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C-SUITE SUSTAINABILITY SENTIMENT

The Visionary CEO's Guide to Sustainability 2026

By *Bain & Co.*

[View the full report here](#)

Notable Highlights

- ◆ **Companies that outperform and hold the competitive advantage** in the coming decade will not have a broad portfolio of sustainability investments but will rather **concentrate capital in the most relevant transitions** for their business **where they have the most conviction** (rather than waiting for certainty).
- ◆ **The top 20% of companies leveraging AI for sustainability** (“Shapers”) account for 86% of sustainable AI use cases and **are 3x as likely to experience the highest-value outcomes** (improving operations, creating commercial advantage, and building resilience) compared to companies utilizing AI to a lesser degree.
- ◆ **Health is consumers’ top purchase criterion**—above quality, environmental impact, price, convenience, and brand. Consumers are paying 24% more for products with both health and sustainability benefits.
- ◆ **83% of consumers have adopted three or more sustainable lifestyle habits** (up from 73% in 2023), including self-identified sustainability skeptics. **38% now use AI** to recommend eco-friendly products.
- ◆ **Investors are focusing** less on sustainability-labeled sectors and **more on the sustainability-linked constraints and inflection points reshaping sectors** (e.g., grid capacity, resilient supply chains, and adaptation infrastructure).
- ◆ The following Report Findings include **strategic priorities and recommendations for companies** to build **business resilience**, create **competitive advantage**, accelerate the **energy transition**, and earn **consumer trust**.

Objective

- To identify 2026 sustainability trends, including climate resilience, sustainable AI, consumer behavior, the Asian energy transition, and sustainability investment.

Background

- The report data is based on a study of 7,500 consumers; a survey of 400 senior professionals responsible for AI and sustainability decisions; Bain’s [2026 Global Energy](#)

and [Materials Outlook](#); an analysis of nearly 150,000 company assets in 12 sectors; and a CDP-partnered analysis of over 700 companies' decarbonization progress against the [Private Markets Decarbonization Roadmap](#) (methodology on pg. 12, 22, 34, 39,49).

- “The New Investment Playbook for Sustainability” section was written in collaboration with CDP.

Report Findings

Companies that best manage the divergence of sustainability transitions will win in the next decade (pg. 4-11):

- Climate transitions depend on **three key enablers** to reach positive economics and scale: **technology, behavior, and policy**.
- Sustainability transitions are diverging across industries, where **investments and technologies are progressing at different paces**:
 - **Only three out of 37 sustainable technologies overperformed 2025 forecasts** (solar, battery storage, EVs), and most missed by a wide margin (details on page 7).
 - Over the past decade, nearly 90% of sustainable capital flowed into green energy, buildings, and mobility, and **less than 10% flowed to agriculture, land use, and manufacturing and materials**.

➤ **Strategic priorities for CEOs to turn sustainable transition divergence into competitive advantage (pg. 32-37):**

Corporate climate resilience (pg. 31-37):

➤ **Three questions to build business climate resilience (pg. 32-37):**

1. **Ask: Where can our business break?** (vs. are we insured against climate risk?)
 - Natural disaster losses are growing 5-7% each year, and **total losses have more than doubled insured losses** over the last five years. Insurance may buy time, but it's not a comprehensive risk strategy.
 - Map the full value chain, including critical inputs, logistics routes, and customers.
 - Determine which risks can't be insured and **quantify exposure** at each point.
2. **Ask: How can we thrive even as other businesses fail?** (vs. what's the ROI on resilience?)

- Rather than focus on near-term financial impact, **manage resilience as a business necessity** like cybersecurity, where short-term payback isn't expected.
 - Climate shocks don't just destroy value; they transfer it to whoever is prepared. The goal is to **be more resilient than competitors**. (Pages 35-36 include examples of company returns from resilience beyond loss avoidance.)
 - Resilience is often **cheapest when built into planned upgrades** rather than retrofitted later. (Pages 34-35 include examples of asset lifecycles.)
- 3. Ask: What keeps supply flowing when diversification isn't enough?** (vs. have we diversified our suppliers?)
- Where feasible alternatives don't exist, **build flexibility** into other aspects, including redundancy, buffer stocks, and supplier agreements that lock in volume and price over the medium term.
 - **Engage upstream** to make supply inputs more resilient, including strengthening supplier capabilities, funding R&D, and developing new production regions early.

Asia's outsized role in the global energy transition (pg. 22-29):

- Many of the factors that will determine the pace, shape, and cost of the global energy transition will play out in Asia.
- **Asian countries are following different energy transition paths** based on their assets and priorities. Pages 25-28 break down the paths of China, India, Indonesia, and South Korea and what they mean for companies.
- Pages 28-29 showcase potential implications for global companies resulting from Asia's energy transition.

