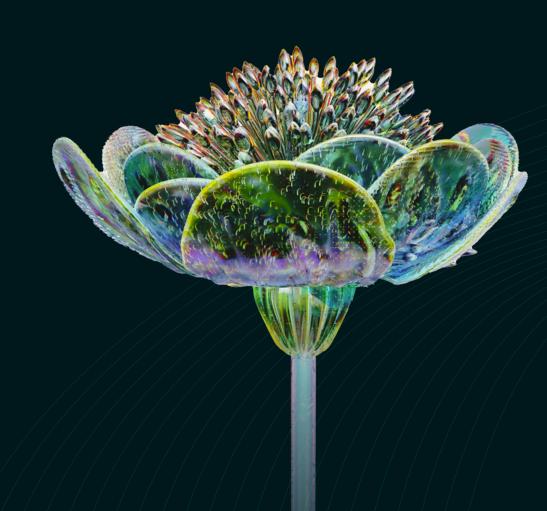


From Vision to Impact: The Global Sustainability Barometer

NOVEMBER 2023



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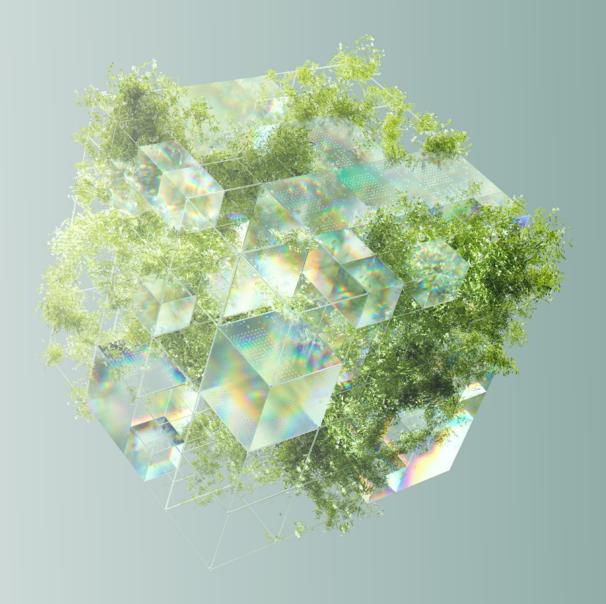


Introduction

Sustainability is a global priority. It's critical that we unite in our commitment to address climate change and secure a better future for generations to come.

The UN's synthesis report from the global stocktake underscores the need for significant efforts to reach the ambitious objectives of the Paris Agreement, which aims to limit global warming to 1.5°C compared to pre-industrial levels. Faced with record-breaking temperatures and unparalleled climate-related events, this is a moment that calls for collective action from governments, industries, enterprises, and individuals alike.

Ecosystm, in collaboration with Kyndryl and Microsoft, aims to drive positive change through the Global Sustainability Barometer Study. This initiative outlines the importance of alignment between sustainability commitments and actual actions in organizations worldwide. The study not only delves into the pressing priorities impacting current global business practices but also provides valuable insights to empower organizations on their sustainability journeys.





About the Study

The Global Sustainability Barometer Study, commissioned by Kyndryl and Microsoft, reflects the perspectives of 1,523 global sustainability leaders spanning 16 countries and 9 industry groups.

Conducted between September and October 2023, the study aims to bridge the Sustainability-Technology divide and provide insights into the role of Innovation, Data, and AI in achieving sustainability ambitions. To ensure comprehensive insights into challenges and opportunities, 50% of respondents are technology leaders, while the remaining 50% represent sustainability leaders from various lines of business.



Understanding Organizational Sustainability Initiatives

Sustainability has emerged as a key strategic imperative for organizations globally, driven by changes in legislation, political pledges, and heightened consumer and customer demands. Businesses now face the challenge of balancing their profitability goals with a commitment to operate without negative impacts on the environment, society, and communities. Today, neglecting sustainability poses financial and reputational risks – and organizations across the globe are aware of the urgency and the implications.

However, are organizations effectively translating their intentions and commitments into tangible actions and strategies to align their vision with their stated impact?

The Global Sustainability Barometer Study in collaboration with Kyndryl and Microsoft assesses organizations across the critical ingredients of success: STRATEGY, PEOPLE, and TECHNOLOGY.



