.

[8] Silvia Gonzalez-Zamora and Maria Lesage, "Cultivating a culture of caring: A strategic approach to social sustainability," KPMG in Canada, 2026.

Partnerships take center stage

Companies increasingly rely on two kinds of partners to scale AI responsibly: tech providers that offer infrastructure and expertise and policymakers who shape evolving regulations. As a result, external partners have become essential to deploying AI efficiently, compliantly, and sustainably.

Key takeaways:

Companies view partnerships as crucial to supporting AI in sustainability, especially for:

- Technology selection and implementation
- Talent acquisition and development
- Strategic planning and roadmap development

9 in 10 respondents cite environmental sustainability as a key criterion for AI partner selection.

The value of external partnerships is expected to increase over the next two to three years.

Technology partnerships become values-driven

AI's rapid pace of advancement and the hype around its adoption can spur a "progress at any cost" mentality. That's why leadership needs to evaluate partners not only for tech strategy, selection, and implementation but also for how they will advance the company's sustainability objectives.

Our findings suggest that tech partnerships are no longer purely transactional; they are also values-driven. Nearly nine out of 10 respondents cite sustainability as a key criterion when selecting partners. This shift reflects a growing expectation that partners bring not only technical capability but also transparent, verifiable commitments to reducing environmental impact across the AI lifecycle.

For tech providers, this signals a clear expectation from customers that they demonstrate their own commitment to sustainable AI or risk losing business. These companies want clear information from their providers on the ways they optimize compute efficiency, source renewable energy, manage water usage, and design lower-impact infrastructure—areas that increasingly influence competitive differentiation. This includes greater scrutiny of energy use and emissions performance, particularly Scope 3 emissions tied to cloud services, hardware supply chains, and data center operations.

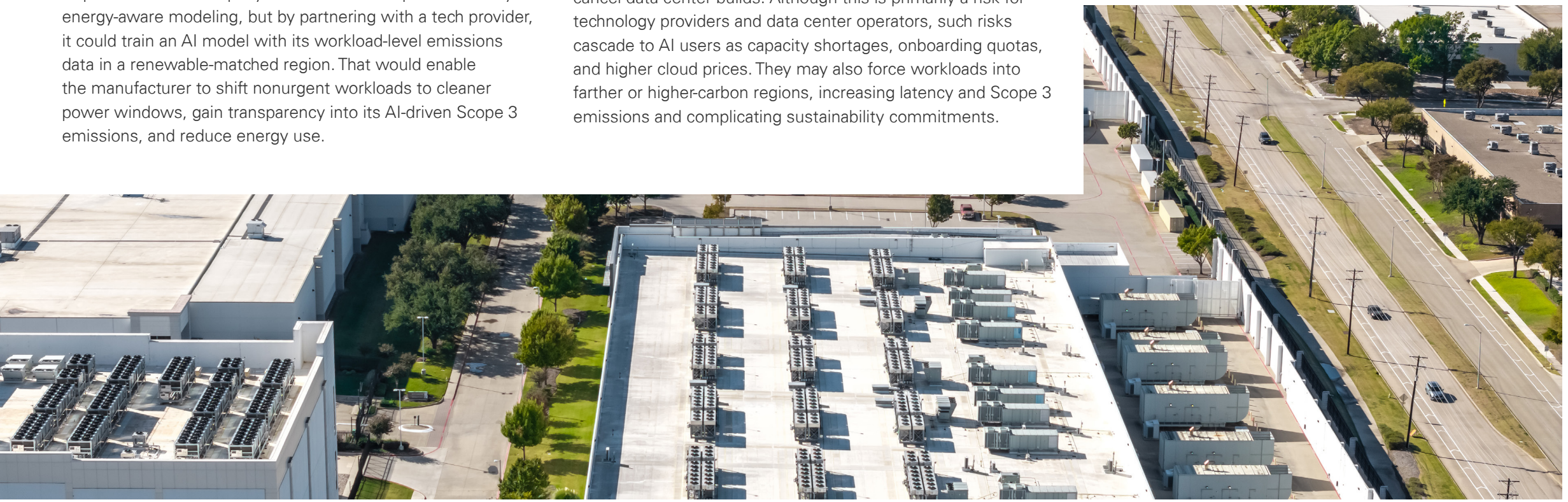
For companies, leveraging such technology partnerships can fast-track innovation while ensuring alignment with sustainability goals. The right tech partners help organizations deploy AI with lower cost, lower risk, and greater transparency, while enabling them to meet emerging reporting and compliance expectations.

Imagine a global manufacturer partnering with a cloud and AI provider to modernize production with sustainability as a core requirement. The company lacks its own compute efficiency and energy-aware modeling, but by partnering with a tech provider, it could train an AI model with its workload-level emissions data in a renewable-matched region. That would enable the manufacturer to shift nonurgent workloads to cleaner power windows, gain transparency into its AI-driven Scope 3 emissions, and reduce energy use.

