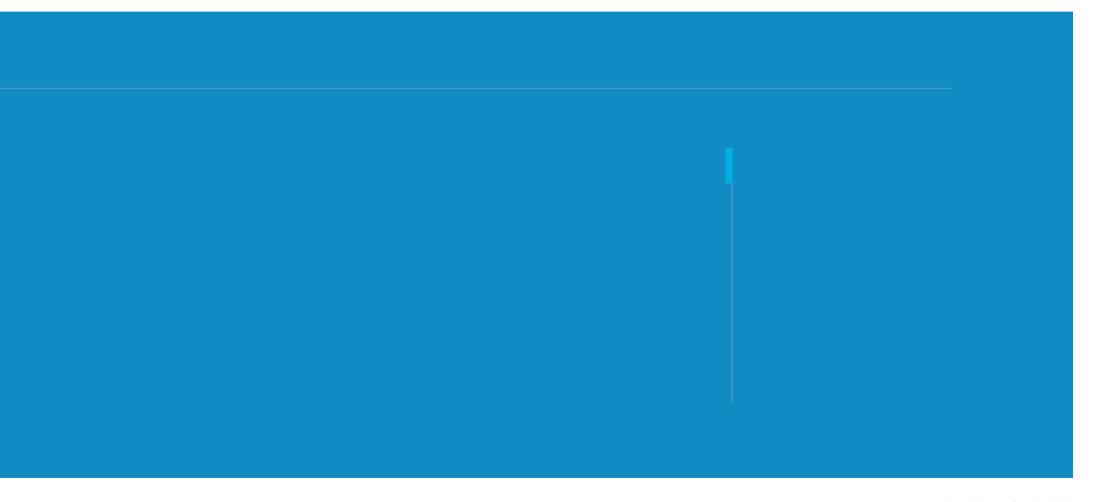




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A world in balance 2025: Unlocking resilience and long-term value through environmental action



### Who should read this report and why?

The fourth edition in our annual series, this report examines the trends shaping sustainability strategies and roadmaps. It offers a comprehensive view of organizational progress toward sustainability goals; where and why momentum is slowing; and what action organizations are taking. The report will be especially valuable for chief sustainability officers (CSOs) but given the cross-functional nature of sustainability – and this edition's focus on business value and future-proofing – it will also be relevant to the broader C-suite and leaders across functions such as strategy, R&D, supply chain, and technology.

This year's edition ranges across themes from investment priorities, business value creation, and climate adaptation, to the impact of AI in sustainability and barriers to implementation. It also offers recommendations to help organizations sustain progress and adapt to an evolving business and regulatory environment.

This report is based on original findings from a comprehensive industry survey of 2,146 senior executives (director level and above) from 716 leading organizations across 13 countries with annual revenue above \$1 billion. Half of the executives

surveyed work within corporate functions, and half come from value chain functions. We also interviewed senior sustainability executives at leading organizations and conducted a global survey of 6,566 consumers.

Please see the research methodology at the end of the report for more details. Thank you to the industry executives who contributed their perspectives to this study



**Dr. Eva Riesenhuber**Global Head of Sustainability,
Siemens



Anke Ehlers
Managing Director –
International Sustainability,
ALDI South



Paul Polman
Former CEO at Unilever and
co-author of the book "Net Positive:
How courageous companies thrive
by giving more than they take"



Rodolfo Brajcich Global Director of Nutrition and Sustainability, Sigma



Lucía Ávila Martín del Campo Sustainability Global Process Owner, Sigma



Edmundo Fuentes Executive Vice President – Business Transformation, Sigma



Christine Maria Betz Chief Sustainability Officer, BSH Home Appliances Group



Simone Targetti Ferri Chief Sustainability Officer, Italy, L'Oréal



Tomás Zaborowski Head of Sustainability Excellence, Bayer Crop Science



**Gabrielle Ginér** Head of Environmental Sustainability, BT Group



Erik Wottrich Head of Sustainability, Tele2, a Sweden-based telecom operator



Filip Rosengren
Director – Sustainability,
SKF Group



Organizations around the world are at a pivotal point in their sustainability journey. While commitment to sustainability remains strong, rising consumer expectations, climate risks, and geopolitical, economic, and operational pressures are challenging the pace and depth of progress. This fourth edition of our annual *A world in balance* research explores how organizations are navigating these complexities.

### Sustainability investment is set to increase, but credibility of actions is under pressure

Despite global uncertainty, organizations continue to prioritize sustainability, driven by the growing recognition of its importance to long-term business success. Most (82%) plan to increase environmental sustainability

investments over the next 12–18 months (up from 74% in 2024), and 92% have not revised their net zero timelines. However, the spotlight is now on action, not ambition. About two in three (67%) executives say they are under increasing pressure to demonstrate credible, science-based progress toward net zero. Yet only 21% of organizations have developed detailed transition plans with

**82**%

of organizations plan to increase environmental sustainability investments over the next 12–18 months interim targets and capital allocation. At the same time, 62% of consumers believe organizations are engaging in greenwashing, up from 33% in 2023 and 52% in 2024. This widening credibility gap highlights the need for transparent, evidence-backed sustainability communication.

### Sustainability is seen as a business value driver and core future-proofing strategy

Organizations increasingly recognize that sustainability is not just a compliance exercise – it's a source of business value. Over two-thirds (67%) of executives cite business value creation as a key reason for sustainability investments. Almost half (49%) of organizations have already realized a positive return on investment (ROI) on their sustainability investments – half of them

within a shorter timeframe than for traditional investments. Sustainability is also viewed as a long-term strategic lever: 75% of executives say it is core to their future-proofing efforts. This is driven by needs such as staying ahead of regulation (72%), building stakeholder trust (69%), and driving innovation (67%) in a competitive global landscape.

**67**%

of executives say they are under increasing pressure to demonstrate credible, sciencebased progress toward net zero

#### Climate adaptation is on the radar, but execution is lagging

As climate impacts grow more severe and frequent, organizations are feeling the strain. A vast majority report disruptions: 86% to supply chains, 78% to production, and 73% due to raw material shortages. While 56% of executives say their organization prioritizes climate adaptation, actions often stop at planning. Many executives rate their organizations as "well-prepared," yet only 38% have upgraded infrastructure. 31% shifted suppliers or production to less climatevulnerable regions, and 26% redesigned products. This signals a disconnect between perceived readiness and actual resilience, as organizations conflate strategic planning with true climate preparedness.

**75**%

of executives say sustainability is a core future-proofing strategy for their organization



**56**%

of executives say their organization prioritizes climate adaptation

#### Al is powering sustainability efforts; but its environmental impact is a critical consideration

Most (64%) executives report that their organization uses AI to achieve its sustainability agenda. While 57% acknowledge that Gen AI's environmental impact is being discussed in boardrooms, only 32% report having taken steps to mitigate it. That said, most (57%) still

believe the benefits of Gen AI outweigh its environmental costs, however this has declined from 67% in 2024, indicating growing caution around its environmental footprint.

### Structural, geopolitical, and organizational barriers are slowing progress

Despite strong intent, sustainability momentum has stalled. Following steady gains from 2022 to 2024, maturity levels have dipped in 2025. The share of sustainability "front-runners" has fallen from 7% to just 1%. According to 65% of executives, geopolitical tensions are slowing down initiatives. Internally, progress is hindered by budget constraints (cited by 81%), inadequate data and measurement systems (also 81%), and operational silos (79%). On the consumer front, affordability, availability, and information gaps

continue to limit adoption of sustainable adoption of sustainable products. Only 24% of consumers consider them affordable, and just 16% feel they have access to sufficient sustainability information.

The disconnect between organizations' stated intent to invest in sustainability and the reality of stalled execution reveals a critical paradox. Sustainability is widely recognized as a strategic priority, yet short-term actions sometimes fail to align.

The report concludes with targeted recommendations to help organizations navigate mounting pressures and sustain steady, long-term progress toward their sustainability goals. Key actions include:

- Strengthening the credibility of climate actions through demonstrable, near-term measures
- Building consumer trust through intuitive consumer messaging
- Advancing from climate adaptation strategy to operational preparedness

- Ramping up circularity to reduce resource dependency
- Investing in next-generation infrastructure to enhance resilience
- Transforming and evolving functions to build future-readiness
- Enabling sustainability progress through robust data systems and responsible AI.



of executives report that their organization uses AI to achieve its sustainability agenda



"Organizations today are navigating a complex landscape defined by both uncertainty and opportunity. Geopolitical pressures, climate risks, and shifting regulatory landscapes undoubtedly add complexity, but they also strengthen the case for rethinking growth and resilience and for future-proofing competitiveness."

#### Cyril Garcia

Group Executive Board Member, Head of Global Sustainability Services and Corporate Responsibility, Capgemini



Political pressures, regulatory delays, and investor caution are contributing to a more complex environment for sustainability-related initiatives. For example:

- Amid rising political and legal scrutiny of ESG initiatives, particularly in the US, several major banks across the US, Europe, and Asia have exited the Net-Zero Banking Alliance (NZBA), signaling a setback for voluntary climate finance coalitions.<sup>1</sup>
- Climate tech venture and growth investment declined by 19% year on year in H1 2025. Investors cite policy uncertainty, especially around US climate incentives and tariffs, as the primary concern.<sup>2</sup>
- Regulatory momentum has slowed in key markets such as the US and EU. In March 2025, the US Securities and Exchange Commission (SEC) voted to stop defending its climate disclosure rule in court after multiple lawsuits, effectively stalling implementation of the rule and leaving its future uncertain.<sup>3</sup> The European Commission has delayed the rollout of key climate disclosure and due diligence rules (CSRD<sup>4</sup> and CSDDD<sup>5</sup>), citing efforts to simplify compliance.<sup>6</sup>

Yes, despite these challenges, our research shows that organizations continue to demonstrate a strong commitment to sustainability. This commitment is increasingly motivated not only by regulatory requirements, but also by the tangible business value sustainability delivers. As explored later in the

report, business value ranks as the second most important driver of sustainability investments – just behind compliance. While regulation has been instrumental in shaping sustainability agendas, our findings indicate that even when regulatory momentum slows, investment plans continue. This reflects a broader shift toward viewing sustainability as a core business strategy that enhances resilience, drives efficiency, and strengthens competitiveness.

### Sustainability investments are set to increase

Most (82%) organizations plan to increase investment in environmental sustainability over the next 12–18 months (up from 74% in 2024). A further 14% expect to maintain current investment levels, and only 4% expect to cut back (see Figure 1). Additionally, 66% of organizations treat sustainability as a key criterion in their business investment decisions. Moreover, 59% of executives see a clear business case for sustainability (up from 55% in 2024) and only 22% agree that the cost of sustainability initiatives outweighs the benefits (compared to 23% in 2024). For example:

 Schneider Electric pledged more than \$700 million by 2027 to strengthen supply chain sustainability in the US. It intends to enhance energy infrastructure; expand its domestic manufacturing base; and improve grid reliability.<sup>7</sup>

- In 2025–29, Spanish bank BBVA plans to channel €700 billion to sustainable business, more than double the 2018–25 target.<sup>8</sup>
- Global retailer **IKEA** will reportedly invest €1 billion in recycling organizations.<sup>9</sup>
- In March 2025, US-based materials science organization
   Dow announced an investment in Xycle, a Rotterdam-based chemical recycling startup, to support the construction of its first commercial-scale plant and expand access to circular plastic feedstocks.<sup>10</sup>
- In May 2025, **Microsoft** signed an offtake agreement with Sublime Systems, a low-carbon-cement technology startup, to purchase up to 622,500 tons of low-carbon cement for its data centers and support scaling.<sup>11</sup>

Rodolfo Brajcich, Global Director of Nutrition and Sustainability at Sigma, a Mexican multinational food company, highlights how sustainability is core to the company's strategy: "As we shape our mid- to long-term vision, sustainability is deeply embedded in everything we aim to accomplish. Our core investment areas include monitoring and investing in refrigeration equipment to prevent fugitive emissions; shifting to greener energy sources through on-site electricity generation and clean electricity procurement; reducing water consumption; improving waste management and adopting circular solutions; and transforming packaging by reducing virgin plastic and enhancing recyclability. These

are not isolated projects, but part of our core strategy to advance sustainability and business performance."

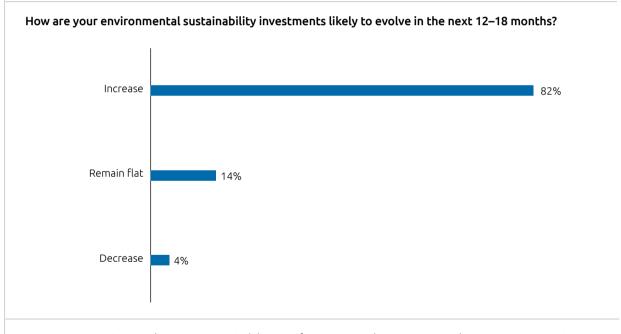
Anish Saigal, Director – Sustainability and Transition Finance at Barclays, asserts: "ESG commitments haven't simply disappeared amid geopolitical tensions. The banking sector continues to move forward, making major financial commitments. This reflects how sustainability is now embedded into how industries and investors operate; commercially, it's tied to business opportunity, competitiveness, and future growth."

Our conversations with industry executives suggest that while sustainability investment is increasing, some organizations are stepping up investment in priority areas while keeping others steady, or in some cases, redirecting them. These decisions reflect a deliberate effort to align sustainability investment with areas most critical to business impact.



of organizations treat sustainability as a key criterion in their business investment decisions

**Figure 1.**More than 80% of organizations plan to increase investment in environmental sustainability

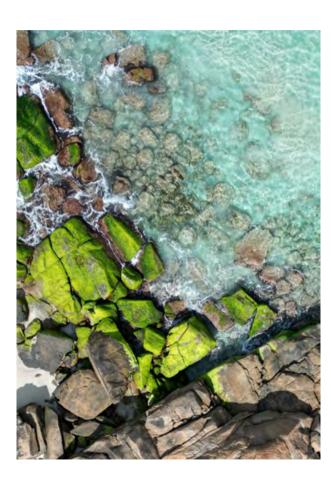


Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 716 organizations.



"As we shape our mid- to long-term vision, sustainability is deeply embedded in everything we aim to accomplish. Our core investment areas include monitoring and investing in refrigeration equipment to prevent fugitive emissions; shifting to greener energy sources through on-site electricity generation and clean electricity procurement; reducing water consumption; improving waste management and adopting circular solutions; and transforming packaging by reducing virgin plastic and enhancing recyclability. These are not isolated projects, but part of our core strategy to advance sustainability and business performance."

Rodolfo Brajcich Global Director of Nutrition and Sustainability at Sigma



### Organizations are standing firm on net zero commitments

Despite global uncertainty, 92% of organizations have retained the timelines of their net zero goals, signaling strong commitment (see Figure 2).

#### For instance:

 Mercedes-Benz continues to invest in renewable energy usage and generation to decarbonize production, with renewable resources already meeting 50% of energy needs at its production plants. The organization aims to achieve up to a 50% reduction in CO<sub>2</sub> emissions across the entire value chain within the next decade.<sup>12</sup>

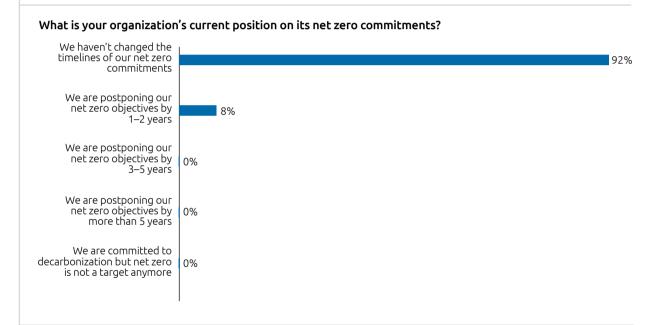
Renata Jungo Brüngger, Member of the Board of Management of Mercedes-Benz Group AG. Integrity, Governance & Sustainability, says: "In a time of growing global uncertainties, we continue to take proactive measures to ensure a real difference within our six sustainability focus areas aiming to anchor sustainability firmly in our operational business. We want and need to be ahead – for example by proactively identifying and addressing potential issues in our value chain. The goal is to avoid potential risks at an early stage ensuring the future success of Mercedes-Benz."