TECHNOLOGY

85% of organizations place a high strategic importance on achieving sustainability goals



Yet only **16%**have integrated sustainability into
their strategies and data



Evolving Sustainability: From Compliance to Strategy

While 85% of global organizations recognize the strategic significance of establishing sustainability goals, only 16% have successfully integrated sustainability into their corporate and transformation strategies with tangible data. A majority (59%) have set goals to fulfill external reporting and compliance obligations, while 25% have not incorporated sustainability into their strategies using concrete data and measurable targets.

Sustainability Efforts Often Lack a Strategic Focus



5%

Sustainability part of corporate strategy, but goals and measures not quantified



20%

Sustainability part of transformation strategy, but goals and measures not quantified



59%

Sustainability goals and initiatives are built into the existing operational review and reporting processes



16%

Organization's sustainability strategy and goals are prioritized and built on real facts and data

 $\hbox{Q: Which of these statements is true of your organization's sustainability strategy?}\\$



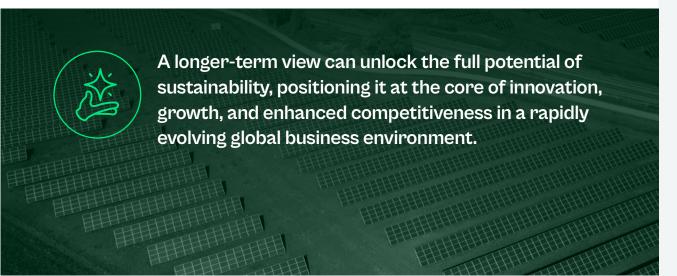
Organizational maturity lies in not just setting net-zero commitments, but in extending focus beyond mere compliance. It involves leveraging technology and data as a catalyst for sustainability progress.

Navigating Market Forces: Responding to the Right Drivers

As organizations navigate their sustainability journeys amid shifting market dynamics, achieving net-zero emissions is a key commitment.

However, strategic drivers often have short-term focus. Meeting eco-conscious consumer demands is crucial for competitiveness and is regarded as more important than meeting regulatory requirements. Simultaneously, organizations recognize the dual benefits of sustainable practices, reducing carbon footprints and yielding significant cost savings.

Organizations have yet to fully embrace a strategic approach to sustainability, that goes beyond compliance and involves leveraging sustainability initiatives to access additional funding and explore new market opportunities.



Drivers of Sustainability Journeys

46%

Alignment to organization's net-zero goals

42%

Customer demands for sustainable products

40%

Reducing energy consumption and expenses

36%

Employee recruitment/retention

35%

Demands from supply chain partners

30%

Requests from shareholders/investors

26%

Access to funding dedicated to sustainability projects

24%

Current or future regulations

22%

Exploring new markets/business opportunities

Q: What are the 3 main drivers for your organization's sustainability goals?

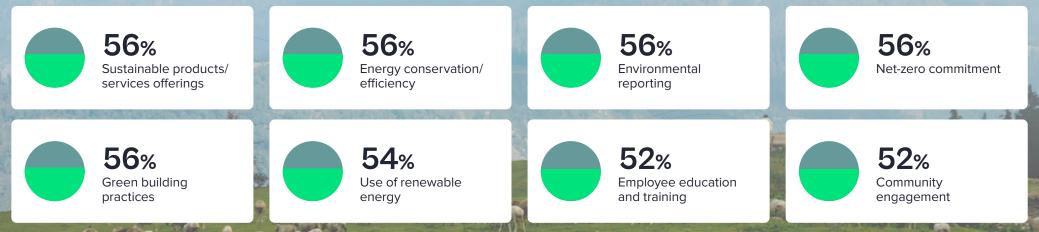
Strategic Implementation: Choosing the Right Initiatives



The initial and crucial step toward achieving sustainability goals is the identification of the right initiatives. This involves a comprehensive assessment that takes into account organizational objectives, customer demands, investor priorities, and the potential regulatory risks.

However, the prevailing challenge for most organizations lies in precisely identifying these initiatives, as they grapple with a scattered focus on a multitude of sustainability endeavors.