Sustainable AI (pg. 38-45):

- **The top 20% of companies leveraging AI for sustainability ("Shapers") account for 86% of sustainable AI use cases and are 3x as likely to experience the highest-value outcomes** (improving operations, creating commercial advantage, and building resilience) compared to companies utilizing AI to a lesser degree.
- There is divergence on how sustainable AI is viewed within companies:
 - **When evaluating sustainable AI investments, GM/C-suite leaders prioritize ROI**, while sustainability leaders prioritize compliance and risk management.
 - Sustainability leaders worry most about accountability and emissions, while GM/C-suite leaders worry about workforce backlash and job-market disruption.

- **To scale sustainable AI**, sustainability teams must **connect materiality, data, and compliance to revenue and resilience**, and business leaders must account for environmental impact and the data/standards needed to manage it.

Consumers are acting more sustainably for reasons beyond the environment (pg. 12-21):

- **85% of consumers globally are concerned about sustainability**, up from 79% last year.
- Consumers are **willing to pay 18% more** for products with sustainability benefits. However, on average, 68% of consumers **struggle to identify the lower-carbon option** between two products.
- **Health remains consumers' top purchase criterion**. 72% say they change what they buy based on PFAS, BPA, or microplastics.

➤ **Recommendations for companies to earn consumer trust (pg. 20-21):**

Sustainability investment (pg. 46-52):

- **Companies acting on climate risk and engaging on policy are now competitive differentiators for investors.**
 - Simply identifying climate risks is no longer a differentiator, as over 96% of companies now do so. However, **fewer than 70% can articulate the financial impact of climate risks**, and only 35% of the 1,200 largest listed companies have disclosed an adaptation plan.
 - Well-designed **adaptation investments return a median of \$10 for every dollar** invested in responding to physical climate risk.
 - Companies that engage governments on carbon pricing and subsidies **reduce emissions intensity almost 4x faster** than those that remain passive.

Chief Sustainability Officers' Outlook

By *World Economic Forum*

[View the full report here](#)

Notable Highlights

- ◆ **49% of CSOs expect their sustainability strategy and investments to remain broadly unchanged** in the next 12 months, and 20% expect them to accelerate.
- ◆ The **strongest accelerators of global sustainability progress** over the next three years will be a **clear business case** (64%) and **cheaper, more available technologies** (56%), followed by value chain collaboration (50%), regulatory predictability and clarity (33%), and stronger demand signals (20%).
- ◆ **85% of CSOs expect adaptation to become a greater focus** of global sustainability over the next three years. **Demonstrating the value of adaptation investments is a key constraint**, driven by uncertain cost-benefit assessments (62%), a lack of leadership buy-in (42%), and short budgeting cycles (31%).
- ◆ **Policy conditions and geopolitical fragmentation will impact sustainability momentum** over the next three years, with **policy reversals/inconsistent regulatory signals** (68%), short-term **performance pressures** outweighing long-term transition priorities (61%), international tensions (54%), public/political **pushback** (30%), and insufficient **enabling infrastructure** (22%) the top expected constraints.
- ◆ **72% believe AI and other digital technologies will be key for driving progress.**
- ◆ In the next three years, **CSOs expect AI to have the greatest positive impact on sustainability through** risk modeling and forecasting (66%), resource and energy efficiency (61%), and measuring and reporting environmental impacts (52%).

Objective

- To provide a snapshot of Chief Sustainability Officer (CSO) sentiment on the global sustainability agenda, including adaptation and resilience, geopolitics, business strategy, and AI.

Background

- This report data is based on a survey of 103 CSOs from large companies, research, and insights from the WEF [Chief Sustainability Officers' Community](#), [Centre for Nature and Climate](#), and [Centre for the New Economy and Society](#) (methodology on pg. 3, 21).

- The survey was conducted amid escalating geopolitical tensions, including in February 2026, when the U.S. and Israel launched air strikes on Iran. Most participants completed the survey before the conflict.

Report Findings

CSOs expect sustainability progress despite headwinds (pg. 6-10):

Short-term CSO outlook (over the next 12 months):

- 58% believe more businesses will report their **climate- and nature-related risks**.
- Progress is likely to diverge across sectors, markets, and regions due to varying priorities, competitiveness, and resilience:
 - 64% expect **emerging markets** to play a growing leadership role in sustainability efforts.
 - **85%** expect the **commercial gains** from sustainability to be **unevenly distributed**, suggesting that progress will be determined less by ambition and more by delivery capacity.