 In February 2025, Standard Chartered bank published its Transition Plan, which represents an important milestone in the bank's net zero roadmap, published in 2021. In addition to targeting net zero by 2050, it has set interim 2030 targets against all 12 high-emitting sectors, as defined N7BA Guidance 14

Among the 8% of organizations that have extended their net zero timelines, the reasons cited most frequently are overly ambitious targets, limited control over Scope 3 emissions, and high costs, rather than an ideological or strategic shift away from sustainability. This trend holds across all surveyed countries, underscoring a globally resilient stance (see Figure 3). The data reflects responses from 716 large organizations — each generating over \$1 billion annually and collectively representing approximately \$10.7 trillion in revenue (please see the research methodology at the end of the report for more details).

Our discussions with industry executives surfaced perspectives on how a growing sense of realism is shaping adjustments to sustainability goals. For instance, realworld constraints such as limited availability of recycled materials are prompting a reassessment of earlier targets. In parallel, the current geopolitical climate, marked by increased scrutiny and pushback against sustainability in some countries, is creating space for companies to revisit overambitious commitments and develop more grounded, achievable strategies.

**Figure 2.**Over 90% of organizations have retained their net zero timelines



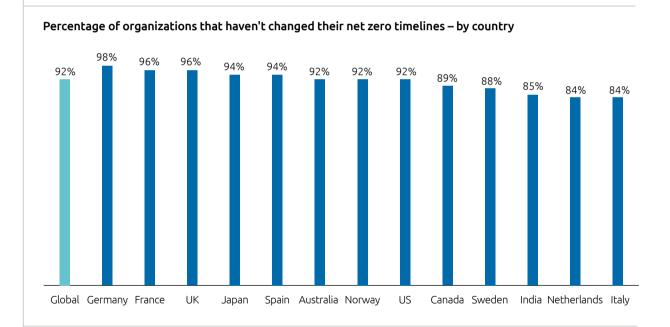
Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 714 organizations that have a net zero target.



92%

of organizations have retained their net zero timelines

**Figure 3.**Most organizations across countries have retained their net zero timelines



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 714 organizations that have a net zero target.

8\*

of organizations have extended their net zero timelines; the reasons cited most frequently are overly ambitious targets, limited control over Scope 3 emissions, and high costs, rather than an ideological or strategic shift away from sustainability







"In a time of growing global uncertainties, we continue to take proactive measures to ensure a real difference within our six sustainability focus areas aiming to anchor sustainability firmly in our operational business. We want and need to be ahead – for example by proactively identifying and addressing potential issues in our value chain. The goal is to avoid potential risks at an early stage ensuring the future success of Mercedes-Benz."

13

#### Renata Jungo Brüngger

Member of the Board of Management of Mercedes-Benz Group AG. Integrity, Governance & Sustainability

### The imperative to demonstrate progress

About two in three (67%) executives say their organization is under increasing pressure to demonstrate credible, science-based toward net zero.

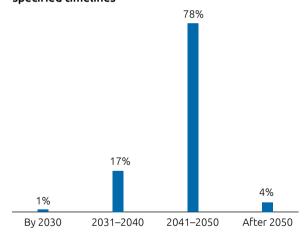
A senior sustainability executive at a multinational food and beverage company highlights this evolving mindset: "Sustainability has always been framed as a long-term goal — 2030, 2040, even 2050. But that mindset is shifting. We're now being asked: what's the year-one deliverable? What do we need to achieve in the next quarter? There's growing pressure to break down net zero ambitions into near-term actions and KPIs – just like we do with financial metrics. It is no longer enough to talk about distant milestones. It's about showing progress, step by step."

Most organizations are falling short, with 82% only planning to reach net zero by 2041 or beyond (see Figure 4). Only 21% have a detailed transition plan that includes science-based interim targets and capital allocation.

Figure 4.

Over four in five organizations have set net zero targets for 2041 or later

Proportion of organizations with net zero targets by specified timelines



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 714 organizations that have a set net zero target.

Our research reveals 62% of consumers feel that organizations/brands are engaging in "greenwashing," up from 33% in 2023<sup>15</sup> and 52% in 2024,<sup>16</sup> highlighting persistent public skepticism around sustainability claims and a widening credibility gap. Further, 77% believe corporations should do more to reduce GHG emissions.

A European Commission study suggests that 53% of green claims are vague, misleading, or unfounded, and 40% have no supporting evidence whatever. The risk is increased by the rise of deepfake technology.<sup>17</sup> In response, from April 2025, the UK Competition and Markets Authority (CMA) can impose penalties of up to 10% of global turnover for misleading environmental claims.<sup>18</sup>

This sends a strong message to businesses: sustainability communications must be accurate, transparent, and backed by evidence.

**82**%

of organizations only plan to reach net zero by 2041 or beyond



"The actual sign of progress is that organizations continue to hold firm on sustainability despite short-term uncertainties. That persistence reflects a growing recognition that sustainability is deeply intertwined with long-term business performance."

Vincent Charpiot
Executive Vice President, Head of Group Sustainability
Business Accelerator, Capgemini

A world in balance 2025: Unlocking resilience and long-term value through environmental action

# Sustainability is a core future-proofing strategy

### Organizations recognize sustainability as a key driver of business value

While regulatory compliance remains a key motivator (71% of executives cite it as a strong driver of sustainability investments), two in three executives (67%) identified business value – including profitability, cost savings, and operational efficiency – as a strong driver of sustainability investments (see Figure 5). This reflects a growing understanding that sustainability is a strategic asset with measurable ROI.

Lucía Ávila Martín del Campo, Sustainability Global Process Owner at Sigma, says: "Sustainability is part of Sigma's global strategy, projects are evaluated through a business lens, and the results are clear: sustainability creates business value. For example, energy efficiency and green energy deliver cost savings – our migration to clean energy in Mexico continues to bring us savings to this day – while water efficiency and reuse are helping us build resilience and mitigate the risk of water scarcity in stressed regions. Sustainability has also become a powerful way to attract and retain talent and strengthen our culture, as employees, especially younger generations, want to work for companies that have a sense of purpose."

Erik Wottrich, Head of Sustainability at Tele2, a Sweden-based telecom operator, highlights: "Sustainability has evolved from being a compliance checkbox, to a communications tool, and now into a strategic lever. We see that sustainability initiatives are not only reducing emissions but also cutting costs and driving innovation. For instance, AI is being used to temporarily reduce capacity in network equipment during low-traffic periods without affecting service."

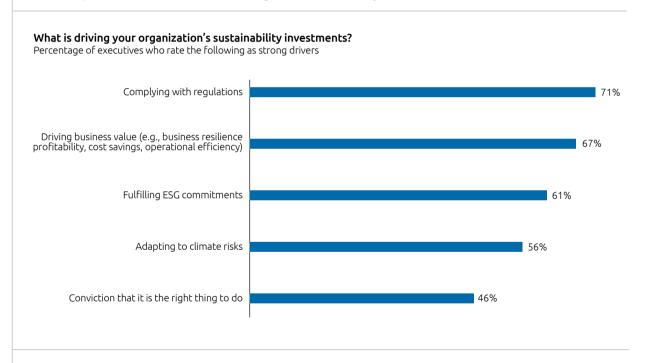
Miljan Gutovic, CEO at Holcim AG, a Swiss multinational building materials manufacturer, said: "Sustainability is driving net sales growth and margin expansion at Holcim. We are seeing rising demand for sustainable offering that comes with price premiums."<sup>19</sup>

**67**%

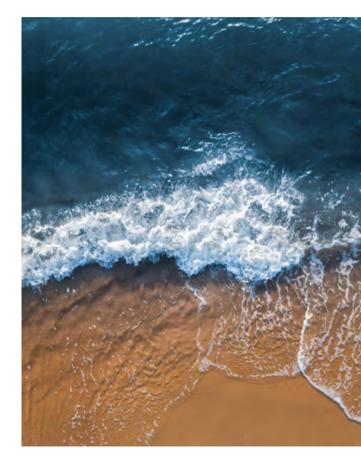
of executives identified business value – including profitability, cost savings, and operational efficiency – as a strong driver of sustainability investments

Sustainability is just as vital for public sector organizations as a means to deliver long-term value to citizens. Investments in sustainability help reduce operating costs, strengthen infrastructure resilience, and meet rising public expectations – 70% of surveyed consumers believe governments must play a larger role in reducing greenhouse gas emissions. Initiatives such as energy-efficient buildings, clean transport, water reuse systems, and climate-resilient infrastructure can not only lower costs but also protect communities and build public trust.

**Figure 5.**While compliance leads, business value is a strong driver of sustainability investments



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 2,146 executives.



**Figure 6.**How sustainability is delivering business value

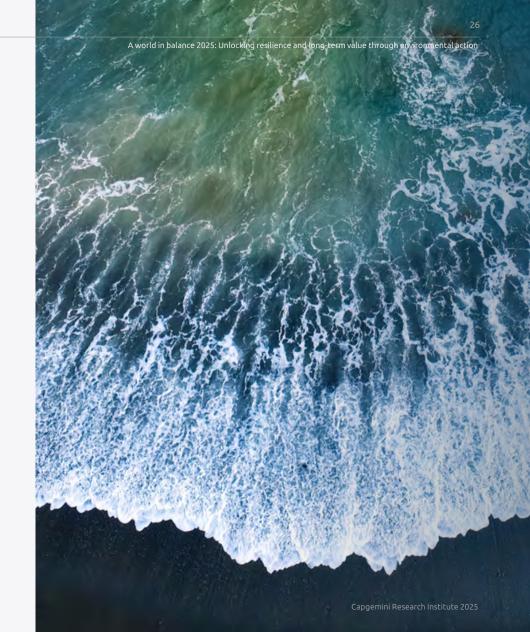
Revenue growth	Standard Chartered bank reported income of \$982 million from sustainable finance in 2024, against a target of at least \$1 billion by 2025. <sup>20</sup> BT Group targets action in its product development processes, improving data collection and enabling customers to access its networks, products, and services to cut carbon. <sup>21</sup> Gabrielle Ginér, Head of Environmental Sustainability at BT Group, says: "Since FY22, we've helped customers avoid over 5.5m tonnes of carbon, mainly through full fiber broadband reducing personal or work-related travel. As we develop more products and services, like Internet of Things and AI, we expect this number to grow. Associated revenues from carbon-saving products amounted to £6bn in 2025."
Cost savings	<b>Delta Airlines</b> achieved \$110 million in annual cost savings by cutting jet fuel use by 1% (~45 million gallons) through a range of operational efficiencies such as reducing weight on board and optimizing aircraft speed and routing. <sup>22</sup> The <b>Singapore Government</b> plans to invest \$300 million over five years to improve energy efficiency in public sector buildings. The initiative is expected to deliver lifecycle cost savings and generate excess savings for the public sector in the long term. <sup>23</sup>
New business opportunities	<b>H&amp;M's</b> investment in the second-hand platform Sellpy is an example of simultaneous growth creation and sustainable development. In 2024, sales from resale increased to 0.6% of total group turnover. <sup>24</sup>
Improved customer lifetime value	A senior executive from a multinational fashion retailer says: "Our resale program is a standalone business unit. It generates revenue and is profitable. Our repair services don't just drive revenue. They are a customer retention tool and extend customer lifetime value [CLV]."
Improved affordability	In June 2025, <b>L'Oréal</b> launched its first global, multi-brand, multi-category, multi-channel campaign: #JoinTheRefillMovement. The campaign invites consumers worldwide to embrace refills and promote both sustainability and smarter spending. <sup>25</sup> Simone Targetti Ferri, CSO Italy at L'Oréal, told us: "Our refill strategy is a game changer. In the medium term, pouches cost less to produce than traditional packaging. It's better for the environment and lets us offer lower prices to retailers and consumers."

Source: Secondary sources and Capgemini Research Institute interviews.



"Our refill strategy is a game changer. In the medium term, pouches cost less to produce than traditional packaging. It's better for the environment and lets us offer lower prices to retailers and consumers."

Simone Targetti Ferri CSO Italy at L'Oréal





"Sustainability has evolved from being a compliance checkbox, to a communications tool, and now into a strategic lever. We see that sustainability initiatives are not only reducing emissions but also cutting costs and driving innovation. For instance, AI is being used to temporarily reduce capacity in network equipment during low-traffic periods without affecting service."

### **Erik Wottrich**Head of Sustainability at Tele2, a Swedenbased telecom operator

## Sustainability efforts have already proven profitable for nearly half of organizations

Nearly half (49%) of organizations report a positive ROI from sustainability initiatives. For many, the payback period is shorter than or comparable to that for traditional investments:

- 50% report accelerated ROI
- 5% report broadly unchanged time to ROI
- Only 35% experienced a longer timeline

A recent study by Morgan Stanley reveals that 83% of organizations globally measure ROI for their sustainability activities in a similar way as that for non-sustainability initiatives. Moreover, one-quarter see increased profitability as the greatest value-add for sustainability over the next five years.<sup>26</sup>

Sustainability efforts deliver ROI in both tangible and intangible forms. Tangible returns include cost savings (e.g., from energy-efficient processes or waste management programs), increased revenue (e.g., sales from sustainable products), and improved access to capital (e.g., lower

interest rates). Intangible benefits include talent attraction (e.g., avoided rehiring costs), stronger brand reputation (e.g., customer loyalty), and risk resilience (e.g., avoided costs from disruption or regulatory fines).

Julien Denormandie, former French Minister and Chief Impact Officer at Sweep, a software firm specializing in carbon data management, says: "Businesses that embed sustainability into their core operations often discover untapped revenue streams and cost efficiencies that dramatically improve their net present value over time. What was once seen as a reputational play is now a tangible driver of income and shareholder value.

The ROI equation has evolved – today, environmental sustainability is directly tied to financial outcomes."<sup>27</sup>

Italy-based multinational energy company Enel, for instance, increased renewable capacity by 60% and cut emissions intensity by over 70% between 2017 and 2024, while increasing ordinary EBITDA from €15.6 billion to €22.8 billion in the same period.<sup>28</sup> Looking ahead, Enel expects a 40% increase in EBITDA by 2027, driven by its continued investment in renewables.<sup>29</sup>

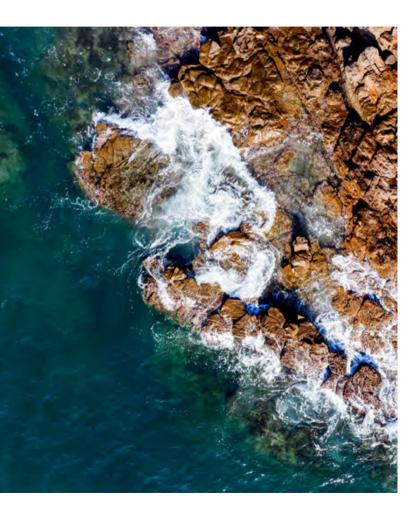


Three-quarters of executives (75%) say sustainability is a core future-proofing strategy for their organizations to drive long-term growth, competitiveness, innovation, and resilience.