Lack of Clarity Results in the Prioritization of Too Many Initiatives

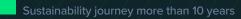


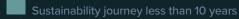
Q: Which of these environmental measures has your organization undertaken?

Sustainability Leaders Go Beyond Goal-setting and Education, Implementing Effective Solutions

Becoming a truly sustainable organization is a long journey that demands continual commitment to change and improvement. In this transformative journey, insights and wisdom from organizations that have made substantial strides holds immense value. These forward-thinking organizations stand as benchmarks, showcasing significant milestones, priorities, and successful initiatives that have stood the test of time. Drawing lessons from these sustainability leaders can expedite the journey for other organizations and guide them in making well-informed and strategic decisions that align with industry best practices.







Q: Which of these environmental measures has your organization undertaken?

Strategic Measurement: Key to Achieving Right Results

Establishing measurable metrics is a fundamental step in assessing the effectiveness of sustainability initiatives.



The real value lies in evaluating actions against clearly defined and attainable targets.

Despite measuring various parameters, organizations often struggle in two key areas. First, they fail to set clear and specific targets for their actions, making it challenging to assess sustainability impact. Second, they prioritize easily measurable metrics such as the financial implications of environmental fines or routine customer metrics, due to data limitations.

This may result in an incomplete evaluation of sustainability progress, often neglecting the broader and more profound environmental and societal impacts of their initiatives.

Not Enough Organizations Setting Comprehensive Targets for Sustainability Actions



48% Customer metrics



47%
Core environmental metrics



46% Environmental fines



44%Financial benefits to organization



44%
Improvements on sustainability targets



44%Compliance with regulations



40% Investor ratings



39%
Compliance with industry practices/best practices



39%
Employee training and education metrics



35% Sustainability innovations

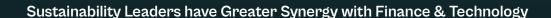
TECHNOLOGY

Strategic Alignment: Engaging the Right Stakeholders

Over 50% of organizations entrust the CEO and the Board with leadership in their sustainability journeys, with 65% placing the CEO at the helm of shaping the sustainability vision. This ensures that sustainability is not just a peripheral priority but receives attention at the highest level, promising impactful outcomes. Yet, organizations are not fully aligned with two crucial strategic stakeholders: Finance and Technology.



Establishing Finance as a strategic partner fosters a direct connection between sustainability and financial goals, elevating it to a strategic business priority. A robust alignment with Technology enhances the seamless delivery of sustainability initiatives. It empowers organizations to make better use of data to quantitatively measure the impact of their sustainability efforts and harness technology-driven innovations that can have a far-reaching influence in achieving sustainability goals.







Sustainability journey more than 10 years

Sustainability journey less than 10 years

TECHNOLOGY

Empowering Change: The Human Force in Sustainability

While regulators have historically taken the lead in advocating for sustainability, there is a noticeable shift towards consumer responsibility taking on a more prominent role.



Companies are increasingly aware of a growing sense of duty in individuals to contribute positively to building a sustainable future.

This shift is seeing organizations adapting their strategies. They are now prioritizing the delivery of products and services with a clear 'Sustainability stamp,' as a direct response to customer demands for eco-responsible offerings. Additionally, organizations are placing significant emphasis on raising employee awareness of sustainability issues within their workforce because they are part of their footprint. Investors are focused on risk management and ensuring the sustainability and resilience of their investments.

The Most Vocal Advocates of Sustainability











From Awareness to Impact: Measuring Employee Engagement

Organizations acknowledge that employee awareness is highly impactful for sustainability journeys. But only 21% of organizations indicate that their programs for employees have established sustainability-related KPIs, that go beyond awareness to actual impact measurement. This hampers the ability to link awareness and engagement endeavors to overall progress and success.

Going beyond mere communication and awareness-raising efforts to implement concrete mechanisms for measuring and assessing the engagement and impact of employees, enhances the effectiveness of sustainability initiatives.

Organizations Have the Opportunity to Link Employee Contributions Directly to Sustainability Goals



3%

Limited awareness of organization's sustainability goals and objectives



15%

Awareness of organization's sustainability goals, success and failures



61%

Awareness of organization's sustainability goals and some understanding of employee responsibilities



21%

Awareness of organization's sustainability goals with KPIs set relevant to employee roles





Measurable actions not only empower employees to actively contribute to sustainability objectives but also allow organizations to quantify the positive impact driven by their workforce.