Working with policymakers

Regulation is emerging as a second major external force, alongside technology partnerships, shaping how companies operationalize AI. Half of organizations we surveyed say they are proactively engaged with policymakers to anticipate potential shifts in AI and environmental rules. That is unsurprising, considering local regulations and policies can delay or cancel data center builds. Although this is primarily a risk for technology providers and data center operators, such risks cascade to AI users as capacity shortages, onboarding quotas, and higher cloud prices. They may also force workloads into farther or higher-carbon regions, increasing latency and Scope 3 emissions and complicating sustainability commitments.

> Half of organizations surveyed say they are proactively engaged with policymakers to anticipate potential shifts in AI and environmental rules."



Green IT moves from aspiration to action

With policymakers and communities scrutinizing the effects of data centers, organizations are turning inward to support sustainable AI. Green IT is an essential sustainability lever for companies, but AI's rapid expansion is challenging the delicate balance between technological ambition and environmental stewardship. This dynamic is boosting Green IT initiatives that were already underway as companies increasingly view sustainable digital infrastructure as foundational to responsible AI growth.

Key takeaways:

3 out of 4 respondents expect to increase Green IT investments in the next two to three years.

74% anticipate improved ROI from Green IT investments.

68% of organizations have a Green IT goal today—and as their AI scales, the adoption of a formal strategy nearly doubles.

47% of companies in the early stages of AI use have a formal Green IT strategy compared to—

93% of companies with more advanced AI operations.

Scaling AI operations forces action

Our survey shows that organizations are beginning to recognize that sustainable infrastructure is essential to scaling AI responsibly. More than three quarters plan to increase their Green IT investments in the next few years, by optimizing data center energy use, expanding cloud capabilities, and integrating renewable power. And they expect those investments to pay off: 74 percent anticipate stronger ROI from their Green IT strategies over time.

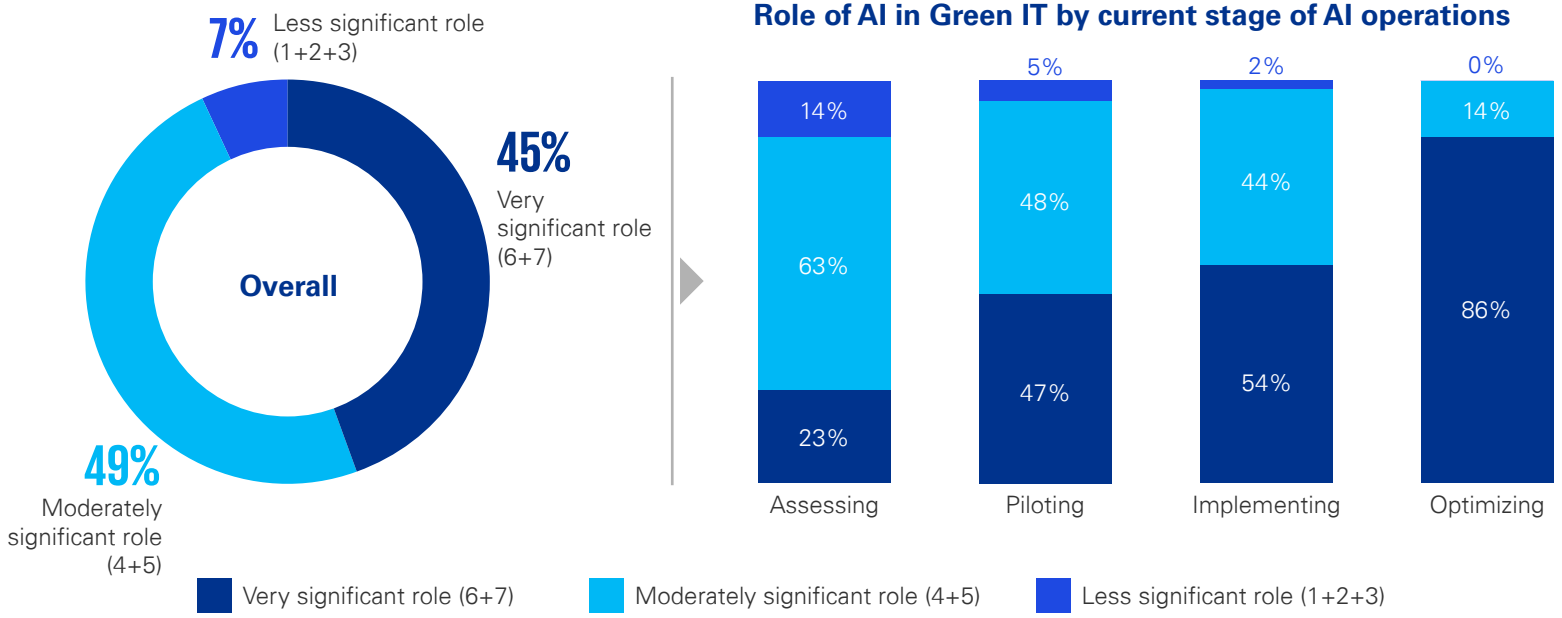
This momentum becomes even clearer as AI programs mature. While 68 percent of organizations today have some form of Green IT goal, the presence of a formal strategy nearly doubles as AI scales—from 47 percent among early adopters to 93 percent among those with more advanced AI operations. In other words, the more an organization relies on AI, the more essential sustainable infrastructure becomes.