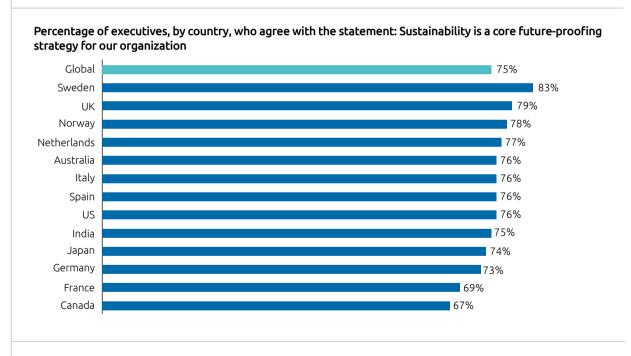


**75**%

of executives say sustainability is a core future-proofing strategy for their organization



**Figure 7.**Executives from Sweden, the UK, and Norway lead in viewing sustainability as a future-proofing strategy



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 2,146 executives.

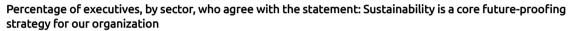


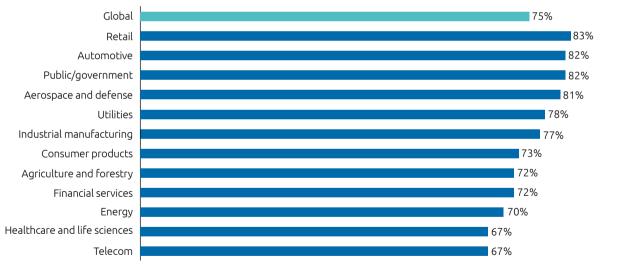
"Sustainability is part of Sigma's global strategy, projects are evaluated through a business lens, and the results are clear: sustainability creates business value. For example, energy efficiency and green energy deliver cost savings – our migration to clean energy in Mexico continues to bring us savings to this day – while water efficiency and reuse are helping us build resilience and mitigate the risk of water scarcity in stressed regions. Sustainability has also become a powerful way to attract and retain talent and strengthen our culture, as employees, especially younger generations, want to work for companies that have a sense of purpose."

**Lucía Ávila Martín del Campo** Sustainability Global Process Owner, Sigma

Figure 8.

More than four in five executives from retail, automotive, public sector, and aerospace and defense organizations say sustainability is a core future-proofing strategy





Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 2,146 executives.



The need to ensure future regulatory alignment (72%), strengthen stakeholder trust (69%), mitigate emerging risks (68%), and drive innovation to remain competitive (67%) all influence this view (see Figure 9). As global competition intensifies, 55% of executives say they face growing pressure to embed sustainability into their offerings.

Simone Targetti Ferri at L'Oréal emphasizes that sustainability enhances competitiveness: "If we can cut waste, reduce resource use, and still deliver value, we're not just sustainable – we are more competitive than companies that can't afford to change."

Christine Maria Betz, Chief Sustainability Officer at BSH Home Appliances Group, explains how sustainability is embedded into their business strategy: "Sustainability is not a standalone initiative at BSH – it's one of our strategic pillars that guides our entire business. We don't treat it as a separate agenda; it's embedded in how we design products, engage with consumers, and make investment decisions." She adds: "Whether it's reselling scrap, using alternative materials, or rethinking supply chains, each step reduces risk and builds strength and resilience for the future. Circular products are still expensive today, but if we find smarter ways to scale them, they can open up entirely new value pools."

#### Figure 9.

Beyond compliance and risk mitigation, sustainability is viewed as a catalyst for innovation, competitiveness, and long-term resilience

Why does your organization view sustainability as a core future-proofing strategy?

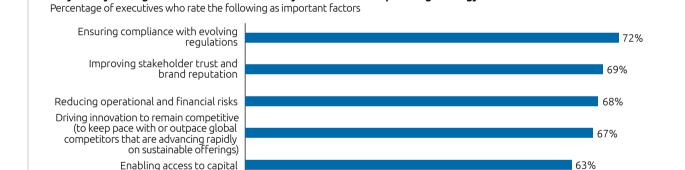
Attracting and retaining talent

Building resilience to external

disruptions (e.g., climate, supply chain)

savings, waste reduction, circularity, etc.)

Reducing costs (e.g., through energy



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 1,616 executives that say that sustainability is a core future-proofing strategy for their organization.

58%

53%





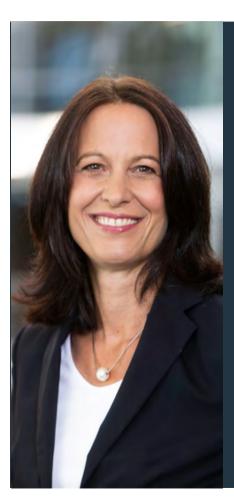
"Whether it's reselling scrap, using alternative materials, or rethinking supply chains, each step reduces risk and builds strength and resilience for the future. Circular products are still expensive today, but if we find smarter ways to scale them, they can open up entirely new value pools."

Christine Maria Betz Chief Sustainability Officer at BSH Home Appliances Group



"Investing in sustainability is investing in futureproofing growth. Organizations that harness it as a catalyst for innovation and resilience are best positioned to unlock new value pools and thrive in uncertainty."

Florent Andrillon Head of Group Climate Tech, Capgemini



### A discussion with **Dr. Eva Riesenhuber**Global Head of Sustainability, Siemens

How does Siemens maintain momentum on sustainability initiatives amid geopolitical volatility?

We view sustainability as a long-term transformation – one we've backed with steady, strategic investment. For example, two years ago, we committed €650 million to transition our operations and cut scope 1 and 2 emissions by 90% by 2030 – electrifying our fleet, shifting production, and moving all our buildings to net zero. We've defined our strategy and are executing consistently. Our focus is firmly on the future, maintaining the pace of progress to deliver what's needed.

How does AI help in advancing Siemens' sustainability agenda?

AI is a powerful enabler of the energy transition and for resource efficiency and

circularity. It helps manage complexity – whether in grid management, predictive maintenance, or optimizing energy flows. At Siemens, we apply industrial AI across grid management and advanced manufacturing. For example, we used AI to redesign a robot arm to weigh 2 kilograms instead of 50 kilograms, saving up to 90% of material, reducing the cycle time by 20%. When scaled across more than three million robots' arms worldwide, the impact is enormous.

#### How does Siemens address Al's environmental impact?

We recognize that AI has its own footprint. Data centers consume vast amounts of energy, so we focus on making AI itself greener: through smarter algorithms, better cooling technologies, and more

efficient infrastructure. With our customer Greenergy, for example, we developed an AI managed automatic cooling system reducing the energy use of their data center by up to 30%. We are still at the early stages but expect rapid progress in AI infrastructure. The key is balance: not every AI application is necessary, but when applied to critical infrastructure, the societal benefits of AI far outweigh its costs.

world in balance 2025: Unlocking resilience and long-term value through environmental action

## 03

# Climate adaptation is a priority but most organizations are underprepared

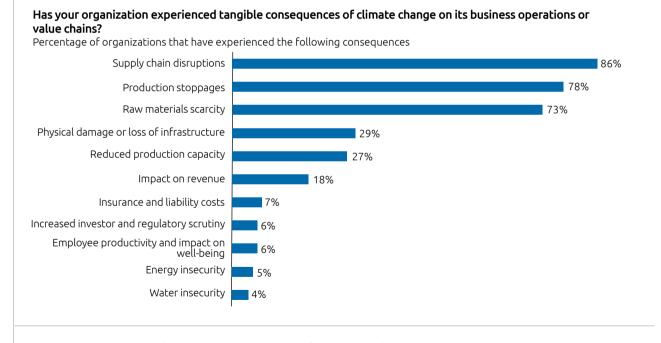
# Climate impacts are hitting business operations and value chains

Most organizations surveyed have experienced supply chain disruptions (86%), production stoppages (78%), and raw material scarcity (73%) as a direct consequence of climate change (see Figure 10).

A senior executive from a multinational fashion retailer explains: "Ten years ago, climate adaptation wasn't really on the radar. It was more about emissions and mitigation. But that's changed. Now, organizations are engaging in scenario planning and asking: What if there's no water? What if sea levels rise? What does that mean for our supply chain or even for our business model?"

Extreme weather events are causing widespread disruptions to business operations and value chains globally, as illustrated in Figure 11.

**Figure 10.**Most organizations have already felt the impact of climate change



 $Source: Capgemini\ Research\ Institute, Sustainability\ transformation\ trends\ survey,\ June-July\ 2025,\ N=716\ organizations.$ 

**Figure 11.** Examples of climate-related disruptions

Climate impacts	Illustrative cases
Raw materials scarcity	<ul> <li>In July 2024, flooding at a key aluminum supplier's factory disrupted production for <b>Porsche.</b><sup>30</sup></li> <li>Extreme heat and drought across cocoa-producing West African countries and coffee-producing regions in Brazil and Vietnam are driving supply shortages and price spikes, impacting food manufacturers.<sup>31</sup></li> </ul>
Supply chain disruptions	<ul> <li>Recent droughts severely lowered water levels in major rivers such as the Mississippi, Yangtze, Rhine, and Amazon, causing significant supply chain disruptions.<sup>32</sup></li> <li>In January 2025, Archer-Daniels-Midland (ADM) declared force majeure at its Gulf Coast terminals after a deep freeze halted grain loading and fertilizer logistics.<sup>33</sup></li> </ul>
Operational stoppages	<ul> <li>In December 2023, Apple suppliers Foxconn and Pegatron suspended iPhone production in Chennai, India, after Cyclone Michaung caused severe flooding and disrupted factory operations.<sup>34</sup></li> <li>In January 2025, BASF, Dow, and other chemical companies shut down Gulf Coast plants after an Arctic freeze from winter storm Enzo disrupted operations and forced emergency shutdowns.<sup>35</sup></li> </ul>
Physical asset damage	<ul> <li>In September 2024, LG Electronics' Hai Phong plant in Vietnam suffered major damage after Typhoon Yagi caused flooding and structural collapse, disrupting production.<sup>36</sup></li> <li>In 2024, flooding in Slovenia damaged raw-materials processing facilities, disrupting supply chains for automotive and electronics manufacturers.<sup>37</sup></li> </ul>
Financial loss	• US property and casualty insurer <b>Travelers</b> disclosed that the Los Angeles, California wildfires in January 2025 led to over \$1.7 billion of net losses, including personal and commercial segments. Rolobal insured losses from natural disasters totaled \$137 billion in 2024 (up from \$115 billion in 2023), driven by Hurricanes Helene and Milton, severe storms in the US, wildfires, and major floods worldwide. Release and Milton, severe storms in the US, wildfires, and major floods worldwide.

Sources: Information compiled from publicly available secondary sources.

# More disruption is expected as climate risks intensify

As global temperatures continue to rise, extreme weather events are projected to become more likely and severe. 40 Reflecting this growing concern, the World Economic Forum's 10-year risk outlook ranked extreme weather as the top long-term global risk, for the second consecutive year. 41

For executives, the most pressing concerns are maintaining operations during extreme weather events (76%); sourcing materials or parts (74%); and meeting regulatory and disclosure requirements (73%). Additionally, 66% foresee difficulties in managing insurance or financial risks. While less widespread, water and energy insecurity are still notable concerns for 20% and 19% of respondents, respectively. Erik Wottrich, Head of Sustainability at Tele2, says: "We've always designed our infrastructure to withstand storms and floods, but now we're seeing these events more frequently. It's not just about resilience – it's about anticipating the next level of disruption. That means rethinking where we store equipment, how we cool it, and how we build redundancy into systems that were never meant to operate under climate stress."

A study by the Potsdam Institute for Climate Impact Research (PIK) estimates that, by 2049, climate change could cost the global economy approximately \$38 trillion annually, with a projected range between \$19 trillion and \$59 trillion. These damages are driven primarily by rising temperatures, along with shifts in rainfall patterns and increased temperature variability. Additional weather extremes such as storms and wildfires could push these costs even higher. \*2" Our analysis shows that climate change will cause massive economic damages within the next 25 years in almost all countries around the world, also in highly-developed ones such as Germany, France, and the United States," says PIK scientist Leonie Wenz, who led the study. \*43

The total annual cost of physical climate risks alone for the world's largest companies in the S&P Global 1200 is projected to reach \$1.2 trillion by 2050.44

**76**%

of executives anticipate challenges with maintaining operations during extreme weather events 66%

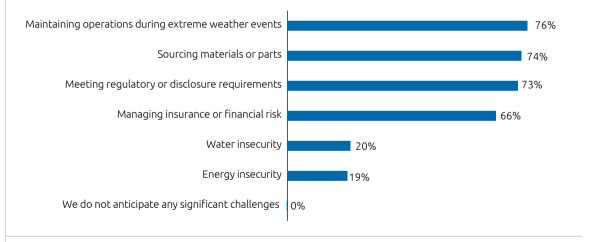
of executives foresee difficulties in managing insurance or financial risks



#### **Figure 12.**Executives are bracing for disruption as climate impacts intensify

#### Do you anticipate that climate change will create challenges for your organization in any of the following areas?

Percentage of executives who expect the following challenges



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 2,146 executives.

"Ten years ago, climate adaptation wasn't really on the radar. It was more about emissions and mitigation. But that's changed. Now, organizations are engaging in scenario planning and asking: What if there's no water? What if sea levels rise? What does that mean for our supply chain or even for our business model?"

A senior executive from a multinational fashion retailer

## What is climate adaptation?

Climate adaptation refers to the process of anticipating, preparing for, and responding to climate risks – both physical (such as extreme weather events and rising sea levels) and transition risks (such as regulatory changes or shifts in market expectations). Unlike mitigation, which targets the root cause of climate change by reducing greenhouse gas (GHG) emissions to limit future warming, adaptation focuses on managing the current and future impacts of climate change. The two are necessary and complementary pillars of climate action.



Types of climate risk:

#### 1. Physical risks

These relate to the direct physical impacts of climate change and are categorized as:

- Acute risks: Extreme weather events such as hurricanes, floods, or wildfires that can damage physical assets, disrupt operations, delay or break supply chains, threaten employee health and safety, and reduce productivity.
- Chronic risks: Long-term climate shifts such as rising sea levels, desertification, or changes in temperature and precipitation patterns that gradually erode asset value, strain resource availability, and increase operational costs.

#### 2. Transition risks

These stem from the changes associated with the transition to a low-carbon economy:

- Policy and legal risks:
   New regulations, carbon pricing, or litigation that increase compliance costs or restrict operations.
- Technology risks: Disruption from emerging low-carbon technologies that may render existing systems or investments obsolete.
- Market risks: Shifts in consumer preferences, investor expectations, or supply chains that affect demand for certain products and services, potentially leading to reduced revenue or financial losses.

Reputational risks:
 Stakeholder criticism or loss of trust due to perceived inaction on climate issues.

Climate adaptation involves two core actions: first, assessing climate risks through scenario analysis and forecasting, and integrating those risks into enterprise risk management (ERM), infrastructure planning, and supply chain strategies. Second, taking action such as upgrading assets, shifting operations, and redesigning products.



## Organizations prioritize climate adaptation

Amid growing concern over the likelihood of missing the 1.5°C target set by the Paris Agreement, climate adaptation (see insert "What is climate adaptation?") is becoming increasingly imperative. The World Meteorological Organization accords a 70% probability that global average temperatures between 2025 and 2029 will breach the critical 1.5°C threshold.<sup>45</sup> Organizations are beginning to respond: 56% of executives say their organization actively prioritizes climate adaptation as part of its broader climate strategy.

But the focus on adaptation varies across industries (see Figure 13). The agriculture and forestry sector faces direct physical risks such as crop failure and reduced yields, as well as forest loss due to wildfires. While less physically exposed, the financial services sector faces risks through its investment portfolios and growing regulatory pressure to assess and disclose climate-related exposures.

The consumer products and utilities sectors give the lowest priority to climate adaptation, despite being among the most vulnerable. Infrastructure-dense industries such as manufacturing, energy, utilities, telecom, consumer products, and retail are particularly

exposed owing to their extensive physical assets. A 2021 study found that, of capital-intensive industries, utilities face the highest long-term physical risk due to climate hazards such as water stress, wildfires, storms, and heatwaves. 46 Its relatively low emphasis on climate adaptation reveals a disconnect between exposure and preparedness.