In Summary: Take a New Look at Your Sustainability Strategy



Recognize the Strategic Importance of Sustainability Goals

Recognize sustainability's vital role in long-term success. Embrace clear sustainability goals in your corporate and transformation strategies.



Ensure Leadership Commitment

Elevate sustainability to top priority by involving the CEO and Board in sustainability leadership roles, setting the tone for the entire organization.



Align with Finance

Make sustainability a core strategic business priority, fostering a synergy between economic and environmental benefits.



Select the Right Initiatives

Start your sustainability journey by identifying initiatives that align with your goals, customer demands, and investor priorities. Avoid superficial actions that don't align with your core purpose.



Define Clear Goals and Track Progress

Set specific targets and use real data to monitor your sustainability efforts, promoting transparency and accountability.



Prioritize Growth in Sustainability

Elevate sustainability from compliance to a strategic driver of growth. Focus on initiatives beyond the minimum standards, exploring new market opportunities through sustainable practices.



Empower Your Team

Encourage your employees to take on sustainability responsibilities with meaningful, goal-oriented tasks sustainability goals more efficient; that align with the organization's progress and foster a collective effort toward sustainability.



Use Tech for Sustainability

Partner with tech to use data and innovations, making your evaluate advanced analytics, digital platforms, and automation to optimize sustainable practices.





Digital Pathways to a Sustainable World: Leveraging Technology

While nearly 80% of organizations acknowledge technology's crucial role in achieving sustainability goals, only 37% feel they effectively harness its full potential. Organizations need to urgently look for ways to bridge the divide and align technology with sustainability ambitions. This will ensure fact-based target setting and data-backed evaluation of progress against set goals.

An increasing number of organizations recognize the need for external assistance in shaping their sustainability roadmap, with 85% using consulting firms or systems integration services to define and initiate their journeys and incorporate the right technologies to support their objectives.



80% of organizations appreciate the importance of technology in achieving sustainability goals



Yet only **37%*** feel that their sustainability efforts are fully leveraging technology

Reducing IT Carbon Emission: From Modernization to Real-time Insights

Technology teams are under a mandate to reduce carbon emissions, aligning initial steps with overarching technology modernization strategies. Organizations are reevaluating infrastructure, be it server refreshes, assessing subscription-based on-premises solutions, or increasing investments in cloud and server virtualization. These endeavors support digital and data ambitions, creating opportunities to integrate sustainability into modernization goals. Simultaneously, tech teams are enhancing the integration between operational and information technologies to meet organizations' evolving data needs.



There is an opportunity for Green IT initiatives to extend beyond reducing carbon emissions from IT infrastructure. This broader scope includes minimizing emissions from various IT operations including procurement, management, and disposal.

Green IT Measures linked to Tech Modernization



TECHNOLOGY

55%

Refreshes server/hardware to newer and more efficient devices



50%

Integrates OT and IT for seamless data capture



48%

Makes on-prem infrastructure on-demand/ pay-as-you-go



47%

Increases cloud investments



47%

Reduces energy consumption of technology



46%

Increases server virtualization ratios



Ensures that data centers/ servers report carbon emissions



Invests in sensors/devices and IoT



Tracks IT operations emissions

Q: What actions does your IT/ technology team take to reduce their carbon footprint?

Maximizing the Role of Tech: From Automation to Innovation

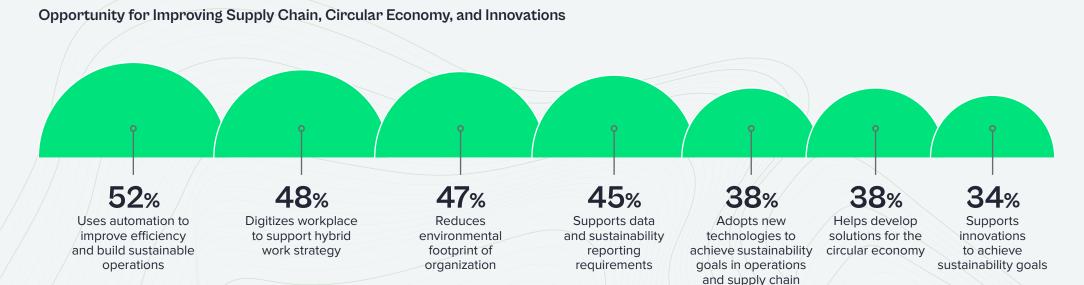
Technology primarily serves to automate processes, enhancing the efficiency of sustainability projects. Automation is critical to streamlining operations, minimizing human error, and accelerating progress toward sustainability objectives. However, many organizations have not fully explored the role of technology in managing data and reporting within their sustainability initiatives.