Medium-term CSO outlook (over the next three years):

- Only **7%** expect **international agreements to drive sustainability progress** over the next three years, as policy implementation has become less predictable, and environmental action is increasingly reframed through national priorities such as competitiveness, energy security, and industrial resilience.
- **Climate and nature concerns appear to compete with more immediate issues**, such as inflation, crime, poverty, and unemployment.

CSOs are working to maintain sustainability momentum under short-term pressures (pg. 11-13):

- **65% of C-suite leaders still view sustainability as a compliance obligation**, 50% as a social license to operate, and just 41% as a source of business growth or value.
- **66% of CSOs expect decision-making to shift further toward shorter-term performance priorities** over the next year, putting a premium on sustainability initiatives that strengthen competitiveness, operational resilience, and financial performance.

- Nearly **two-thirds say investor expectations are critical** or very important for shaping corporate sustainability action—considerably higher than customer or workforce expectations (16%).

Companies are primarily using AI as an operational capability (pg. 14-17):

- **AI's near-term sustainability value primarily lies in strengthening businesses' ability to execute on objectives**, including improving operational decisions, resource use, and the speed and quality of sustainability information. E.g.:
 - Schneider Electric used AI-enabled microgrid optimization to reduce energy consumption by 14% and CO2 emissions by 28% per site across 97 locations.
 - Lenovo used AI-enabled data center management to reduce energy consumption by 6.5-11% while improving workload and cooling efficiency.
- About **half of CSOs (52%) believe AI will lead to measurable improvements in business sustainability performance** in the next 12 months.
- **AI's sustainability benefits will likely be unevenly distributed:**
 - 68% believe **gaps in workforce skills and capabilities will significantly constrain** their ability to use AI for sustainability in the next 12 months.
 - 58% of CSOs expect AI's sustainability benefits to be highly concentrated by sector and region.
- **AI should be treated as a sustainability accelerator** rather than a substitute for sustainability strategy. **Success will depend as much on execution as on technology**, including reliable data, clear governance, cross-functional skills, low-carbon infrastructure, and well-defined operational use cases.
- **Named areas of sustainability risks associated with AI:**

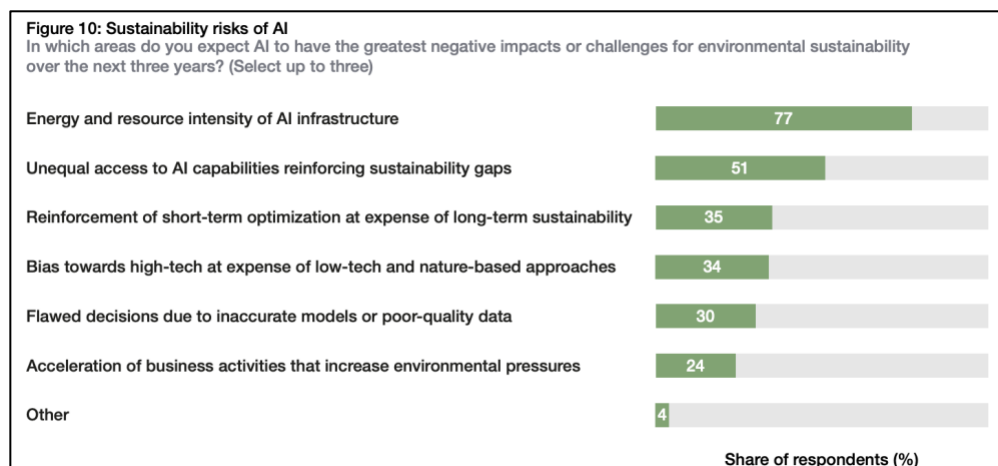


Image taken from pg. 16

Execution is a key challenge of climate adaptation (pg. 18-20):

- CSOs believe **distribution and logistics (54%), operations (53%), and insurance cost and availability (42%)** are the value chain aspects most vulnerable to climate- and nature-related impacts over the next three years.
- **One-third believe focusing on adaptation will divert resources from mitigation efforts** in the next three years.
- **77% believe private-sector investment will be decisive**, but capital alone won't scale adaptation.
- **Investable structures, risk-sharing mechanisms, clearer revenue or repayment models, and stronger public-private collaboration are needed** to turn the value of adaptation (i.e., avoided disruptions rather than revenue generation) into a credible business case.