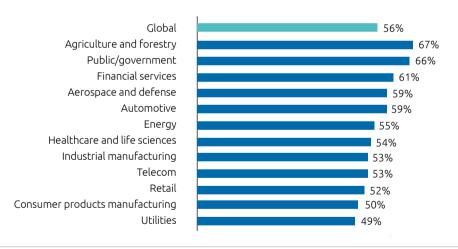
**70**%

probability that global average temperatures between 2025 and 2029 will breach the critical 1.5°C threshold<sup>45</sup>

**Figure 13.**The agriculture and forestry, government, and financial services sectors lead in the prioritization of climate adaptation

#### Our organization actively prioritizes climate adaptation as part of its overall climate strategy

Percentage of executives who agree with the statement



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 2,146 executives.

## But most remain underprepared to respond

More than half (54%) of executives say their organization is underprepared for the impacts of climate change (e.g., physical damage to people and property due to extreme weather events, financial losses, reputational damage, or regulatory non-compliance).

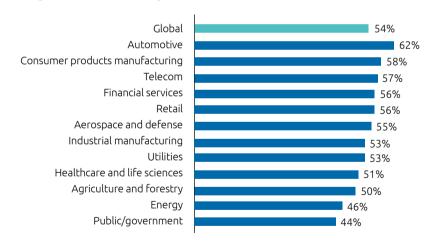
**67**<sup>%</sup>

of executives from the agriculture and forestry sector say their organization actively prioritizes climate adaptation

**Figure 14.**Perceptions of under-preparedness are highest in the automotive, consumer products, and telecom sectors

#### Our organization is currently underprepared for the impacts of climate change

Percentage of executives who agree with the statement



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 2,146 executives.

# Confusing climate preparedness with strategic planning

Despite growing awareness, many executives appear to misjudge the depth of climate adaptation required. Most rate their organizations as well or fully prepared for several types of climate risk – particularly acute physical risks (75%), policy and legal risks (77%), and market risks (74%) (see Figure 15).

However, this confidence is not always backed by implementation (see Figure 16). While many organizations have taken foundational steps such as conducting climate risk assessments (78%) and integrating physical climate risks (84%) and transition risks (76%) into ERM, adaptation remains limited. Only 38% have upgraded physical infrastructure and 31% have shifted suppliers or production to less climate-vulnerable regions. Just 26% have redesigned products or services to withstand future climatic conditions.

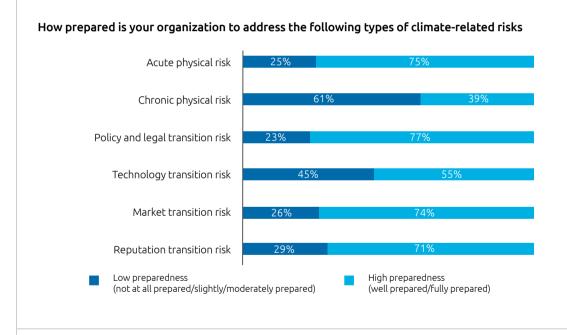
The gap between perceived levels of preparedness and tangible action suggests that executives may be equating preparedness with planning, reflecting a narrow view of what climate adaptation truly entails. A senior executive from a multinational fashion retailer asserts: "Analysis alone isn't action. There's a gap between knowing and being resilient. Even experts struggle to fully define the worst-case scenario. We are trying to plan for something we can't fully see. So, it's hard to know if you're actually well prepared."

Without translating adaptation strategies into on-theground action, organizations risk remaining vulnerable as climate impacts intensify. BT Group, for instance, has taken a series of measures – rolling out full fiber and closing legacy networks to reduce physical network sites, investing in cooling upgrades that allow network operations to continue in external temperatures up to 45°C, deploying early warning systems to manage risks and prioritize restoring services. and collaborating with the water industry to protect assets from water leaks and flooding to enable rapid repairs, among others.<sup>47</sup> Gabrielle Ginér, Head of Environmental Sustainability at BT Group, adds: "Climate risks like flooding or extreme heat can damage our network infrastructure and disrupt services. It's important for us to make sure our services keep going under any circumstances. That's why we have been moving or upgrading our critical infrastructure where needed. In FY25, we invested more than £8m in cooling upgrades to our core network and mobile sites. Climate resilience needs to be built now, not later."

38%

share of organizations that have upgraded physical infrastructure to adapt to climate risks

**Figure 15.**Organizations feel more prepared for immediate, visible threats than for long-term risks

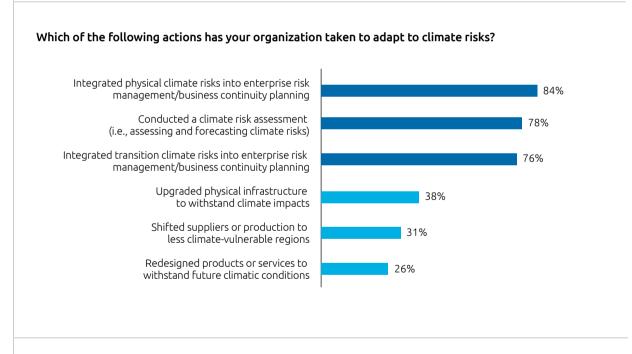


 $Source: Capgemini\ Research\ Institute,\ Sustainability\ transformation\ trends\ survey,\ June-July\ 2025,\ N=2,146\ executives.$ 

"Analysis alone isn't action.
There's a gap between
knowing and being
resilient. Even experts
struggle to fully define
the worst-case scenario.
We are trying to plan for
something we can't fully
see. So, it's hard to know
if you're actually well
prepared."

A senior executive from a multinational fashion retailer

**Figure 16.**Organizations have taken limited concrete adaptation measures



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 2,146 executives.



"Climate risks like flooding or extreme heat can damage our network infrastructure and disrupt services. It's important for us to make sure our services keep going under any circumstances. That's why we have been moving or upgrading our critical infrastructure where needed. In FY25, we invested more than £8m in cooling upgrades to our core network and mobile sites. Climate resilience needs to be built now, not later."

Gabrielle Ginér Head of Environmental Sustainability at BT Group



## A discussion with Anke Ehlers

Managing Director – International Sustainability, ALDI South

#### How has the role of sustainability evolved for ALDI South?

In 2022, we launched our first global sustainability strategy, making sustainability an active part of shaping business strategy. That shift was driven by multiple forces: consumer expectations, regulatory pressures, a broader societal awakening, and a mindset shift within businesses. For ALDI South, this means recognizing sustainability not as a separate function but as a principle that underpins business resilience, competitiveness, and long-term value creation.

How do you see sustainability shaping ALDI South's strategy going forward – especially amid geopolitical uncertainty and your focus on cost leadership?

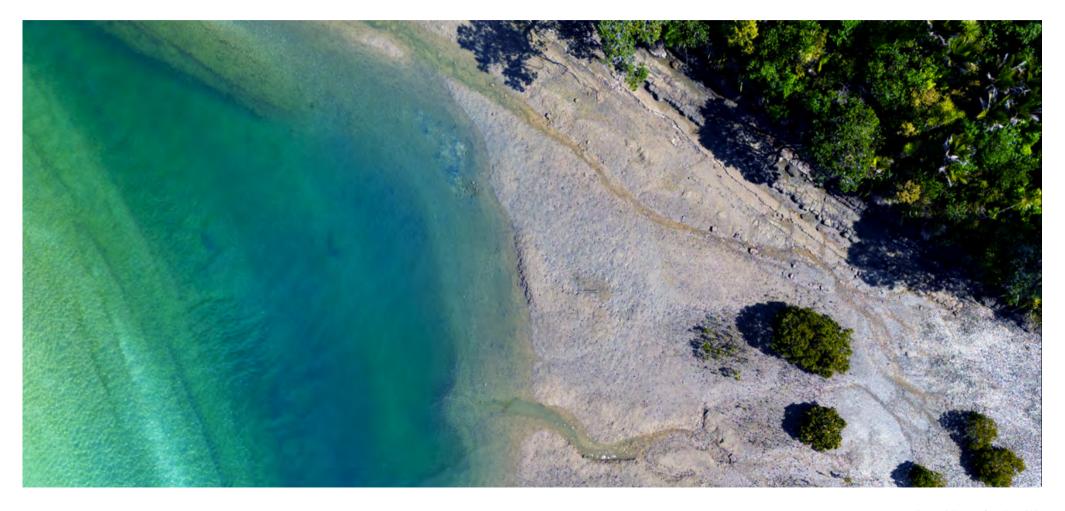
Geopolitical volatility has only reinforced why sustainability must be central. At ALDI South, resilience is a strategic priority: ensuring our supply chains remain robust so our business can withstand shocks. For example, we've even entered into 30-year supplier contracts – something unthinkable a few years ago – because securing continuity is securing competitiveness.

Sustainability and cost leadership go hand in hand. Efficiency, which underpins our discount model, is increasingly achieved through sustainable practices, whether in sourcing, logistics, or energy use. In that sense, sustainability has become not just a priority but a core pillar of our business strategy.

What are the most critical climate risks for retailers, and how is ALDI South responding?

On the physical side, extreme weather events – floods, hurricanes, and wildfires – have already forced us to close stores, with some even permanently lost. Beyond infrastructure damage, these events disrupt communities and supply continuity. Supply chain risks are equally important, as climate change reduces availability of commodities such as cocoa, coffee, and sardines, driving price volatility and long-term sourcing concerns. Litigation and compliance risks are also rising as climate regulations tighten.

Our approach combines working closely with suppliers, reassessing sourcing patterns, adapting physical infrastructure such as considering weather patterns when selecting store locations, and evolving transition plans in line with EU sustainability directives.



A world in balance 2025: Unlocking resilience and long-term value through environmental action

# Al is powering sustainability efforts, but its environmental impact is a critical consideration

# Organizations are using AI to advance their sustainability agendas

Today, 64% of executives say that their organization uses Al to achieve its sustainability agenda. Al supports a range of sustainability-related use cases – from automating reporting processes and improving resource efficiency to optimizing energy grids, transport networks, and urban infrastructure. It can also accelerate the discovery of climate solutions, such as packaging design and materials innovation.<sup>48</sup> In addition to these applications, AI can play a valuable role in climate adaptation and resilience. In addition to these applications. AI can play a valuable role in climate adaptation and resilience. It can enhance scenario modeling, early warning systems, and real-time disaster response; support the design of climate-resilient infrastructure by simulating materials and structural designs under future climate conditions: help reconfigure supply chains by identifying climate-vulnerable nodes and recommending alternative sourcing strategies; and support product redesign by anticipating resource scarcity and suggesting resilient alternatives.

Within the broader AI landscape, generative AI (Gen AI) offers a range of potential applications in sustainability,

including ESG reporting, sustainable product design, life cycle assessment (LCA), supplier sustainability reporting, virtual assistance, sustainable IT governance, and ESG scenario planning. <sup>49</sup> Despite this promise, 52% of executives report that their organization uses Gen AI to advance its sustainability agenda in 2025, down from 65% in 2024 and 56% in 2023. One reason for this decline could be concern over Gen AI's environmental footprint. In previous research, 48% of executives believed that their use of Gen AI had contributed to increased greenhouse gas emissions. <sup>50</sup> In our current research, 57% of executives say the sustainability impact of Gen AI is a topic of discussion at the board level (the same proportion as reported last year).

The use of agentic AI to advance sustainability goals is still in its early stages, with 29% of executives saying their organization uses or plans to use agentic AI/AI agents for sustainability. Unlike traditional AI or Gen AI applications, which often focus on narrow, predefined tasks, agentic AI can manage and execute end-to-end processes. In the context of sustainability, it could be used to manage complex tasks across systems. For example, it could be used to monitor and adjust energy or water usage in real time based on changing conditions, or coordinate waste management workflows across facilities. In reporting, it could be used to gather data from multiple sources, validating it against regulatory requirements, and generating draft disclosures, reducing manual effort.

Tomás Zaborowski, Head of Sustainability Excellence at Bayer Crop Science, says: "There's a huge opportunity in using AI for reporting and prediction. With the massive volume of data and the need for transparency, AI can assist in adapting, generating, and validating content against regulations and legal frameworks. At the same time, its predictive capabilities offer the potential to forecast environmental impacts or supply chain disruptions before they happen – that's where I see real efficiency gains."

Below are a few use cases demonstrating the role of AI in advancing sustainability efforts.

**57**%

of executives say the sustainability impact of Gen AI is a topic of discussion at the board level

**Figure 17.**Al use cases in sustainability

Use cases	Examples				
Accelerating scientific discovery  At Bayer Crop Science, breeders use machine learning (ML) and digital twin technology to write new genetic combinations and anticipate a proposition of micro-level climatic and soil conditions, optimizing crop design. Historically, a single breeding cycle took five or six years to compare the proposition of micro-level program takes only four months — which will more than double the rate of genetic innovation by 2030. 51					
Enhancing resource efficiency	In Timor-Leste, UNEP is testing how the agriculture sector could apply ML to evaluate crop sensitivity to environmental conditions; assess the impact of weather on crop growth; and generate tailored advisories to promote resource efficiency. <sup>52</sup>				
Improving energy efficiency	75F, an IoT-powered building solutions provider, uses AI to analyze weather, building use, and sensor data to adjust heating, ventilation and air-conditioning (HVAC) settings automatically for energy savings and comfort. The tools have saved 75F's customers 42% in HVAC energy use worldwide. <sup>53</sup>				
ESG reporting automation	US-based battery manufacturing organization EnerSys uses Gen AI to analyze and generate insights from large datasets related to sustainability metrics, including Scope 1 and 2 emissions, travel data, and waste data. <sup>54</sup>				
Strengthening climate adaptation and resilience	To improve the accuracy and efficiency of extreme weather predictions, NVIDIA's Earth-2 platform uses Gen AI models to generate realistic atmospheric states and forecast events such as tropical cyclones more quickly, helping researchers better anticipate and respond to climate risks. 55  Hitachi is using AI to identify and mitigate climate-related supply chain risks and enhance supply chain resilience. 56				

\*Note: The list of use cases is indicative, rather than comprehensive. Source: Information compiled from publicly available secondary sources.



"There's a huge opportunity in using AI for reporting and prediction. With the massive volume of data and the need for transparency, AI can assist in adapting, generating, and validating content against regulations and legal frameworks. At the same time, its predictive capabilities offer the potential to forecast environmental impacts or supply chain disruptions before they happen – that's where I see real efficiency gains."

Tomás Zaborowski Head of Sustainability Excellence at Bayer Crop Science



# The environmental footprint of AI is prompting greater caution

From manufacturing (encompassing materials and hardware impact), model training, and usage (including data centers' energy, water, and carbon impact), to endof-life (e-waste), AI/Gen AI consumes vast resources and leaves a notable environmental footprint.

As noted previously, nearly three in five executives (57%) reveal that the impact of Gen AI on sustainability is a topic of discussion in their boardroom. However, only about one-third (32%) report that their organizations have taken steps to mitigate Gen AI's environmental impact. Startup Mistral AI has recently released a first-of-its-kind study to quantify the environmental impacts of their large language models (LLMs) across three categories: GHG emissions, water use, and resource depletion. The study found that model training and inference account for most emissions (85.5%) and water use (91%).<sup>57</sup>

NVIDIA is reducing the environmental footprint of AI through accelerated computing, which integrates GPUs and CPUs to deliver up to 20x greater energy efficiency than traditional CPU-only systems. It is also deploying direct-to-chip liquid cooling to reduce data center energy consumption.<sup>58</sup>

But while 57% of executives say the benefits of Gen AI outweigh its negative environmental impacts, this is down from 67% in 2024, indicating growing caution around its environmental footprint and possibly a more nuanced understanding of Gen AI's capabilities and limitations.

For more information, refer to our research on Developing sustainable Gen AI.