Most companies are now taking steps to reduce AI's environmental footprint by assessing baseline impacts, piloting measurement tools, and prioritizing sustainable AI practices. Yet only 4 percent have reached true optimization, with AI-specific targets, strong partner ecosystems, sustainability-aligned service-level agreements (SLAs), and regular Scope 3 reporting. This small but advanced group offers a glimpse of what responsible AI growth looks like and underscores how far most organizations still need to go to turn early actions into integrated, enterprise-wide practice.

> Only 4 percent of companies feel they have fully optimized their efforts to improve their AI footprint, characterized by AI-specific targets, strong partner ecosystems, sustainability-aligned service level agreements, and regular Scope 3 reporting."

Figure 1. AI's impact on Green IT strategy and sustainability goals

To what extent does or will AI play a role in driving your Green IT strategy and sustainability goals?

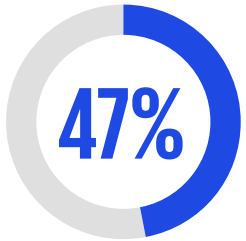


Notes: (a) Sum of percentages may not add up to 100 due to rounding off; (b) "Not sure/not applicable" options are not included in the graphical representation, due to low number of respondents. Source: AI in sustainability survey, September 2025

Achieving targets requires coordinated action

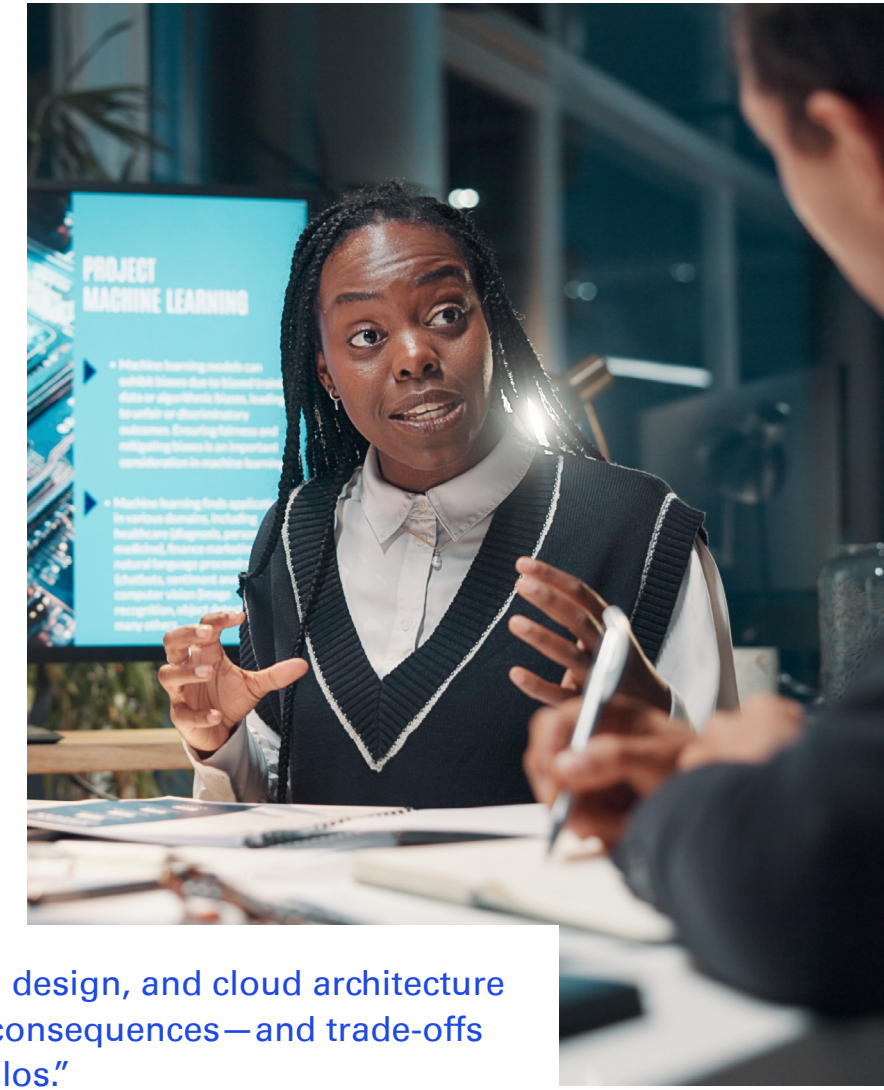
Our survey makes one thing clear: Meeting sustainability targets in an AI-driven world is a team sport. Although 57 percent of respondents say sustainability leaders own the integration of AI into their organization's sustainability programs, they cannot deliver those goals alone. Corporate development and strategy teams are nearly as involved, with 53 percent serving as co-owners, reflecting the strategic importance of aligning AI growth with environmental commitments. This shared responsibility underscores a critical truth: No single function controls all the levers required to make AI both effective and environmentally responsible.