SUPERPOLLUTANTS

Superpollutant Roadmap for Corporate Action

By *Carbon Containment Lab (CCL)*, with support from the *Beyond Alliance*

[View the full report here](#)

Notable Highlights

- ◆ Superpollutants are **responsible for nearly half of the warming reduction required** to keep the planet below 2°C by 2100, and cutting them is the **fastest and lowest-cost way to slow warming** this coming decade.
- ◆ Out of 40 companies in sectors with superpollutant exposure, **88% name methane in their sustainability reports, but only 33% have a quantified target**; 75% name F-gases, but 15% have a target; and 63% name nitrous oxide, but 3% have a target.
- ◆ **Resource reallocation and funding are needed**: Global annual **methane abatement finance** averaged \$13.7 billion in 2021-2022, but an estimated **\$48 billion is needed** by 2030.
- ◆ The CCL **Superpollutant Mitigation Measures Catalog** features **over 200 mitigation measures, 60% of which are mature** and ready to scale and some of which **cost less than \$1 per ton or even provide net savings**.
- ◆ There are **three mechanisms** for superpollutant mitigation in your value chain: **direct operational action, supplier engagement** (e.g., developing mitigation projects with business partners), and **market-based instruments** (e.g., **book-and-claim credits**).
- ◆ Companies can finance mitigation beyond their value chain through **superpollutant credits** (generated by superpollutant projects), which are **abundant and significantly cheaper** than other categories, and have **higher average quality**.
- ◆ The following Report Findings include **priority actions for value chain intervention, policy engagement**, and purchasing superpollutant credits for the next 12-24 months and through 2030.

Objective

- To provide an overview of five types of superpollutants and a roadmap for companies to reduce them.

Background

- “Superpollutants” are climate pollutants that trap significantly more energy per molecule in the atmosphere than carbon dioxide.
- The report covers methane, nitrous oxide (N₂O), ozone-depleting substances (ODS) and fluorinated gases (F-gases), black carbon (soot), and tropospheric ozone (an indirect pollutant formed through reactions involving “precursor gases” like methane).
- The report data is based on:
 - The CCL [database](#) of 204 superpollutant mitigation measures (pg. 100-104).
 - Modeling of the [IPCC’s scenario](#) of 2°C of warming by 2100 against a business-as-usual scenario of 2.7-2.8°C (pg. 40, 105-106).
 - Input from a multi-stakeholder expert Advisory Council (pg. 2).
 - A review of public climate disclosures from 40 large companies in sectors with superpollutant exposure (e.g., technology, media, and finance) (pg. 30).
 - Interviews with corporate practitioners (pg. 30).
- Value chain interventions were selected from the CCL [database](#) based on factors such as declining cost per ton, market readiness, and financing gaps (pg. 107-109).
- [Industrial Economics, Inc.](#) contributed to the “Value Chain Intervention” chapter.

Report Findings

The case for corporate superpollutant action (pg. 5, 15-16, 38-44):

- **Superpollutants** account for only a small percentage of global annual anthropogenic emissions by mass but **are responsible for roughly half of the gross global warming.**
- **Keeping global warming to 2°C requires global superpollutant emissions to fall around 50% by 2050** (approximately 142 Gt CO₂e of avoided emissions).
- **Superpollutant mitigation is an essential complement to decarbonization because:**
 - Burning fossil fuels releases reflective sulfate aerosols, which cool the planet (“aerosol cooling”). As fossil fuel use declines, hidden warming is “unmasked.” **Superpollutant mitigation is the main lever to counter unmasking**, since most measures reduce warming without removing aerosol cooling.
 - Cutting superpollutant emissions **can immediately reduce warming because most are short-lived** in the atmosphere relative to CO₂. For example, a ton of methane abated in 2027 delivers most of its climate benefit by the 2040s.

- A **~35 Gt CO₂e superpollutant reduction requires about 300 Gt of CO₂ abatement** to have the same temperature impact by 2050.
- Rapid superpollutant abatement **buys time to scale slower, capital-intensive CO₂ reductions** in heavy industry and infrastructure.
- **Companies are uniquely positioned to close the gap on a 2°C pathway.**
 - The **largest reduction opportunities are concentrated in** oil and gas, cooling and refrigeration, waste, industrial chemicals, and agricultural supply chains—**systems** that can be regulated and financed but **that companies ultimately operate and own.**
- **Much of the needed abatement is low-cost and easy to target:**
 - A large share of methane and F-gas abatement has **negative or low net cost** because captured gas can be sold, upgrades improve energy efficiency, and fixes are often routine maintenance rather than capital-intensive projects.
 - Many superpollutant emissions are concentrated in **identifiable point sources** and equipment rather than spread across combustion processes in the economy, as with CO₂.