**57**%

of executives say the benefits of Gen AI outweigh its negative environmental impacts



"By analyzing complex data at scale, AI can help organizations proactively anticipate climate risks, model scenarios, and make faster, more informed decisions – strengthening their ability to adapt and thrive in the face of climate uncertainty."

#### Sol Salinas

Executive Vice President, Head of Sustainability for the Americas, Cappemini

A world in balance 2025: Unlocking resilience and long-term value through environmental action

# Organizational, structural, and geopolitical barriers to sustainability

#### Momentum has stalled

After steady gains in 2022–24, reflected in a 22-percentage-point increase in our sustainability maturity index\* (see Figure 18) – the trajectory has dipped in 2025 by 12 percentage points.\*\* Further, the share of organizations considered sustainability front-runners has declined from 7% in 2024 to just 1% in 2025. The drop in front-runners reflects a broader dip in sustainability progress. Since organizations must outperform peers across three dimensions (value chain processes, internal enablers, and tech adoption), fewer met the criteria this year (see Figure 19 for details).

While intent remains strong, organizations are increasingly constrained by a range of internal and external barriers.

The sustainability maturity index benchmarks organizations' progress on sustainability over the past four years across 93 questions in our sustainability framework. We took 2022 as the base year. An index value of 100 indicates that a result matches the baseline average; an index of 200 means the result is double the average; and an index of 50 means it is half the average. For more details on the questions used in the index, please refer to the Appendix.

"While Figure 18 shows an 11-percentage-point difference between the 2024 and 2025 index, the actual difference is 12pp, owing to rounding.

**Figure 18.**Sustainability index by country and sector, 2022–25

Country*	2022 Base	2023 Index	2024 Index	2025 Index	Sector**	2022 Base	2023 Index	2024 Index	2025 Index
Australia	100	106	124	105	Aerospace and defense	100	111	113	116
Canada	100	113	119	114	Automotive	100	116	121	129
France	100	95	114	93	Consumer products manufacturing	100	115	127	112
Germany	100	99	95	101	Energy	100	108	118	101
India	100	124	109	104	Financial services	100	108	138	113
Italy	100	100	148	127	Healthcare and life sciences	100	121	133	100
Japan	100	99	129	123	Industrial manufacturing	100	116	116	104
Netherlands	100	120	142	114	Public/government	100	119	123	100
Spain	100	95	129	131	Retail	100	105	128	110
Sweden	100	119	125	107	Telecom	100	110	115	106
UK	100	111	121	107	Utilities	100	103	108	89
US	100	109	118	120					
			Global a	verage		100	112	122	111

Souce: Capgemini Research Institute, Sustainability transformation trends survey, August–September 2022, N = 2,004 executives; August–September 2023, N = 2,001 executives; June–July 2024, N = 1,859 executives; June–July 2025, N = 1,851 executives.

<sup>\*</sup>Norway is excluded as it was not covered in the 2022 research.

<sup>\*\*</sup>Agriculture and forestry is excluded as it was not covered in the 2022 or 2023 research.

**Figure 19.**Sustainability maturity assessment

	2022	2023	2024	2025
Front-runners	11%	8%	7%	1%
Experimenters	63%	58%	56%	68%
Beginners	26%	34%	37%	31%

#### To gain a sense of where organizations are in their sustainability journeys and identify the leading organizations, we mapped their sustainability maturity across three dimensions:

- Value chain processes: These include sourcing, R&D/product design/innovation, manufacturing, and logistics, as well as the use of technology for sustainability.
- Sustainability enablers: This dimension relates to organizations' getting their people to buy into their sustainability cultures, supported by corporate functions such as IT, finance and accounting, and sales and marketing.
- Tech accelerators: This dimension refers to the adoption of digital technologies and pathways to accelerate sustainability transformation.

#### We identified three cohorts:

- 1. Front-runners: Significant progress along the three dimensions
- 2. Experimenters: Low maturity in one or two dimensions
- 3. Beginners: Low maturity across the three dimensions

Source: Capgemini Research Institute, Sustainability transformation trends survey, August–September 2022, N = 668 organizations; August–September 2023, N = 668 organizations; June–July 2024, N = 628 organizations; June–July 2025, N = 617 organizations.





As Figure 20 shows, sustainability progress has dipped across corporate and value chain functions. Corporate functions experienced an 11-percentage-point (pp) decrease compared to 2024. Notably, IT experienced a 21pp drop, possibly owing to organizations prioritizing the procurement of materials and components amid supply chain disruptions and tariff uncertainties. These challenges could have diverted focus from initiatives such as eco-design of applications and energy performance optimization. Meanwhile, vision and leadership declined by 9pp, potentially reflecting the long-term nature of business and operating model redesigns, which

are especially difficult to advance in the face of volatile geopolitical conditions.

Value chain functions recorded a 13pp decline compared with 2024. Within this, logistics dropped by 18pp and sourcing by 11pp, both likely impacted by geopolitical tensions and trade disruptions. These pressures could have prompted organizations to adjust transportation strategies, including the use of less sustainable logistics solutions to maintain operational continuity. For example, stockpiling goods in anticipation of future tariffs may increase reliance

on carbon-intensive modes of transport and warehousing, thereby inflating carbon footprints and slowing progress on eco-friendly transportation initiatives.

Furthermore, there has been a decline in initiatives across key sustainability areas such as biodiversity, water stewardship, and the circular economy. For instance, 55% of executives say circularity is a key component of their sustainability strategy, down from 65% in 2024. We explore the decline in progress on biodiversity and water stewardship in more detail later in the report.

Figure 20. Change in sustainability index by corporate and value chain functions, 2024 vs. 2025

ightharpoonup	Corporate functions [-11pp]	Key areas showing a decline in progress	↑ Key areas showing an acceleration in progress		
Overall	IT [-21pp]	Eco-designing IT applications (i.e., designing for the lowest environmental impact) Identifying energy-intensive applications and improving energy performance	Using a green cloud architecture for data centers (to reduce power consumption)		
	Talent [-11pp]	Equipping employees with tools to support the low-carbon transition     Training employees to adopt sustainable practices in-office	Upskilling/reskilling on hard sustainability skills (e.g., renewable energy, carbon accounting, environmental science/engineering, data analysis/visualization)		
	Vision and leadership [-9pp]	<ul> <li>Redesigning the business/operating model for sustainability</li> <li>Developing a strategy to transition all energy sources to renewables</li> </ul>	<ul> <li>Integrating sustainability vision into the core strategy of the organization</li> <li>Developing internal governance policies and procedures relating to environmental and social sustainability</li> </ul>		
	Finance [-10pp]	Assessing environmental externalities when evaluating projects to fund     Commitment to fossil fuel divestment	Auditing sustainability data by a third party     Reporting sustainability impacts, along with financial performance, on a quarterly/annual basis		
	Sales and marketing [-7pp]	Measuring the impact of the organization's digital presence on carbon emissions     Communicating the carbon footprint of every product/service the organization sells	<ul> <li>Offering competitive pricing to encourage more people to consume/purchase sustainable products/services</li> <li>Educating customers about the importance of adopting sustainable practices</li> </ul>		
index ·12pp]	Culture [-4pp]	Providing autonomy to employees to develop new solutions to sustainability challenges Backing sustainability reporting and claims with robust audited data	Collaborating actively with interested stakeholders, including customers, investors, academia and governments, to develop and promote sustainable approached.		
-	Value chain functions [-13pp]				
	Logistics [-18pp]	Dedicated carbon reporting from transportation suppliers     Adoption of eco-friendly transportation strategies			
	Innovation/R&D/Design [-17pp]	Following sustainable prototyping and testing processes Redesigning products to have a lower impact on forests	Reducing the use of packaging material in products		
	Operations [-16pp]	<ul> <li>Implementing water stewardship</li> <li>Monitoring the conversion of natural ecosystems on owned/managed lands</li> </ul>	Monitoring and reducing energy consumption through smart systems (e.g., sensors to optimize heating in buildings)		
	Sourcing [-11pp]	<ul> <li>Working with tier-2 and tier-3 suppliers to reduce their emissions</li> <li>Reducing deforestation within the supply chain</li> </ul>	Considering ESG ratings and environmental pledges taken by suppliers during supplier selection		
	Technology [-10pp]	<ul> <li>Using technology such as AI, automation, or digital twins to achieve the sustainability agenda</li> <li>Using tools such as supply chain control towers for monitoring and measuring ESG metrics</li> </ul>	Using Al/ML to optimize data center utilization Measuring and collecting data on all Scope 1 and Scope 2 emissions		
	Manufacturing [-5pp]	Relocating the manufacturing footprint to regions offering low-carbon alternatives	Measuring the energy consumption of industrial processes		

Note: Negative pp values reflect the percentage point drop in the share of organizations implementing sustainability initiatives in each respective area.

Source: Capgemini Research Institute analysis. Capgemini Research Institute, Sustainability transformation trends survey, August–September 2022, N = 2,004 executives; August–September 2023, N = 2,001 executives; June–July 2025, N = 1,851 executives.

\*Norway is excluded as it was not covered in the 2022 research.

\*\*Agriculture and forestry is excluded as it was not covered in the 2022 or 2023 research.

#### **Pockets of progress**

Despite a broader decline, several foundational pillars of transformation have shown encouraging signs of progress (see Figure 20). In addition, the US, Germany, and Spain among countries, and the aerospace and defense and automotive sectors, recorded increases in their sustainability index scores (see Figure 18).

Notable areas of progress include:

- **Vision:** A 10pp increase in organizations reporting that sustainability is well integrated into core strategy. This was especially evident in the US (25pp), Spain (20pp) and the aerospace and defense sector (26 pp).
- **Governance:** A 13pp increase in the adoption of internal policies and procedures addressing environmental and social sustainability. The aerospace and defense sector stood out with a 40pp improvement, alongside 32pp in automotive, 31pp in Germany, and 25pp in Spain.
- Stakeholder collaboration: A 10pp increase in engagement with external stakeholders including customers, investors, academia, and governments to develop and promote sustainable approaches. This momentum was particularly strong in aerospace and defense (29pp) and automotive (22pp).

• Emissions measurement: A 7pp increase in tracking Scope 1 and 2 emissions, reflecting stronger commitments to transparency and accountability. This improvement was even more pronounced in the aerospace and defense sector, which saw a 27pp increase. The automotive sector also advanced, with a 12pp increase. Progress in scope 3 emissions tracking, an area where the global index declined, was also notable in these sectors. The aerospace and defense sector recorded a 30pp increase, while the automotive sector saw a 16pp gain.

These gains suggest that, sustainability is becoming more deeply embedded, even as organizations face broader execution challenges. For more details on the index, please refer to the **Appendix**.

In addition, we see progress from last year around social sustainability and climate tech initiatives.



2. 2

## Social sustainability continues to gain ground

Organizations are steadily expanding their focus on social sustainability, with progress strengthening year over year. For instance, the share of executives saying their organizations publicly report the outcomes of their social sustainability initiatives rose to 66% in 2025, up from 57% in 2024 and 47% in 2023. Similarly, the share of executives reporting that their organizations use third parties to disclose social impact has remained virtually unchanged, at 60% this year, compared with 61% in 2024 and 49% in 2023.

Affordability and accessibility are also advancing. The share of executives reporting that their organizations make products and services affordable to local communities grew from 40% in 2023 to 54% in 2024 and reached 57% in 2025. Accessibility for people with disabilities or

health conditions rose from 42% in 2023 to 50% in 2024, climbing further, to 54%, this year.

Our research also shows modest progress on supply chain practices. The proportion of organizations working only with suppliers who pay a living wage rose from 38% in 2023 to 45% in 2024, and 48% in 2025. Meanwhile, across all age groups, 74% of consumers now expect organizations to work only with suppliers that pay a living wage, up from 66% in 2024 and 45% in 2023.



**77**%

of consumers now expect organizations to work only with suppliers that pay a living wage, up from 66% in 2024

#### 2. 2



Organizations continue to advance on social sustainability

Share of executives who agree with the statements



who pay a living wage

2023

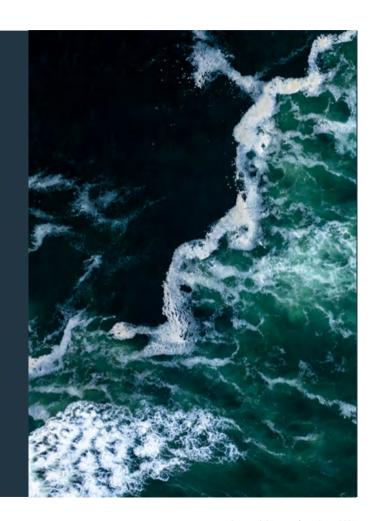
Source: Capgemini Research Institute, Sustainability transformation trends survey, August–September 2023, N = 1,076 executives; June–July 2024, N = 1,003 executives; June–July 2025, N = 1,002 executives in corporate functions.

2024

45%

2025

48%

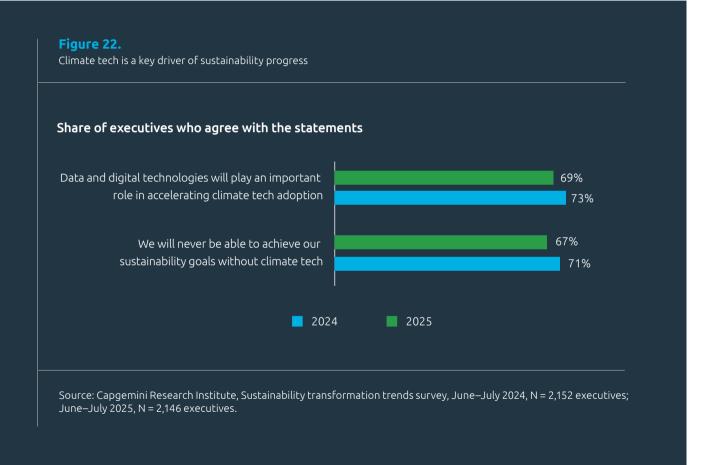


#### 2, 2,

# Climate tech remains a key enabler of sustainability

In our research, climate tech refers to innovative technologies specifically designed to mitigate the impact of climate change and resource depletion (e.g., energy storage, carbon capture, low-carbon hydrogen, alternative fuels, electrification, smart grids). It includes both hardware and software solutions (e.g., climate modeling).

Climate tech continues to be viewed as an enabler of sustainability. Seventy-one percent of executives say their organization will never achieve its sustainability goals without climate tech, up from 67% in 2024. Similarly, 73% say that data and digital technologies will play an important role in accelerating climate tech adoption, up from 69% in 2024.



## Structural and organizational barriers remain

## Financing gaps are impeding climate adaptation

Despite growing awareness of climate risks, the lack of robust climate finance mechanisms remains a critical bottleneck. Over half of executives (55%) cite financial barriers as the top obstacle to advancing climate adaptation efforts. Despite rising investments since the Paris Agreement, wide investment gaps persist for both mitigation and adaptation, but far more significantly for the latter. <sup>59</sup> A study by the World Resources Institute evaluated climate adaptation investments in 12 countries and found that every \$1 invested can generate over \$10.50 in economic, social, and environmental benefits, with average annual returns of 20–27%, making a strong case for scaling adaptation finance. <sup>60</sup>

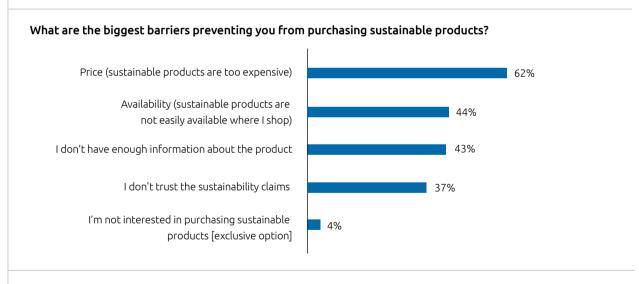
### Barriers to adoption of sustainable products

Affordability, availability, and information gaps continue to be major barriers to consumer adoption of sustainable products (see Figure 22). Price remains the most significant

hurdle, with only 24% of consumers finding sustainable products affordable. Even when consumers are willing to make environmentally conscious choices, sustainable

products are not easily accessible. Additionally, only 16% of consumers feel that the sustainability information available to them is sufficient.