Innovations range from pioneering product designs and services that focus on strategies for waste reduction, enhanced energy efficiency, and sustainable supply chain management. By harnessing technology for innovation, organizations can position themselves as leaders driving meaningful change and contributing to a greener, more sustainable future.



TECHNOLOGY

The true value of a tech-driven sustainability program emerges when organizations harness technological advancements to foster innovations.



Reinventing Sustainability: Predictive Al and Resilience

Despite the use of automation for greater energy efficiency, organizations are underutilizing their access to external datasets.



Organizations are limiting themselves to descriptive analytics and interpretive Al – but the true potential lies in embracing predictive analytics to drive sustainable practices.

Embracing predictive AI can help organizations to anticipate and mitigate risks associated with Scope 3 emissions; accurately forecast future energy consumption based on current data; and even predict and prepare for natural disasters more effectively.

Incorporating predictive analytics into sustainability strategies empowers organizations to make data-driven decisions, reduce risks, enhance resiliency, and improve their overall sustainability efforts.

Use of Data and AI in Sustainability



61%

Monitor energy usage and emissions



51%

Identify high energy



51%

Highlight opportunities for lowering carbon footprint



41%

Flag suppliers with high carbon emissions



35%

Identify scope 3 risks using public sources



34%

Predict future energy consumption based on current data



30%

Support circular economy through manufacturing defects reduction and reuse



29%

Predict and prepare for natural disasters

Q: How does your organization use data and AI to reduce, manage and report on global environmental footprint?

TECHNOLOGY

Sustainability Data Support: Simplifying a Complex Data Terrain

Managing and collecting data for sustainability projects presents a multifaceted set of challenges. In addition to the traditional obstacles of integrating AI with legacy systems and dealing with data silos, organizations encounter new hurdles, such as data identification and the increasing demand for external data from public sources and supply chain partners. As sustainability adoption evolves, organizations grapple with additional complexities, including the need for third-party validation to ensure compliance and the necessity for advanced data estimation techniques to fill data gaps.



A mere 15% of organizations have the capability to provide their employees with real-time dashboards, empowering them with immediate access to validated and vital information regarding sustainability goals and status.

Streamlined data management is crucial for informed decision-making and successful sustainability endeavors.

Challenges in Managing Sustainability Data



50%
Integration of AI solutions with existing systems



49%
Collecting data from multiple internal systems



44%
Identifying the right data for reporting requirements



43%
Satisfying multiple risk/regulatory/ compliance requirements



35%
Collecting data from external sources



34%
Satisfying
investor/rating
agency/customer
requirements



26%
Data estimation where there is no existing data



3rd party validation of data

In Summary: Make Technology a Sustainability Catalyst

STEP 1

Embrace Hybrid Work for Environmental Impact Mitigation

Reduce your technology team's environmental impact. Implement strategies that improve efficiency and sustainability by reducing commuting and office resource consumption.

STEP 2

Align Sustainability with **Technology Modernization**

Ensure that technological upgrades align with environmental efficiency, including the adoption of energy-efficient hardware and sustainable data centers.

STEP 3

Harness Cloud Providers

Use cloud infrastructure and services to optimize resource usage, lower energy consumption, and improve sustainability.

STEP 4

TECHNOLOGY

Make Data Integral to **Sustainability Efforts**

Use advanced analytics and reporting tools to gain in-depth insights into your sustainability performance, facilitating datadriven decision-making.

STEP 5

Leverage Expertise for **Sustainability Roadmap**

Collaborate with consulting firms and systems integrators for expertise on establishing strategies, setting clear objectives, and implementing sustainable practices.