Real progress depends on shared accountability, a common data foundation, and clear decision rights. Finance, procurement, and research and development (R&D) emerge as essential contributors because they sit at key decision points. Finance directs investment toward solutions that balance cost and carbon. Procurement chooses the cloud and AI partners whose infrastructure, disclosures, and sustainability practices shape much of a company's Scope 3 footprint. R&D designs lighter, more efficient models and develops innovations that reduce AI's environmental impact while using AI to advance sustainability across the business. These roles matter because decisions about infrastructure, model design, and cloud architecture carry both financial and environmental consequences—and trade-offs must be managed intentionally, not in silos.



of organizations report establishing AI sustainability governance or dedicated teams

Encouragingly, organizations are beginning to formalize the coordination required. Nearly half of respondents are establishing governance structures or dedicated AI sustainability teams—a top-three action for overcoming internal barriers. Some sectors are moving even faster. In the technology, media, and telecommunications and life sciences industries, for example, IT plays an outsized role, nearly matching sustainability leaders in driving progress. This reflects not only the technical and regulatory complexity of these industries but also the fact that IT—often the buyer of cloud services—directly shapes partner selection and, with it, the environmental impact of AI operations. In these sectors especially, tight coordination isn't optional; it's essential for operational resilience and sustainable AI growth.



> Decisions about AI infrastructure, model design, and cloud architecture carry both financial and environmental consequences—and trade-offs must be managed intentionally, not in silos."

Attention to sustainability boosts AI ROI

Organizations are realizing that they cannot achieve meaningful AI ROI without addressing the cost, energy, and resource demands behind AI workloads. Building on Green IT's focus on efficient infrastructure, companies now must embed sustainability across AI roadmaps, partner selection, and funding decisions. This creates long-term value by reducing waste, lowering operating expenses, and improving cost per workload, ultimately strengthening AI ROI.

Key takeaways:

Highly effective strategies to reduce AI's environmental impact include:

38% partnering with cloud providers.

36% optimizing data center design.

57% of companies say financial constraints limit their ability to embed sustainability into AI programs.

70% achieve 10 percent ROI or less on sustainable AI efforts.

Embedding sustainability into AI strategy is the ideal, but barriers loom

Hyperscalers, data centers, and utilities are already feeling the strain of rising AI-driven energy demand, and those pressures flow directly to the organizations scaling AI. It's no surprise that companies view partnering with cloud providers (38 percent) and optimizing data center design (36 percent) as two of the most effective ways to curb environmental impact and reduce cost exposure.

But ambition meets reality when budgets tighten: 57 percent of companies say financial constraints limit their ability to embed sustainability into AI programs. In response, many are shifting priorities (63 percent) and phasing investments (53 percent). Data and measurement challenges slow the integration of sustainability in AI. Forty five percent of companies struggle with data quality and 43 percent lack reliable ways to track AI's energy use, water footprint, and emissions. Without these insights, leaders can't make informed trade-offs or justify investment.

AI ROI today: What organizations report and how sustainability factors in

Companies expect the biggest gains to come from strengthening infrastructure, investing in sustainable technology R&D, and training teams. Yet ROI remains elusive: 27 percent say unclear returns are a major barrier. Most organizations report modest gains—70 percent achieving 10 percent ROI or less on sustainable AI efforts. Only 12 percent exceed that threshold, with TMT sector leaders (27 percent) showing what's possible when digital maturity and sustainability discipline align.

Still, most companies are not capturing the full picture. Beyond traditional financial ROI, sustainable AI also delivers value through reduced risk, avoided future costs, regulatory readiness, stronger talent attraction, and improved brand resilience. These benefits are real but often unmeasured, creating an incomplete view of AI's true return.

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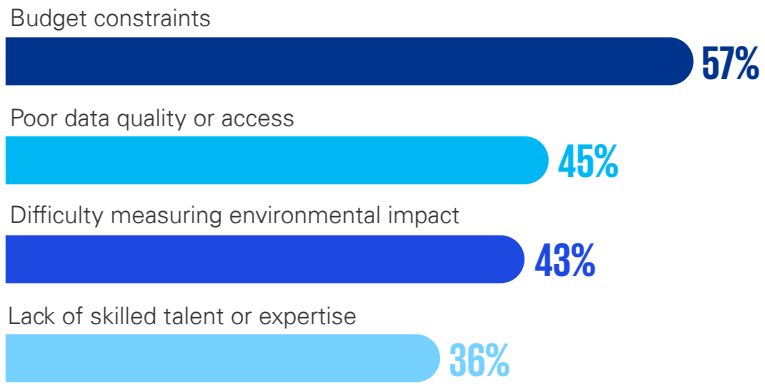
Build foundations now in the early stages

Hurdles such as unclear ownership, constrained budgets, measurement gaps, and modest returns reflect the early stages of the sustainability journey. Talent limitations compound the challenge: more than one-third report expertise gaps holding back progress.

To shift from incremental progress to transformative returns, companies need clearer metrics, aligned teams, and a shared view that sustainable AI is not a trade-off but is the path to efficiency, resilience, and long-term competitiveness.

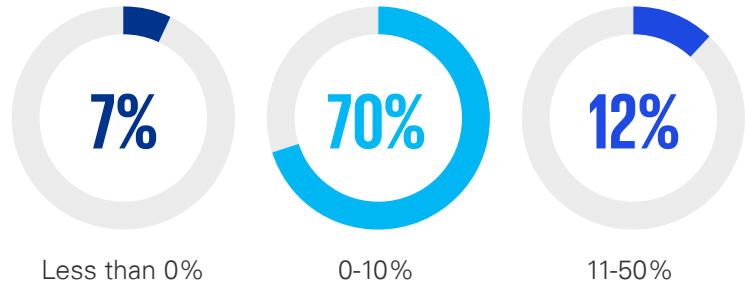
Figure 2. Barriers to integrating sustainability into AI strategy

Which of the following internal constraints are the most significant barriers to integrating sustainability goals into your organization's AI strategy?