**Figure 23.**Price is the biggest roadblock to sustainable choices



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 6,566 consumers.

**81**<sup>%</sup>

of executives cite inadequate data and measurement systems as a barrier to advancing their organization's sustainability agenda

## Operational silos, data gaps, and budget constraints hinder progress

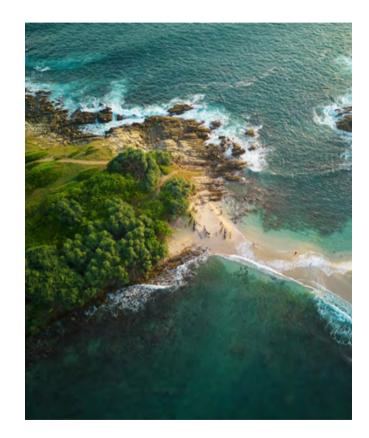
Siloed operations, cited by 79%, limit cross-functional collaboration and make it difficult to embed sustainability across departments. Inadequate data and measurement systems, flagged by 81%, make it difficult to track progress and make informed decisions. Budget constraints, also reported by 81%, further restrict scaling.

Further, only 48% of executives say their organization's sustainability and business agenda is fully aligned. Even fewer – just 27% – say their organization has embedded sustainability-related KPIs across all business units.

Edmundo Fuentes, Executive Vice President – Business Transformation at Sigma, explains how Sigma integrates sustainability and business KPIs: "We're embedding sustainability KPIs into our core business, so it becomes part of how performance is measured. That means looking not just at cost or efficiency, but also at emissions, water use, and circularity across our operations. By integrating these metrics into decision-making, whether in supply chain or production, we gain visibility to manage risks, optimize resources, and create long-term value."

48%

of executives say their organization's sustainability and business agenda is fully aligned

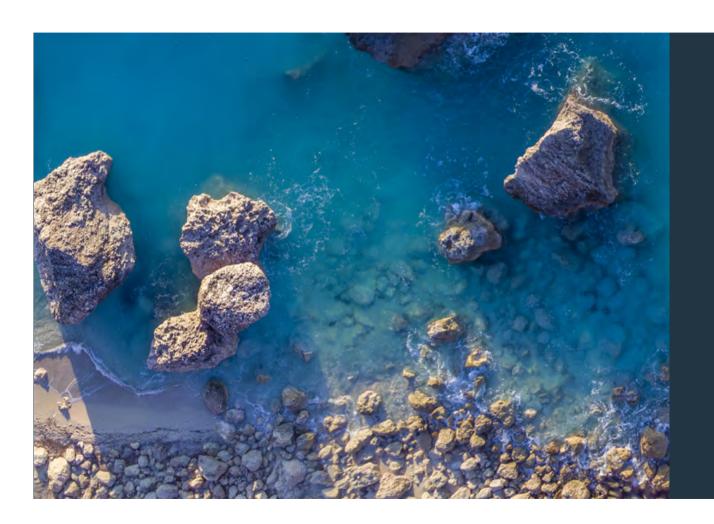




"We're embedding sustainability KPIs into our core business, so it becomes part of how performance is measured. That means looking not just at cost or efficiency, but also at emissions, water use, and circularity across our operations. By integrating these metrics into decision-making, whether in supply chain or production, we gain visibility to manage risks, optimize resources, and create long-term value."

#### **Edmundo Fuentes**

Executive Vice President – Business Transformation at Sigma



# Biodiversity progress dips after consistent progress

After steady gains since 2022, organizations' progress on biodiversity appears to be slowing. Investment in conserving natural habitats rose from 43% in 2022 to 66% in 2024 – but has dropped to 51% in 2025. Similarly, monitoring of ecosystem conversion on owned or managed lands peaked at 60% in 2024, before falling back to 42% this year (see Figure 24). The slowdown may suggest that competing demands are impacting the pace of execution.

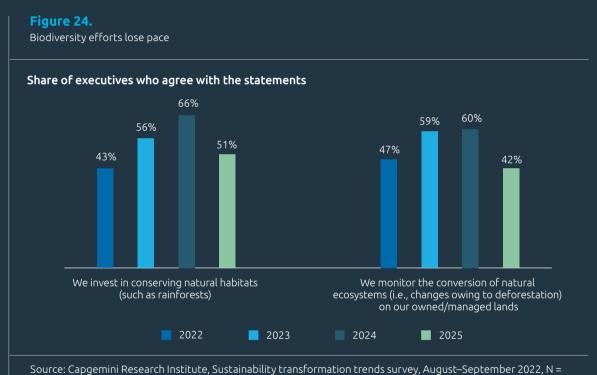
Biodiversity loss presents material risks across sectors. In 2025, three Singapore banks – DBS, OCBC, and UOB – conducted a joint study to assess nature-related risks in their lending portfolios. The palm oil industry was used as a pilot to model how risks such as drought, water shortages, and ecosystem degradation could affect borrowers' financial resilience. Some companies were highly

resilient, while others were significantly affected, highlighting the commercial importance of understanding nature risks for each customer. The study aimed to demonstrate the business case for nature-related risk assessment and promote its wider adoption across the financial sector.<sup>61</sup>

As the UN Secretary-General recently warned, biodiversity loss is happening at "lightning pace".<sup>62</sup> The destruction of tropical forests, for example, directly weakens global carbon sinks, undermining climate resilience. Despite the risks, less than a third (30%) of executives say their organization has a clear strategy on addressing biodiversity loss.

**30**%

of executives say their organization has a clear strategy on addressing biodiversity loss



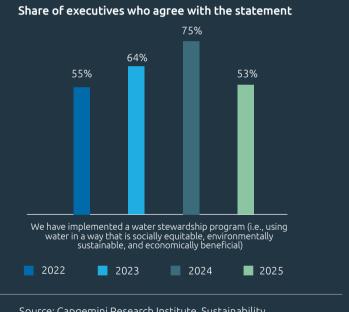
Source: Capgemini Research Institute, Sustainability transformation trends survey, August–September 2022, N = 1,001 executives; June–July 2024, N = 923 executives; June–July 2025, N = 919 executives in value chain functions.

## Water stewardship declines

The responsible use and management of water is essential to achieving environmental, social, and economic sustainability. Yet only 53% of executives say their organization has implemented a water stewardship program, a sharp drop from 75% in 2024 (see Figure 25). This decline comes even as awareness continues to grow – 71% of organizations measure water consumption in industrial processes.

The automotive sector has a higher share (63%) of organizations implementing water stewardship programs. Ford, for example, aims to eliminate freshwater withdrawals for manufacturing across all facilities, including those in water-stressed regions, where it prioritizes alternative sources such as recycled water, rainwater harvesting, and treated wastewater.<sup>63</sup>





Source: Capgemini Research Institute, Sustainability transformation trends survey, August–September 2022, N = 1,001 executives; August–September 2023, N = 1,000 executives; June–July 2024, N = 923 executives; June–July 2025, N = 919 executives in value chain functions.

Water scarcity is set to intensify, with global freshwater demand projected to exceed supply by 40% within five years, due to climate-driven heat and drought. Several industries including agriculture, textiles, food, chemicals, energy, and technology face mounting disruption. By 2050, up to \$70 trillion in alobal GDP could be exposed to high water stress. five times more than in 2010.64 These risks are no longer distant: for example, the semi-conductor industry is already vulnerable. Analysts warn that TSMC could miss its production targets by up to 10% by 2030 if water supply risks are not effectively managed. In response, Taiwan has sanctioned a desalination plant worth €508 million to help secure water for its chipmakers.65



of organizations have implemented a water stewardship program

# Geopolitical tensions continue to weigh on sustainability progress

Ongoing geopolitical tensions – from tariff and traderelated disputes to regional conflicts – are impacting sustainability efforts. In our 2024 research, we anticipated that geopolitics could disrupt sustainability momentum, with 65% of executives reporting that geopolitical factors were driving a slowdown in investments and projects. 66 This concern has materialized, with momentum dipping across multiple sustainability areas. In June–July 2025, the same proportion – 65% – say that current geopolitics is slowing down sustainability initiatives. While organizations continue to prioritize sustainability, with 82% planning to increase investments as noted previously, persistent external pressures appear to be diverting executive attention and shifting focus from long-term sustainability planning to short-term geopolitical and operational concerns.

A senior executive from a multinational fashion retailer says: "Geopolitical tensions – especially around tariffs – have created a kind of operational fire drill. The urgency of navigating tariff-related disruptions pulls focus away from very important but longer-term, less acute priorities like sustainability. When teams are constantly reacting to

immediate crises, it becomes difficult to maintain momentum on goals that require sustained attention and investment – exactly the kind of commitment that sustainability demands."

Executives in Spain (78%), Norway (71%), and the US (71%) are more likely to report a slowdown in sustainability investments/projects owing to current geopolitics, compared with 59% in India and 58% in Canada and France (see Figure 26). Notably, 76% of agriculture and forestry executives report a slowdown, versus 54% in healthcare and life sciences (see Figure 27).

However, geopolitical tensions can also act as a catalyst for sustainability. For example, disruptions such as rising energy prices or restricted access to key inputs could prompt organizations to accelerate the shift toward renewable energy, alternative materials, and redesigning supply chains for greater resilience. Tariffs, in particular, can accelerate reindustrialization plans, leading to shorter supply chains and lower carbon emissions. In our previous research, more than half (54%) of executives said tariffs on imports would boost their reindustrialization plans.<sup>67</sup>

The impacts of geopolitical tensions on sustainability could vary therefore depending on timing:

 In the short term, geopolitical tensions may distract or delay some sustainability efforts, particularly those requiring long-term planning or capital.  Over the medium to long term, these same tensions could force structural changes such as reindustrialization, energy diversification, and material innovation that can enable or even accelerate sustainability.

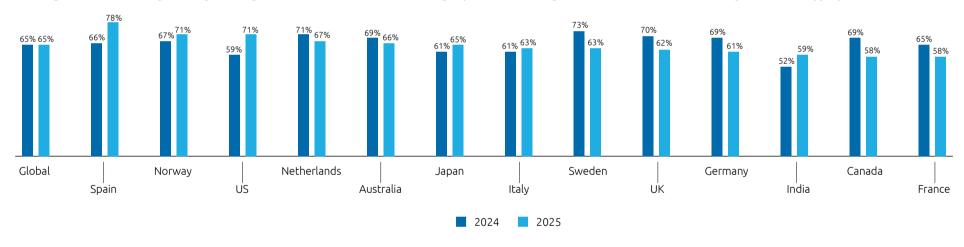
This indicates that the current slowdown is likely temporary, while the broader shift toward sustainability remains strong.

**65**%

of executives report that geopolitical factors are slowing down sustainability initiatives

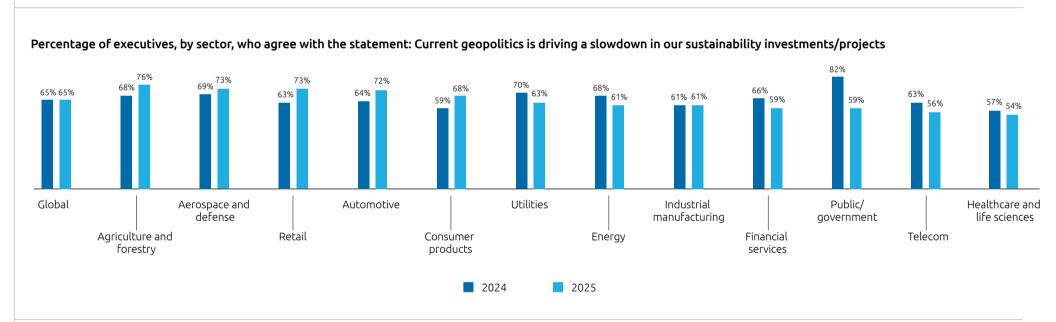
**Figure 26.**Close to two-thirds of executives across countries agree that current geopolitics is slowing down their sustainability investments/projects

#### Percentage of executives, by country, who agree with the statement: Current geopolitics is driving a slowdown in our sustainability investments/projects



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2024, N = 2,152 executives; Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 2,146 executives.

**Figure 27.**Most executives across sectors say that geopolitics is driving a sustainability slowdown



Source: Capgemini Research Institute, Sustainability transformation trends survey, June–July 2024, N = 2,152 executives; Capgemini Research Institute, Sustainability transformation trends survey, June–July 2025, N = 2,146 executives.



"Geopolitical frictions and trade- and tariff-related pressures show that sustainability strategies cannot be static; they need to be flexible so organizations can adjust course without losing sight of long-term objectives."

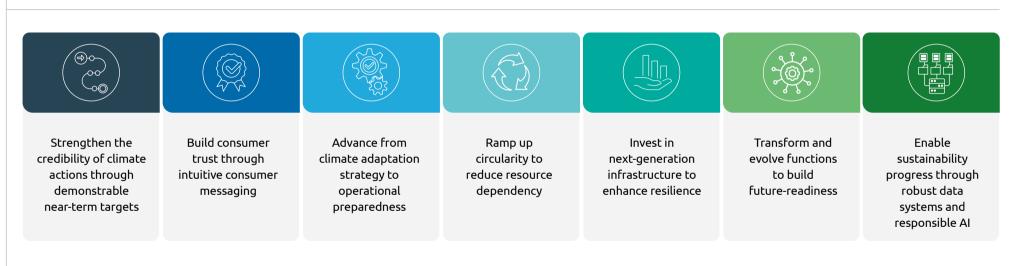
**Shobha Meera**Strategic initiatives, Group Sustainability Services,
Capgemini





To help organizations advance their sustainability efforts and build resilience for the future, we recommend the following targeted actions.

**Figure 28.**Key actions to advance sustainability efforts



Source: Capgemini Research Institute analysis.

# Strengthen the credibility of climate actions through demonstrable near-term measures

To make net zero targets achievable, organizations must develop, science-based transition plans. This includes

setting clear interim targets, allocating capital to support these targets, and publishing transparent roadmaps.

Credible climate action also requires embedding sustainability into operational decision-making and incentive structures. Long-term investments often come with extended payback periods and may be deprioritized without internal mechanisms that support them.

Filip Rosengren, Director – Sustainability at SKF Group, explains: "We have built strong incentives around

sustainability within our organization. If factory heads are evaluated solely on short-term P&L, they may hesitate to electrify a furnace with a 10-year payback period. So, we have made it mandatory for all factories to fully utilize the allocated sustainability funds and deliver a 5% improvement in energy efficiency, year on year. If they fail to meet these criteria, they lose access to other capital or investments."



"We have built strong incentives around sustainability within our organization. If factory heads are evaluated solely on short-term P&L, they may hesitate to electrify a furnace with a 10-year payback period. So, we have made it mandatory for all factories to fully utilize the allocated sustainability funds and deliver a 5% improvement in energy efficiency, year on year. If they fail to meet these criteria, they lose access to other capital or investments."

**Filip Rosengren**Director – Sustainability at SKF Group



## A discussion with Paul Polman

Former CEO at Unilever and co-author of the book "Net Positive: How courageous companies thrive by giving more than they take"

What does it mean for a company to be "net positive," and how can it help future-proof businesses and create long-term value?

Being net positive starts with a mindset shift: recognizing that businesses are deeply connected to society and the environment. It's not enough to minimize harm; organizations need to leave the world better through the way they operate. That means operating within the planetary boundaries defined by science – cutting emissions, restoring nature, and protecting ecosystems.