STEP 6

Unleash Al for Predictive Sustainability

Expand use of Al beyond reporting and embrace predictive analytics to assess Scope 3 risks; forecast future energy consumption based on current data; and develop strategies to anticipate natural disasters, enhancing your resilience.

STEP 7

Enhance Data Visibility and Integration

Establish robust systems for accurate data acquisition and analysis; prioritize data visibility and integration across various sources; invest in data management technologies for seamless data flow; and address data estimation and validation as sustainability initiatives evolve.

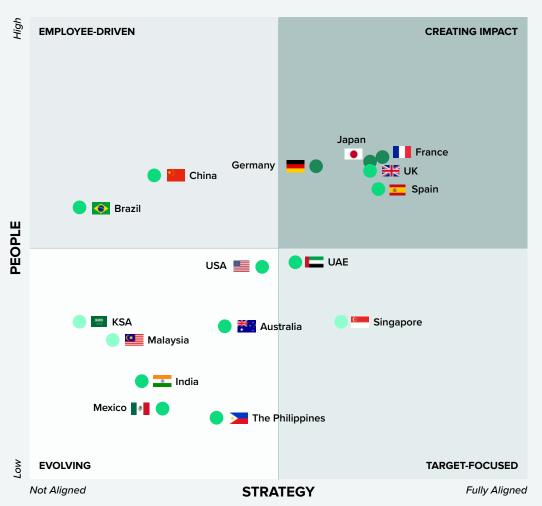
SPOTLIGHT:

Global Perspectives

What are the key differences and similarities in the sustainability journeys and challenges among organizations worldwide?



Global Sustainability Landscape



The Parameters

STRATEGY

Alignment of sustainability strategy with overall business strategy (x-axis)

TECHNOLOGY

PEOPLE

Employee empowerment to take the right sustainable actions (y-axis)

TECHNOLOGY

Leverage of technology to achieve sustainability goals (color of bubble)

lowest highest

CREATING IMPACT. Align sustainability with broader business strategies and empower employees with the necessary capabilities.

TARGET-FOCUSED. Align sustainability with organizational priorities but often fall short in fully engaging employees.

EMPLOYEE-DRIVEN. Employees are empowered to take sustainability actions without clear alignment with the business strategy.

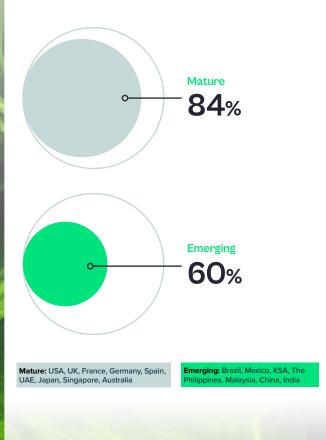
EVOLVING. In the early stages of sustainability journeys, driven primarily by recent regulatory changes or demands from global customers.

TECHNOLOGY

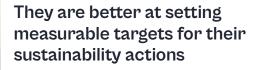
As discussions on Loss and Damage intensify, highlighting economic and non-economic impacts, analyzing the differences in the sustainability journeys of organizations in mature and emerging countries shows that those in mature countries are taking the lead. **However, there is significant room for improvement and progress.**

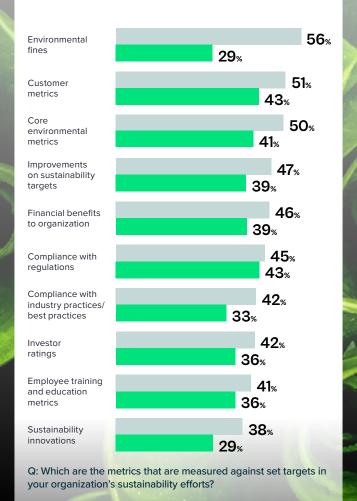
Organizations in mature countries more focused on sustainability strategies

Organizations that have integrated/are integrating sustainability into their strategy and data



Q: Which of these statements is true of your organization's sustainability strategy?





They are using predictive Al more to drive sustainability practices Predict future energy consumption 42% 22% based on current Identify scope 3 39% 28% risks using public 32% Predict and 25% prepare for natural disasters

Q: How does your organization use data and AI to reduce, manage and report on global environmental footprint?