Note: Only the top 4 responses are represented. Source: AI in sustainability survey, September 2025

What was the estimated ROI in the past 12 months from making AI operations more sustainable?



Notes: (a) Only the top 3 responses are represented; (b) "I don't know" and "Not sure/not applicable" options are not included in the graphical representation, due to low number of respondents. Source: AI in sustainability survey, September 2025

Achieving desired financial and sustainability goals requires using AI

As organizations balance financial performance with rising environmental expectations, AI is becoming essential to achieving both. Companies are no longer using AI only to unlock efficiency or generate insights. Instead, they are increasingly depending on it to meet sustainability commitments. From calculating carbon footprints to optimizing manufacturing operations and supply chains, AI is now central to how leading organizations manage performance. Yet a fundamental disconnect remains: While companies rely on AI to advance sustainability, they have not fully embedded sustainability into how they use AI.

Key takeaways:

How organizations are deploying AI:

26% to automate manual processes.

20% to generate insights.

17% to improve sustainability performance.

65% are still in the assessing or piloting stage for improving AI's environmental footprint.

KPIs used to assess AI impact:

74% measure improved resource utilization.

73% track operating costs reductions.

AI is both an accountability engine and an emerging risk

Seven in ten companies already use AI to measure, track, and report on sustainability performance and 62 percent use it to optimize resources and reduce waste. But fewer apply AI to build sustainable supply chains (37 percent) or to identify and mitigate environmental risks (27 percent)—clear indicators of untapped opportunity.

At the same time, as AI capabilities mature, its footprint becomes more visible and more costly. High energy consumption has become the top concern for 41 percent of companies, reflecting not only emissions but also the rising electricity and cloud costs embedded in AI workloads. Early-stage adopters feel this less—only 29 percent cite energy use as a concern—but the issue spikes to 71 percent among organizations with more advanced AI usage. The message to early adopters is straightforward: track cost and carbon together now, or risk being surprised as AI scales.

Still missing: measurable sustainability goals for AI itself

Despite relying on AI to measure sustainability, most organizations do not measure the sustainability of their AI. While improved resource utilization and lower operating costs are the most common key performance indicators (KPIs), only 18 percent of companies have AI-specific sustainability goals.

This mismatch exists because adoption is outpacing governance. Companies are racing to deploy new AI capabilities, often retrofitting sustainability expectations into systems that were not designed with efficiency in mind. Today, 38 percent of companies have sustainable AI goals, but they are not yet measurable; more than a quarter are still developing them, and 13 percent fold AI into broader IT sustainability initiatives. Rather than creating stand-alone AI targets, companies first need clear visibility into how AI changes their operational footprint in terms of energy, water, emissions, and cost. Then, they must ensure those impacts align with existing sustainability goals through integrated measurement and consistent management.

Maturity drives both urgency and action

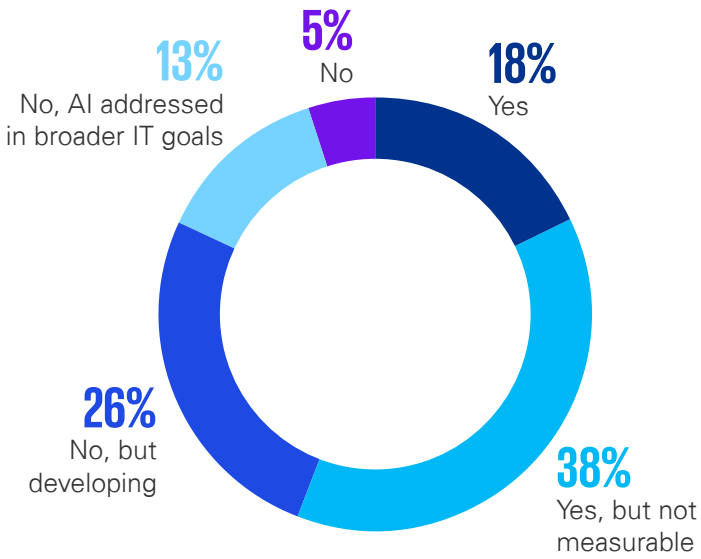
Our survey found that the most mature AI organizations are also the most likely to use AI to measure sustainability progress, automate reporting, and support sustainable operations at scale. Those still in assessment or pilot phases must prepare now for rapidly growing energy demands. Waiting until after costs and impacts rise locks companies into architectures that are expensive to run, inefficient to scale, and hard to decarbonize later.

Even companies with fixed cloud or provider agreements are not insulated. As AI intensity grows, so do overage fees, tiered usage charges, data-transfer costs, and the emissions embedded in cloud workloads. Organizations can act now by tracking usage and footprint, right-sizing models and workloads, and embedding sustainability criteria into procurement and SLAs.