Today, the cost of inaction is higher than the cost of action, making this a huge economic opportunity. There are also fewer trade-offs than before. Investors, consumers, and employees increasingly reward organizations that adopt sustainable business models. These businesses are more resilient, investable, profitable, and attractive to talent.

The long-term health of any organization depends on serving all stakeholders – employees, consumers, communities, future generations, and the planet. That is the essence of net positive: an investable business strategy that creates long-term value for the organization and society, strengthens resilience, and contributes to a better future

With the current global uncertainty and multiple ongoing crises (polycrisis), how can leaders navigate the short-term pressures and sustain momentum in their sustainability journey? Consistent, courageous, values-driven leadership is what sustains momentum through uncertainty. Many organizations play defense to minimize risk, but the real front-runners turn challenges into opportunities. Courageous leaders don't wait for regulation or crises; they act first. That's how resilience is built.

Values like empathy, compassion, equity, dignity, and respect should guide every decision – from sourcing and operations to investments and how workers are treated. When leaders remain anchored in values despite short-term pressures, that consistency motivates employees, strengthens the fabric of the organization, and delivers better results.

## Build consumer trust through intuitive consumer messaging

Consumer trust hinges on how clearly climate action is communicated. Organizations must simplify their messaging, making sustainability information easier for consumers to understand and act on. Without context, consumer messaging falls short of driving awareness or behavior change. Brands have a role to play in simplifying and clarifying the message, but broader efforts in education are equally critical to deepen public understanding.

By integrating sustainability into classroom learning and driving public awareness campaigns, governments can help ensure that citizens are better equipped to understand and act on sustainability information.

# Advance from climate adaptation strategy to operational preparedness

To effectively navigate the escalating risks of climate change, organizations must advance from climate adaptation strategy to operational preparedness. This

means going beyond planning and embedding climate resilience into the core of business execution. A proactive, structured approach to climate adaptation includes the following key actions:

- Model climate risks and assess impacts. Begin by evaluating how physical and transition risks could affect operations, finances, supply chains, communities, and ecosystems. AI can support this by analyzing large datasets to simulate scenarios and predict business continuity threats.
- **Develop actionable adaptation strategies.** Use risk insights to create concrete plans that embed resilience into business models, products, and supply chains. Align internal policies and processes to support long-term adaptation.
- Upskill teams for climate readiness. Invest in training employees on climate science, adaptation strategies, and regulations, to enable informed decision-making across the organization.
- Design climate-resilient products and services.
   Anticipate shifts in resource availability (e.g., water, energy, and raw materials), embed circularity in the full value chain to reduce waste and tackle resource scarcity, and develop offerings that can withstand climate stressors, identifying resilient alternatives where needed.

- Build adaptive operations and supply chains. Rethink sourcing, supplier engagement, and infrastructure to ensure operational resilience. Diversify supplier bases to buffer against climate disruptions.
- Establish continuous monitoring and refinement. Treat adaptation as an ongoing process. Define adaptation-specific KPIs, integrate metrics into dashboards, and use data to guide strategic decisions and course corrections.

For more information, refer to <u>Climate adaptation:</u> <u>Harnessing tech-driven resilience to create</u> <u>sustainable value.</u>



## Ramp up circularity to reduce resource dependency

As resource scarcity intensifies, organizations must scale up circularity across their value chains to reduce dependency on critical minerals and other key resources. This includes assessing indirect exposure through suppliers and implementing circular strategies to enable recovery, recycling, and reuse of materials. Expanding circular practices not only mitigates disruption risks but also drives long-term sustainability and operational efficiency.

## Invest in next-generation infrastructure to enhance resilience

To withstand intensifying climate risks such as extreme heat and flooding, organizations must upgrade infrastructure for future conditions. This includes upgrading buildings and plants with resilient design features such as heat-resistant materials and elevated foundations, and smart technologies such as IoT sensors for real-time monitoring. Next-generation infrastructure is essential not only for strengthening long-term resilience, but also for improving operational performance and reducing lifecycle costs.

# Transform and evolve functions to build future-readiness

Building resilience amid climate, resource, and geopolitical risks requires organizations to rethink how functions interact and operate. This means shifting from siloed operations to deeply collaborative ways of working where teams such as risk, strategy, finance, and operations work together to respond cohesively to complex challenges. Frequent, in-depth risk reviews should become standard practice, enabling organizations to anticipate disruptions and adapt dynamically. In addition, adaptation may require new functions and operating models to address emerging, cross-cutting risks that fall outside traditional functional boundaries.

# Enable sustainability progress through robust data systems and responsible AI

To accelerate sustainability progress, organizations must build robust data systems that connect sustainability indicators with operational metrics across supply chains, products, and customer interactions. Advances in data engineering and AI now make it possible to link diverse datasets and unlock insights to evaluate the effectiveness of sustainability initiatives and adapt implementation strategies. The ability to comply with regulatory requirements such as the EU's Digital Product Passports (DPP) is also shaped by the robustness of these data systems. Yet, persistent challenges around data availability. accuracy, and accessibility continue to hinder progress. To overcome these challenges, organizations should standardize supplier data collection, implement traceability systems such as digital product passports (only 30% of executives say their organization is implementing DPPs), and invest in digital infrastructure – such as centralized data platforms, automated reporting tools, and dashboards – for timely, cross-functional access to data.

Al is deeply intertwined with data – its reliability depends on the quality and consistency of the underlying datasets, while its capabilities enhance data integrity through anomaly detection, validation, and gap-filling. To ensure Al delivers sustainable business value, organizations must implement Al responsibly. This means embedding sustainability across the Al lifecycle: from selecting energy-efficient hardware and optimizing model architectures, to deploying infrastructure powered by low-carbon energy sources. Organizations should rigorously monitor and disclose their Al carbon footprint, set reduction targets, and prioritize use cases that offer clear business and environmental benefits. Equally important is building robust governance frameworks to ensure ethical, transparent, and sustainable deployment.

**30**%

of executives say their organization is implementing digital product passports



"Organizations need a robust data system that doesn't just track sustainability data in isolation but integrates it with other critical data points beyond financials – with products, supply chains, services, and customers. When combined with AI or Gen AI, such integrated data systems enable organizations to bridge sustainability goals with operational and financial performance by unlocking insights at scale and continuously adapt strategies for short- to long-term impact."

#### **Corinne Tresy Jouanny**

Executive Vice President, Portfolio and Intelligent Industry Lead for Southern Central Europe, Cappemini

## Conclusion

Sustainability remains central to organizational priorities, driven by its critical role in shaping resilient and future-ready organizations. To revive and sustain progress in a volatile environment, organizations must rethink business models, offerings, and value chains to be adaptive and resilient to climate risks, and translate long-term goals into credible, near-term action plans. Achieving this will require strong data infrastructure,

responsible use of emerging technologies, and continuous performance monitoring with timely course corrections. Building consumer trust through clear communications and transparent roadmaps can further strengthen this transition, positioning organizations to capture long-term sustainable business value.

## Research methodology

We surveyed 2,146 executives employed at 716 organizations, each with more than \$1 billion in annual revenue, across 13 countries in North America, Europe, and Asia-Pacific and in 12 industries and sectors.

**Countries covered included:** Australia, Canada, France, Germany, India, Italy, Japan, the Netherlands, Norway, Spain, Sweden, the UK, and the US.

**Industries and sectors covered included:** aerospace and defense, agriculture and forestry, automotive, consumer products, energy, financial services, healthcare and life sciences, industrial manufacturing, retail, telecom, utilities, and the public sector/government.

## Executives surveyed were director level and above. They were divided into the following profile groups:

- Half (50%) were executives from corporate functions, including strategy, sustainability, sales and marketing, finance and accounting, IT, operations, and human resources.
- Half (50%) were executives from value chain functions, including innovation/R&D, product design and development, sourcing and procurement, supply chain and logistics, and manufacturing and production.

On average, we surveyed three executives from each organization. The global survey took place in June and

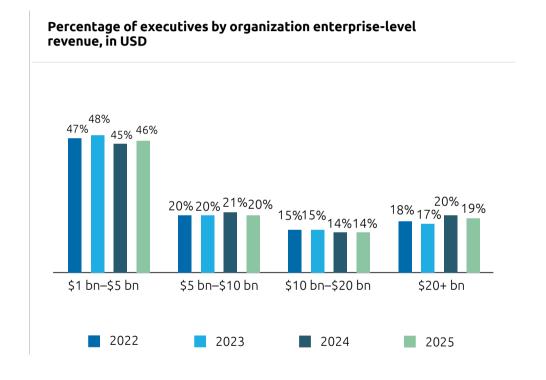
July 2025. The distribution of executives and their organizations is provided in the following charts.

We also conducted a global survey of 6,566 consumers over the age of 18 across the 13 countries. Lastly, we conducted interviews with 15 senior executives at leading organizations globally.

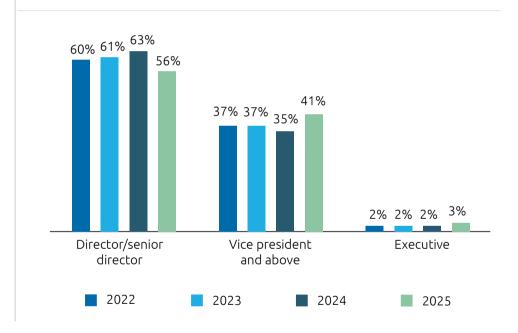
The study findings reflect the views of respondents to our online questionnaire for this research and are aimed at providing directional guidance. Please refer to the methodology for details of respondents and get in touch with a Capgemini expert to understand specific implications.

Note: For any chart that compares 2022, 2023, 2024, and 2025 data, the sample excludes respondents from Norway and the agriculture and forestry sector, as they did not partake in the 2022 and/or 2023 surveys. In these analyses, N = 1,851 executives and 617 organizations.

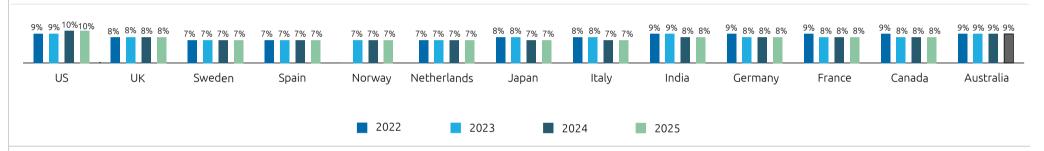
For any chart that compares 2023, 2024, and 2025 data, the sample excludes respondents from the agriculture and forestry sector, as they did not partake in the 2023 survey. In these analyses, N = 1,995 executives and 665 organizations.



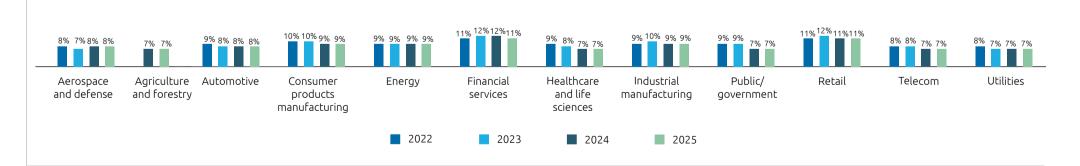
#### Percentage of executives by job title



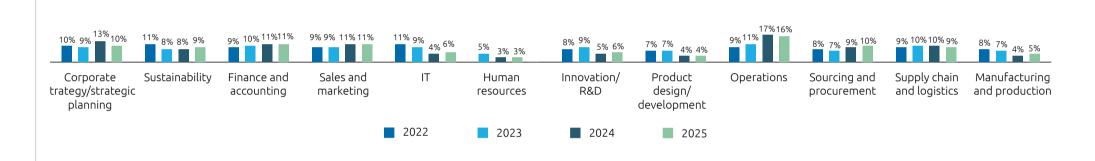
#### Percentage of executives by location of headquarters of current organization



#### Percentage of executives by industry of current organization



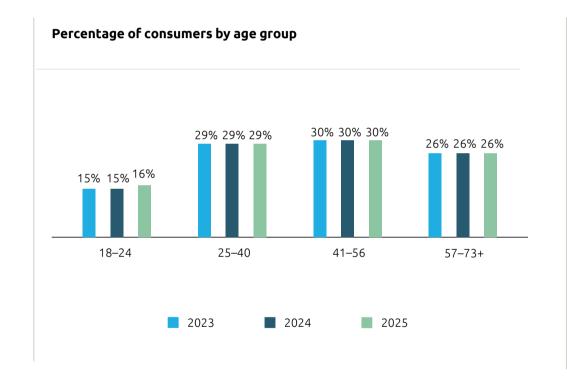
#### Percentage of executives by business function



Source: Capgemini Research Institute, Sustainability transformation trends survey, August–September 2022, N = 2,004 executives, 668 organizations; August–September 2023, N = 2,151 executives, 718 organizations; June–July 2024, N = 2,152 executives, 727 organizations; June–July 2025, N = 2,146 executives, 716 organizations.

<sup>\*</sup>Utilities includes electric utilities, gas utilities, water utilities, and waste management. Energy includes oil and gas, alternative/renewable energy, and energy services. Consumer products manufacturing includes apparel, footwear, household, and personal care. Financial services includes retail banking and insurance.

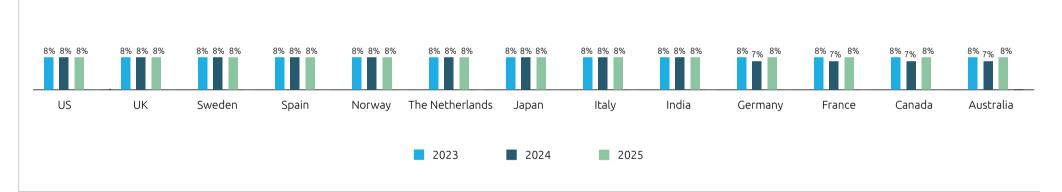
<sup>\*\*</sup>Agriculture and forestry was not included in the 2022 or 2023 surveys.



### Percentage of consumers by gender identity



#### Percentage of consumers by country of residence



Source: Capgemini Research Institute, Sustainability consumer survey, October 2023, N = 6,500 consumers; June–July 2024, N = 6,500 consumers; June–July 2025, N = 6,566 consumers.



## **Appendix**

## Who are the sustainability leaders?

Becoming a sustainable business is a long and complex process, demanding wholesale transformation. To gain a sense of where organizations are in their sustainability journeys and identify the leaders, we mapped their sustainability maturity across three dimensions:

- Value chain processes: These include sourcing, R&D/ product design/innovation, manufacturing, and logistics, as well as the use of technology for sustainability.
- Sustainability enablers: This dimension relates to organizations' getting their people to buy into their sustainability cultures, supported by corporate functions such as IT, finance and accounting, and sales and marketing.
- **Tech accelerators:** This dimension refers to the adoption of digital technologies and pathways to accelerate sustainability transformation.

The building blocks of sustainability transformation

Value chain processes	Sustainability enablers	Tech accelerators
<ul> <li>Sourcing</li> <li>Innovation/R&amp;D product design</li> <li>Manufacturing and production</li> <li>Operations</li> <li>Logistics</li> <li>Technology</li> </ul>	<ul> <li>Vision and leadership</li> <li>Talent</li> <li>Culture</li> <li>IT</li> <li>Finance and accounting</li> <li>Sales and marketing</li> </ul>	<ul> <li>AI/ML</li> <li>Automation</li> <li>AR/VR</li> <li>Collaboration tools</li> <li>3D printing</li> <li>Digital twins</li> <li>IoT/IIoT</li> <li>Robotics</li> <li>Hydrogen</li> <li>Gigafactories</li> <li>Electrification</li> <li>Smart grids</li> <li>Bioeconomy</li> <li>Carbon capture, utilization, and storage</li> </ul>

Source: Capgemini Research Institute analysis.

We identified three cohorts:

- Front-runners: Significant progress along the three dimensions
- **2. Experimenters:** Low maturity in one or two of the above three dimensions
- **3. Beginners:** Low maturity across the three dimensions

# Maturity assessment statements and year-on-year data

Questions asked in each of the four years and used to calculate the sustainability maturity index among organizations in our survey.