Challenges in Achieving Sustainability Goals are Universal

The primary challenges encountered by organizations worldwide remain consistent, centering on prioritization, which involves selecting suitable frameworks, allocating resources, and acquiring data to achieve sustainability objectives. These challenges are heightened by the lack of uniform governance, regulations, and standards.

Another persistent hurdle is the shortage of essential skills needed to address sustainability goals. Organizations struggle with skills such as a deep understanding of the scientific aspects of these goals, the ability to translate sustainability objectives into business advantages, and technological expertise to facilitate streamlined sustainability initiatives.



Organizations Globally Seek More Government Support to Tackle Sustainability Challenges

Organizations are seeking greater and more explicit government mandates. Many find it challenging to initiate or advance their sustainability journeys due to a lack of clear guidance and the associated regulatory uncertainties.

Governments should prioritize comprehensive environmental policies, incentivize sustainable practices in businesses, promote public awareness, and collaborate internationally to effectively lead sustainability initiatives.

What Organizations Want from Government

62%

Mandate change and reporting

58%

Provide detailed action plans with clear accountability

48%

Improve incentives for organizations

43%

Promote an ecosystem that supports sustainable practices

40%

Endorse industry standards and benchmarks

38%

Increase funding for sustainability innovation

30%

Innovate on design and delivery of green initiatives

29%

Increase training and upskilling opportunities for current and new employees

Q: How, according to you, can the government improve the adoption of sustainability measures in organizations?

Conclusion

Organizations are actively responding to the rising expectations for sustainability actions from customers, investors, and employees. This has seen sustainability emerge as a strategic imperative that has the attention of the C-suite. However, we find that many organizations are lagging in achieving their sustainability goals.

Key barriers include the inability to fully leverage technology and a lack of alignment with Finance to implement streamlined solutions that make business sense. There is still much work needed on the basics, such as accessing accurate data, integrating data, aligning with various reporting demands, and reducing existing carbon-intensive infrastructures. Accelerating sustainability journeys will require organizations to get the fundamentals right and leverage predictive technologies that can chart their future paths.

Another aspect that organizations often overlook is employee engagement with individual sustainability KPIs aligned with overall organizational goals. Ultimately, it is the people who execute sustainability programs. Achieving sustainability goals requires strong leadership from the top and engaged, committed employees throughout the organization, right down to the bottom.

As the urgency for collective action grows, it is essential to recognize that we have the right intentions and capabilities. The key lies in setting the right priorities and an active collaboration between governments and the private sector. Organizations need clear mandates and resources to accelerate their journeys to a greener future. The good news is that, globally and across industries, this commitment to sustainability is now important, a stark contrast from a decade ago when it was not even listed as a priority.



About Ecosystm

Ecosystm is a Digital Research and Advisory Company with its global headquarters in Singapore. We bring together tech buyers, tech vendors and analysts onto one integrated platform to enable the best decision-making in the evolving digital economy. Ecosystm has moved away from the highly inefficient business models of traditional research firms and instead focuses on research democratisation, with an emphasis on accessibility, transparency, and autonomy. Ecosystm's broad portfolio of advisory services is provided by a team of Analysts from a variety of backgrounds that include career analysts, CIOs and business leaders, and domain experts with decades of experience in their field. Visit ecosystm.io

About Kyndryl

Kyndryl (NYSE: KD) is the world's largest IT infrastructure services provider serving thousands of enterprise customers in more than 60 countries. The company designs, builds, manages and modernizes the complex, mission-critical information systems that the world depends on every day. For more information, visit www.kyndryl.com

About Microsoft

<u>Microsoft</u> (Nasdaq "MSFT" @microsoft) enables digital transformation for the era of an intelligent cloud and an intelligent edge. Its mission is to empower every person and every organization on the planet to achieve more.

This eBook is sponsored by Kyndryl and Microsoft. The insights presented are based on data from the Global Sustainability Barometer Study. It also represents the Ecosystm analysts' subject matter expertise in the area of coverage in addition to specific research based on interactions with technology buyers from multiple industries and technology vendors, industry events, and secondary research.