The takeaway is clear: Achieving financial and sustainability impacts requires using AI the right way. Companies that integrate sustainability into AI strategy early will unlock efficiencies, reduce risk, and build more resilient operations. Those who delay will face higher costs, higher emissions, and harder choices later.

Figure 3. Percentage of companies with AI-focused sustainability goals

Does your organization have specific sustainability goals focused solely on the use and impact of AI technology?



Notes: (a) Sum of percentages may not add up to 100 due to rounding off; (b) the options for this question are abbreviated, please refer to the speaker notes for full descriptions; (c)"Other" and "Not sure" options are not included in the graphical representation, due to low number of respondents. Source: AI in sustainability survey, September 2025

> The organizations with the most mature AI capabilities are also the most likely to use AI to measure sustainability progress, automate reporting, and support sustainable operations at scale.

Key recommendations

Most organizations plan to expand AI and invest in Green IT, yet tight budgets, unclear ownership, and weak measurement hold many back. The companies that break through don't treat AI and sustainability as competing priorities. Instead, they manage cost and carbon together, designing AI with efficiency in mind, and measuring progress as rigorously as financial performance. KPMG believes companies can do this in four ways.

01 Architect for cost and sustainability from the start

The most effective AI programs are built, not retrofitted, for efficiency. Companies that rely on cloud and vendor services can design lighter models, right-size workloads, and make smarter architectural choices that reduce cost and carbon. Treat sustainability as part of the business case—not an afterthought.

What you can do:

- Run one unified business case that evaluates total cost of ownership and environmental impacts (energy, emissions, water, community factors).
- Make trade-offs explicit with internal carbon pricing and value-based funding.
- Use design gates that require each substantive AI project to document its footprint and mitigation plan before it's built.
- Prioritize the highest-value, lowest-impact use cases and retire models that no longer earn their keep.
- Plan for evolving rules and engage early with cloud providers on capacity, emissions, and region-specific constraints.
- Treat AI sustainability as a risk topic, with real owners and escalation paths.

The payoff: Lower operating cost, fewer surprises, smarter investment, and AI that scales responsibly.

02 Choose tech partners who accelerate your sustainability goals

Most companies don't run their own AI infrastructure, but they do control who does it for them. Provider choices have an outsized influence on emissions, energy use, water footprint, and resilience. The most effective companies use their buying power to select partners whose sustainability commitments match their own.

What you can do:

- Define what "sustainable AI" means for the organization and use it as a formal selection criterion.
- Prioritize partners with credible environmental goals, transparent reporting, and clean-power strategies.
- Choose cloud regions wisely, factoring in renewable energy coverage, water stress, and community impact.
- Embed sustainability into contracts, including incentives for improvements and regular performance scorecards.
- Co-innovate with partners, piloting cleaner compute options or shifting workloads to greener regions.
- Stay aligned on regulatory changes and coordinate communications with stakeholders.

The payoff: Cleaner AI, clearer reporting, fewer cost surprises, and stronger resilience.

03 Share responsibility for sustainable AI across the business

AI touches every function and no one team can optimize cost, performance, and footprint alone. Companies that progress quickly create shared ownership, clear decision rights, and incentives that drive collective action.

What you can do:

- Establish cross-functional governance that brings together sustainability, strategy, finance, procurement, IT, and business units.
- Require sustainability sign-off on AI investments and architecture decisions.
- Align incentives, tying funding and leadership bonuses to cost-plus-sustainability performance.
- Embed criteria into budgeting and portfolio processes, not just sustainability documentation.
- Set measurable, AI-specific targets for energy, emissions, water, and reporting quality.
- Upskill teams with simple tools to help them choose lower-impact approaches.
- Reinforce success culturally, highlighting wins and sharing guidance on responsible AI use.

The payoff: Faster decisions, more efficient AI, aligned teams, and fewer governance gaps.