Statement	2022	2023	2024	2025	
N = executives	2,004	2,001	1,859	1,851	
Vision and leadership (asked to corporate functions)	% of executives who agree with the statement				
Top leadership share a common vision of how the business needs to change to become sustainable	58%	69%	68%	60%	
The sustainability vision is well integrated into the core strategy of the organization	52%	55%	58%	68%	
We have defined a corporate purpose that extends to the environment and society (i.e., purpose meaning a reason for being beyond profit)	55%	57%	63%	68%	
Sustainability aspects are considered in corporate decisions across the organization	56%	61%	68%	58%	
We have a sustainability task force with representatives from all functions of the organization	53%	55%	63%	54%	
We have a clearly defined priority list of sustainability initiatives to be implemented in the next three years	49%	61%	68%	62%	
Sustainability is part of each of our C-suite executives' agenda	64%	59%	66%	55%	
We are redesigning our business/operating model, so it is more sustainable	37%	57%	62%	50%	
We use third-party sustainability indices to benchmark our progress on sustainability (e.g., Dow Jones Sustainability Index)	50%	42%	54%	57%	
We have a strategy to transition to renewable energy for all sources (i.e., a switch from conventional to renewable energy for electricity, fuel, heating)	54%	60%	68%	60%	

Statement	2022	2023	2024	2025
Vision and leadership (asked to corporate functions)	% of executives who agree with the statement			with
Circularity (i.e., a product is created with its own end-of-life considered; once the user is finished with the product, it goes back into the supply chain instead of the landfill) is a key component of our sustainability strategy	58%	56%	65%	55%
We have internal governance policies and procedures relating to environmental and social sustainability	48%	59%	59%	72%
We use an external third-party to help disclose our environmental impact (e.g., CDP Worldwide)	54%	49%	58%	63%
We have set up an internal carbon pricing to aid our decision- making for new projects	45%	57%	59%	34%
Talent (asked to corporate functions)	% of	executives the sta	who agree v tement	with
Upskilling/reskilling on hard sustainability skills (e.g., renewable energy, carbon accounting, environmental science/engineering, data analysis/visualization) is a top priority for our organization	41%	52%	60%	65%
Upskilling/reskilling on soft sustainability skills (e.g., leadership, innovation, communications, design thinking) is a top priority for our organization	50%	48%	56%	58%
We actively recruit and hire new talent with strong sustainability skills	47%	64%	63%	54%
We train our employees to adopt sustainable practices in-office	50%	64%	74%	64%
We equip our employees with tools to support their low-carbon transition (e.g., giving reusable water bottles to reduce single-use plastic, utilities tracker for carbon footprint)	41%	52%	59%	47%

Statement	2022	2023	2024	2025
Statement	2022	2023	2024	2025
Talent (asked to corporate functions)	% of executives who agree with the statement			with
We train employees on the importance of sustaining the environment	52%	69%	73%	64%
Employees have sustainability KPIs that they are evaluated against as part of performance management	46%	46%	59%	52%
Leaders have sustainability KPIs that they are evaluated against as part of performance management	60%	62%	65%	59%
We have employees with eco-design and sustainable design skills	51%	62%	71%	67%
Culture (asked to corporate functions)	% of executives who agree with the statement			with
Employees understand how our business impacts the environment along the value chain	58%	67%	69%	60%
We encourage research and experimentation to develop new initiatives for sustainability	55%	53%	61%	60%
We provide autonomy to employees to develop new solutions to sustainability challenges	50%	59%	62%	54%
We actively collaborate with interested stakeholders, including customers, investors, academia, and governments, to develop and promote sustainable approaches	48%	55%	57%	67%
Our leaders are focused on profit at the expense of our environmental footprint	29%	39%	41%	52%
All of our sustainability reporting and claims are backed by robust audited data	58%	61%	70%	55%

Statement	2022	2023	2024	2025
<b>Technology</b> (asked to corporate functions)	% of executives who agree with the statement			
We measure the environmental impact of technologies before using them	52%	66%	71%	58%
We use technology to minimize landfill usage efficiently (e.g., smart waste management for tracking, sorting using robots for recycling, using AI/ML to reduce waste)	53%	47%	55%	54%
We use technology such as AI, automation, or digital twins to achieve our sustainability agenda	58%	54%	63%	51%
We are using IoT/IIoT to monitor/reduce energy consumption	56%	57%	61%	62%
We use 3D printing to produce less waste and save fuel required for transport (asked only for industrial manufacturing/CP/LS/auto/telecom/A&D)	40%	60%	57%	53%
We use digital technologies (e.g., AR/VR, collaboration tools) to reduce travel needs of employees	54%	54%	59%	59%
We use blockchain/smart contracts to make our supply chain more sustainable	43%	56%	58%	33%
We use tools such as supply chain control tower for monitoring and measuring our ESG metrics	53%	65%	65%	46%
We use AI/ML to optimize data center utilization	43%	53%	56%	64%
We are able to measure and collect data on all our Scope 1 and Scope 2 emissions	60%	61%	66%	73%
We are able to measure and collect data on all our Scope 3 emissions	60%	51%	58%	54%
Sustainability-related data is available and shared across the entire organization (e.g., functions, business units, employees, managers)	43%	56%	68%	61%
Sustainability-related data is available to interested stakeholders external to the organization (e.g., investors, activists, governments, consumers)	48%	58%	66%	71%

Chahamanh	2022	2022	2024	2025
Statement	2022	2023	2024	2025
Sourcing (asked to value chain functions)	% of executives who agree with the statement			with
We consider the ESG ratings and environmental pledges taken by suppliers during supplier selection	50%	66%	63%	69%
We are working with our tier-1 suppliers to identify measures for reducing their carbon emissions	57%	52%	58%	58%
We are working with our tier-2 and tier-3 suppliers to identify measures for reducing their carbon emissions	54%	50%	60%	46%
We use suppliers who have validated SBTi targets to procure raw materials	51%	57%	65%	51%
We make a concerted effort to source raw materials locally	50%	63%	64%	64%
We are working toward reducing deforestation in our supply chain	55%	60%	62%	48%
Innovation/R&D/product design (asked to value chain functions)	% ol	executives the sta	who agree ' tement	with
We are reducing the use of packaging material in our products (Not asked for public/energy/utilities)	49%	59%	62%	70%
We are designing products so they can serve their originally intended functions longer (i.e., lifetime extension as opposed to planned obsolescence, in which products are designed to fail after a specific time) (Not asked for public/energy/utilities)	57%	47%	55%	55%
We use AI/data analytics to aid in the discovery of optimal raw materials (Not asked for public)	52%	55%	61%	49%
We follow sustainable prototyping and testing processes (e.g., use of additive manufacturing or 3D printing) (Not asked for public/retail/energy/utilities)	46%	56%	62%	41%
We are redesigning products to remove fossil fuel feedstock sources (such as coal) (Not asked for public/retail/energy/utilities)	47%	62%	69%	50%

Statement	2022	2023	2024	2025
Innovation/R&D/product design (asked to value chain functions)	% of executives who agree with the statement			
We are redesigning products to have a lower impact on forests	44%	59%	67%	50%
We are building solutions to reduce the environmental footprint of our end users/customers	51%	57%	63%	53%
We perform LCA (life cycle assessment) on all of our products/ services	54%	55%	56%	59%
Manufacturing (asked to value chain functions)	% ol	executives the sta	who agree v tement	with
We are minimizing over-production and waste in the production process (Asked for industrial manufacturing/CP/LS/auto/telecom/A&D)	60%	73%	67%	72%
We are shifting our manufacturing footprint to places/locales with low carbon alternatives	55%	57%	63%	40%
We are redesigning processes, so they consume less energy (e.g., improving process heating in the production process, powering down equipment at the end of the day)	50%	55%	62%	66%
We measure the energy consumption of our industrial processes	43%	64%	71%	76%
Operations (asked to value chain functions)	% o		who agree tement	with
We use responsible recyclers who do not export our e-waste to developing countries or improperly dispose of it	52%	65%	62%	60%
We are reducing food waste in our operations (e.g., by improving accuracy of forecasting, clearer expiration dates)	48%	43%	53%	66%
We have implemented a water stewardship program (i.e., using water in a way that is socially equitable, environmentally sustainable, and economically beneficial)	55%	64%	75%	53%

Statement	2022	2023	2024	2025
Operations (asked to value chain functions)	% of executives who agree with the statement			
We actively work to recover waste (i.e., using waste as an input material to create useful products as new outputs)	54%	66%	75%	57%
We take back end-of-life products from customers to use them in the remanufacturing process/upcycle	52%	53%	64%	44%
Recycling products is a core aspect of our manufacturing strategy	53%	62%	72%	58%
We monitor the conversion of natural ecosystems (i.e., changes owing to deforestation) on our owned/managed lands	47%	59%	60%	42%
We invest in conserving natural habitats (such as rainforests)	43%	56%	66%	51%
We have smart systems in place to monitor and reduce energy consumption (e.g., sensors to optimize heating in buildings)	54%	58%	65%	69%
We are adopting plant-based food in our operations (e.g., offering only vegetarian meals/snacks in office, promoting plant-based diets to employees/customers)	50%	38%	42%	51%
<b>Logistics</b> (asked to value chain functions)	% о		who agree tement	with
We use analytics for optimizing logistics to reduce travel and associated emissions	48%	72%	72%	68%
We have adopted eco-friendly transportation strategies to reduce emissions (e.g., use of low-carbon fuels, electric vehicles, replacing old fleets with more energy-efficient ones)	62%	56%	64%	55%
We have dedicated reporting from our transportation suppliers on the carbon impact of their services	54%	66%	76%	59%

Statement	2022	2023	2024	2025
IT (asked to value chain functions)	% of executives who agree with the statement			
We know how much carbon our technology (i.e., digital tools, apps, IT systems, data centers) emits	55%	65%	65%	51%
We use a green cloud architecture for our data centers (which reduces power consumption)	48%	45%	54%	62%
We eco-design our IT applications (i.e., designing for the lowest environmental impact such as using "sleep modes" on laptops)	50%	56%	55%	36%
We identify energy-intensive applications and take steps to improve their energy performance	51%	58%	67%	55%
We have green policies for IT hardware and services procurement (e.g., environmental disclosure for IT vendors)	52%	52%	62%	56%
We include a carbon emissions assessment when allocating IT spend	51%	58%	58%	33%
Our organization has a sustainable IT strategy and roadmap	56%	61%	66%	59%
Finance and accounting (asked to value chain functions)	% o		who agree tement	with
We include an assessment of environmental externalities when evaluating projects to fund (e.g., pollution that might be caused by the project that diminishes property values or health of people in the surrounding area)	47%	55%	67%	53%
We report our sustainability impacts (e.g., water usage, GHG emissions, hazardous waste produced) along with our financial performance, on a quarterly/annual basis	46%	55%	58%	67%
We have assets invested in ESG portfolios (i.e., funds that incorporate screening criteria for environmental, social, and governance issues, or invest in socially responsible companies)	57%	60%	65%	71%

Statement	2022	2023	2024	2025
Finance and accounting (asked to value chain functions)	% of executives who agree with the statement			
We have made fossil fuel divestment pledges (i.e., accelerating adoption of the renewable energy transition through the stigmatization of fossil fuel organizations)	55%	59%	68%	33%
We invest in carbon offsets (such as purchase of credits or increase in carbon storage through tree planting, land restoration) to balance out our carbon emissions	54%	52%	61%	56%
We have our sustainability data audited by a third party	50%	54%	61%	72%
We have leveraged debt with the interest rate indexed on our ESG performance/KPIs	49%	53%	67%	57%
	% of executives who agree with the statement			
Sales and marketing (asked to value chain functions)	% 0			with
Sales and marketing (asked to value chain functions)  We educate customers about the importance of adopting sustainable practices	50%			with 73%
We educate customers about the importance of adopting		the sta	tement	
We educate customers about the importance of adopting sustainable practices  We follow external guidelines on responsible communication	50%	the sta	64%	73%
We educate customers about the importance of adopting sustainable practices  We follow external guidelines on responsible communication and advertising to avoid greenwashing  We offer competitive pricing to encourage more people to	50%	67% 51%	64% 54%	73% 59%
We educate customers about the importance of adopting sustainable practices  We follow external guidelines on responsible communication and advertising to avoid greenwashing  We offer competitive pricing to encourage more people to consume/purchase sustainable products/services  We communicate a carbon footprint for every product/service	50% 49% 59%	51%	64% 54% 48%	73% 59% 58%

Source: Capgemini Research Institute, Sustainability Transformation Trends Survey, August–September 2022, N = 2,004 executives; August–September 2023, N = 2,001 executives; June–July 2024, N = 1,859 executives; June–July 2025, N = 1,851 executives.

<sup>\*</sup>Norway is excluded as it was not covered in the 2022 research.

\*\*Agriculture and forestry is excluded as it was not covered in the 2022 or 2023 research.

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Based in New York, Vincent has over 25 years of experience supporting global organizations across industries on their digital transformations and more recently, on their sustainability journeys as Capgemini Group Sustainability Business Accelerator head since 2023. Vincent graduated from EM Lyon in France and started his career in the technology industry in the UK and France, before joining Capgemini in 2008. His passion is to help companies leverage innovative digital and engineering solutions to deliver sustainable and business outcomes



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Florent has more than 20 years of experience in the energy and utilities sector, helping companies achieve their sustainability goals and transition to a low-carbon economy. He advises companies across sectors on their climate, environment, and energy transition strategies. Florent graduated from EM Lyon in France and started his career in the energy industry, before joining Capgemini in 2005. He is a frequent speaker and panelist at the World Climate Foundation events including the World Climate Summit.



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James completed his doctorate with Henley Business School investigating the drivers and outcomes of corporate sustainability. He lectures on sustainability at a number of universities and is an associate member of faculty at Imperial College Business School, London where he teaches Sustainable Business and Carbon Accounting to both undergraduate and postgraduate students. James has led the Capgemini Group's sustainability agenda since setting first carbon reduction targets in 2008. He is driving the Group's global net zero program to reduce environmental impacts across its most material impacts towards the goals of Capgemini becoming carbon neutral no later than 2025 and net zero by 2030.



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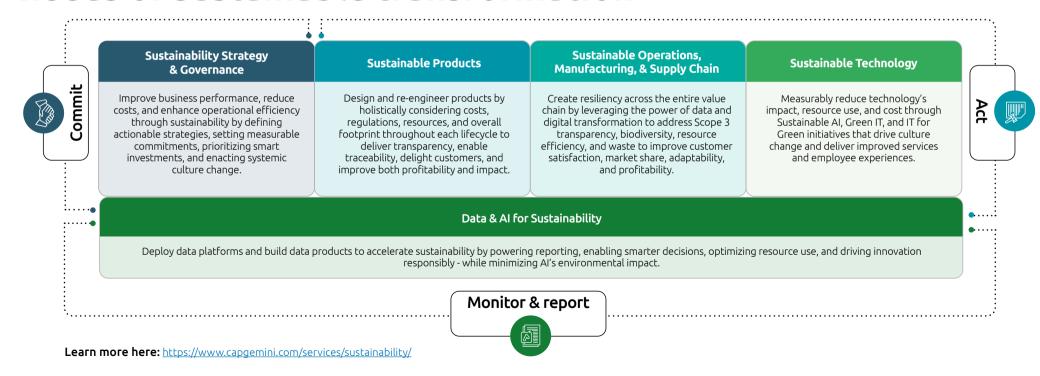
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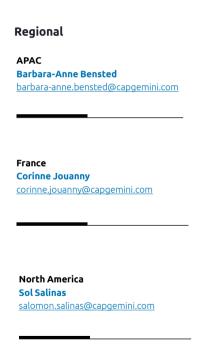
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