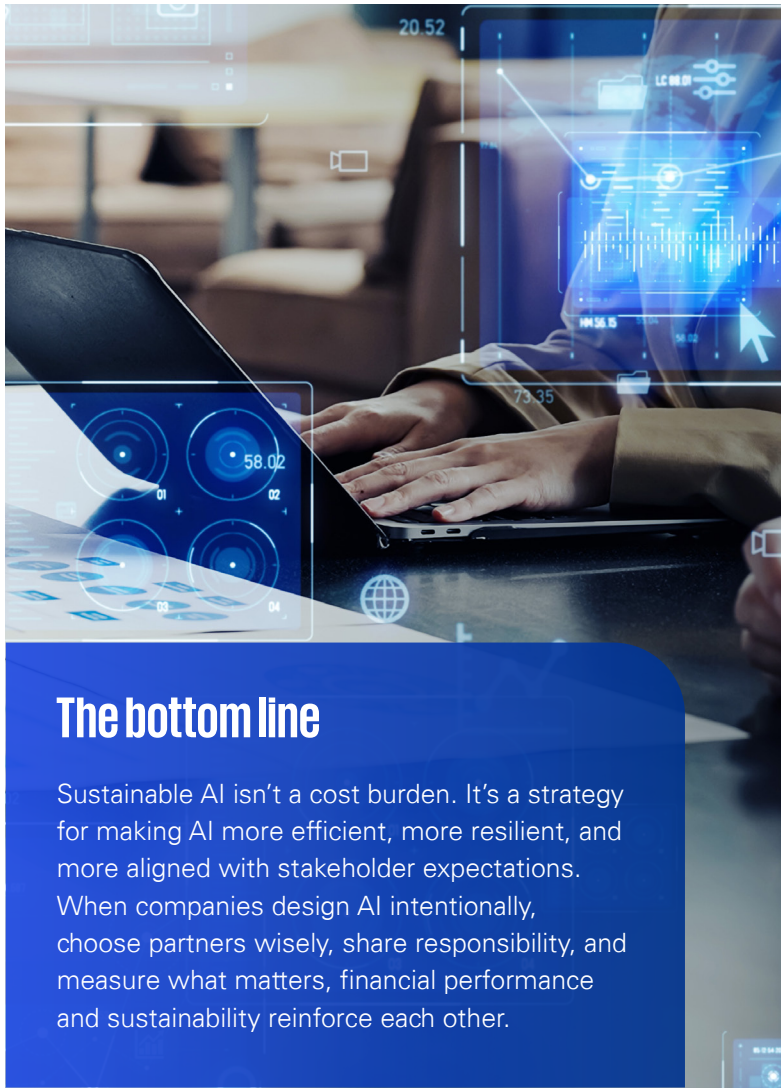
04 Prove ROI with measurable, AI-specific sustainability goals and reporting

Companies increasingly use AI to measure sustainability, but they rarely measure the sustainability of their AI. Without clear metrics, organizations can't track progress, justify investment, or compare options. The result is modest ROI and missed opportunities.

What you can do:

- Define what counts as AI (training, inference, embedded features) and what will be measured.
- Set boundaries for Scope 2 and Scope 3 emissions tied to AI workloads.
- Use consistent units of output (per interaction, report, decision) to compare cost and carbon across use cases.
- Adopt AI-specific KPIs, like emissions per workload, percentage matched with renewables, or cost per AI transaction.
- Build simple, decision-ready dashboards that translate technical metrics into business language.
- Integrate AI impact into sustainability disclosures and board reporting, supported by third-party assurance.
- Standardize partner reporting to ensure consistent, comparable data.

The payoff: Clarity, accountability, better investment decisions, and higher-value AI.



The bottom line

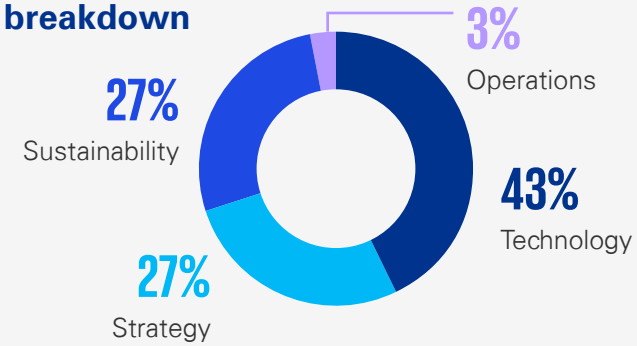
Sustainable AI isn't a cost burden. It's a strategy for making AI more efficient, more resilient, and more aligned with stakeholder expectations. When companies design AI intentionally, choose partners wisely, share responsibility, and measure what matters, financial performance and sustainability reinforce each other.

Survey methodology

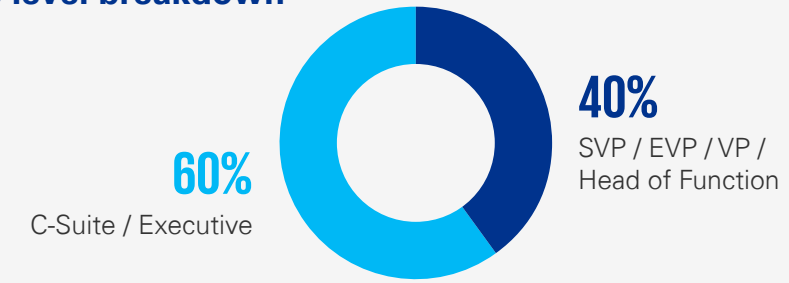
KPMG surveyed
350 executives
across
15+ countries
to understand how companies are balancing their AI and sustainability ambitions

N=350

Function breakdown



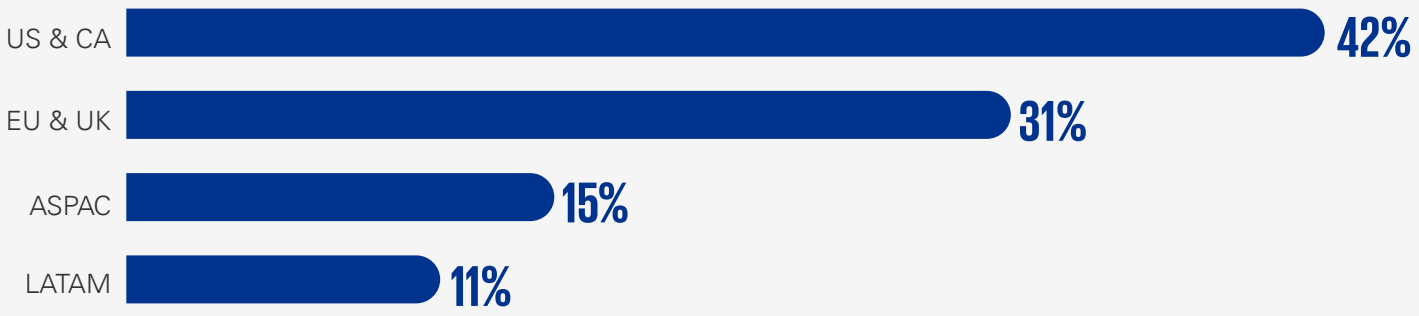
Role level breakdown



Sector breakdown

- 8% LS
- 11% HC
- 15% IM
- 15% ENRC
- 16% FS
- 16% TMT
- 19% CnR

Region breakdown



Note: Totals do not equal 100% due to rounding

How KPMG can help

As global organizations scale AI capabilities, they will face increasing pressure to manage cost, carbon, and stakeholder expectations around the impact of their AI use. We bring together our professionals across sustainability, technology, financial operations, procurement, risk, and change management to help organizations turn sustainable AI from aspiration into measurable, repeatable outcomes.

KPMG faces the same challenges and opportunities, and our work with clients is informed by our own sustainability efforts and practices.

Architecting for value and impact with trusted AI

KPMG helps you architect an AI strategy that drives financial performance and sustainability in unison, guided by our Trusted AI framework.

We help you accelerate value by:

- Embedding efficiency and responsibility from day one.
- Establishing a clear business case with robust guardrails.
- Integrating risk management—regulatory, operational, and third-party—throughout the entire AI lifecycle.
- Leveraging AI to drive your sustainability goals and innovate for the future.

Building shared accountability

KPMG helps you build shared accountability by designing an operating model that unites your organization around sustainable AI.

This includes:

- Breaking down silos by linking key business functions.
- Establishing consistent, enterprise-wide governance.
- Aligning incentives and funding to both financial and carbon outcomes.

Forging trusted, value-aligned partnerships

KPMG helps you select and manage value-aligned partners that are essential for a sustainable AI ecosystem.

We provide support by:

- Identifying vendors that mirror your sustainability commitments.
- Defining partner evaluation criteria for sourcing and selection.
- Integrating sustainability into third-party risk management and reporting.
- Establishing shared metrics to enable transparency and monitor progress towards joint sustainability goals.

Measuring what matters

KPMG helps you measure what matters by developing the metrics and reporting to track the true impact of your AI.

Our approach includes:

- Defining meaningful KPIs for both AI performance and sustainability.
- Implementing software to unify cost and carbon data in a single view.
- Building custom, AI-enabled analytics for advanced sustainability insights.
- Preparing your sustainability disclosures and laying the groundwork for assurance.

Authors

Maura Hodge

US Sustainability Leader, KPMG LLP
E: mhodge@kpmg.com

Maura is KPMG's US sustainability leader, focused on helping clients create long-term value while building a more sustainable, resilient future for all. She brings the best of the firm's integrated, cross-functional experience, industry-specific insights, and global reach with localized knowledge to offer thorough solutions that drive both environmental and economic value. Maura sits at the nexus of sustainability strategy and reporting and regularly speaks with the media and clients to educate and advise on practical next steps.

Tegan Keele

Climate Data & Technology Leader, KPMG LLP
E: tegankeele@kpmg.com

Tegan leads the sustainability data and technology offering within KPMG. In this role, Tegan focuses on helping clients implement and improve their sustainability strategy and reporting through engagements that cover the spectrum of sustainability data needs: data and calculation assessments, methodology definitions, technology implementations, and advanced climate analytics. She works closely with other KPMG teams to help clients across industries navigate their climate and sustainability journeys and meet their sustainability and decarbonization goals with confidence based on a foundation of reliable data and insights.

Marcus Leach

Advisory Managing Director, KPMG LLP
E: marcusleach@kpmg.com

Marcus is a managing director in KPMG US's Strategy practice and leads global sustainability for KPMG's Technology, Media, and Telecommunications (TMT) sector. He helps organizations embed sustainability into enterprise strategy, large-scale transformations, and M&A. Marcus brings more than 15 years of experience across strategy development and execution, transformation, and transactions. He mobilizes teams across strategy, transactions, infrastructure, and climate to turn ambition into scalable, value-driven outcomes.

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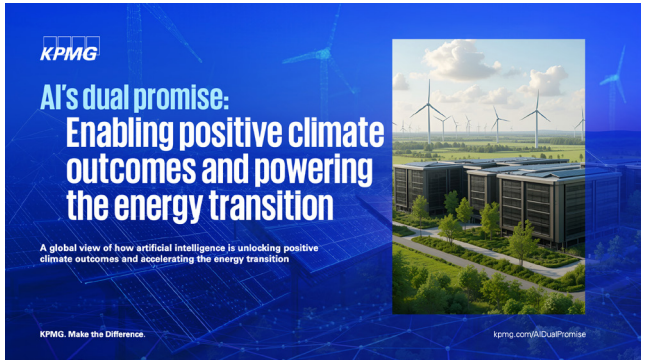

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