The state of corporate superpollutant action (pg. 10, 29-36):

- **Common hurdles for corporate action:**
 - They **sit almost entirely in Scopes 1 and 3**. 58% of S&P 500 companies with a Scope 1 target report flat or rising Scope 1 emissions, and 62% report flat or rising Scope 3 emissions.
 - They're **harder to measure than carbon** because they leak from equipment and vary with weather, herds, and soil.
 - **Standards overlooked them:** The **SBTi** bundled superpollutants into aggregate CO₂e targets without requiring gas-specific goals. However, starting in 2027, large companies' near-term Scope 1 targets must cover 100% of emissions.
 - Many companies can identify their major superpollutant sources but **lack a credible methodology** for how reductions count toward existing climate commitments and clarity on how to include action in climate plans.
 - Value chain **interventions are typically pilots** vs. portfolio commitments.
- **Three common characteristics of “pathfinder companies”:** (1) they act where the gas is concentrated and measurable, not where the aggregate footprint is largest; (2) they act on pollutants beyond their value chain; and (3) they treat superpollutant action as a managed program, not a pilot, with a baseline, target date, and accountable owner.

- Page 35 includes **examples of companies taking action** on superpollutants.
- The [Superpollutant Action Initiative](#) offers a model for collective action (pg. 36).

Overview of the five types of superpollutants (pg. 17-27):

- **Methane — The largest superpollutant contributor, though emission reductions are largely technically feasible and cost-effective today.**
 - Methane emissions account for about **30% of gross global warming** since pre-industrial times.
 - The Carbon Containment Lab [database](#) includes **60 mitigation measures**.
- **Nitrous oxide (N2O) — Should be considered a near-term priority** because proven technologies are available and low-cost. **Agricultural measures also show strong potential.**
 - N2O accounts for approximately 10% of net global warming since pre-industrial times, with agriculture producing over 70% of human-caused N2O.
 - The [4R framework](#) can **cut over 50% of agricultural N2O emissions** while maintaining yields and generating net savings of around \$85 per ton of CO2e when societal benefits are included.
 - Within the industry sector, **pollution controls** at nitric acid and adipic acid plants **could abate 116 Mt CO2e annually by 2030**, with two-thirds achievable at just \$0.50-\$5 per ton.
- **Ozone-depleting substances (ODS) and fluorinated gases (F-gases) — They require management across their full lifecycle**, transitioning to low-/zero-[GWP](#) gases and equipment, and reducing global cooling demand.
 - An estimated **3.8 million tons of ozone-depleting substances** (about 6.8 billion tons of CO2e) **sit in old equipment and stockpiles**.
 - Due to rising cooling demand, the **global cooling sector** is projected to account for over **10% of global emissions** by 2050.
 - Hydrofluorocarbons (HFCs) account for around 90% of F-gas volume/emissions.
 - **Global use of the most potent known GHG**, sulfur hexafluoride (SF6) (used in electrical grid equipment), **is rising** as grids expand to support economic growth and renewable energy deployment.
- **Black carbon (soot) — Reduction could deliver a near-immediate climate response**, as it has the shortest atmospheric lifetime of any major climate pollutant—just days to weeks.

- Fine particulate pollution (of which black carbon is a disproportionate component) is linked to an **estimated 4.7 million premature deaths** globally each year.
- Fully implementing **available controls could cut black carbon emissions by up to 80%** over 20 years, with a large share achievable at **net cost savings**.
- When deposited at high latitudes, black carbon **accelerates regional ice melt**. **Retrofitting ships** on Arctic routes may offer outsized climate returns.
- **Tropospheric ozone** — This indirect pollutant forms through reactions involving “precursor gases” such as methane and carbon monoxide and leads to **health and food-security costs**.
 - By 2030, tropospheric ozone is **projected to reduce crop yields by 5-26%** for wheat and 4-9% for maize.

The CCL Superpollutant Mitigation Measures Catalog (pg. 8-9):

The *Superpollutant Mitigation Measures Catalog* features **over 200 mitigation measures**, including their maturity level, whether carbon market methodologies exist for them, and which value chain mechanisms may suit them.

- **Priority mitigation measures for companies** (with high scalability potential and mechanisms to support them):

Project Type	Superpollutants Mitigated	Mechanism	Status
Biomethane from Manure Lagoons/ Anaerobic Digesters	Methane, Nitrous Oxide	Renewable Natural Gas (RNG) certificates; Spot or Forward purchase of carbon credits	Ready for expansion
Landfill Gas Capture & Destruction	Methane	Spot or Forward purchase of carbon credits	Ready for expansion
Lifecycle Refrigerant Management	F-Gases (various)	Spot or Forward purchase of reclaimed gas; and/or carbon credits supporting leak detection & repair or destruction.	Ready for expansion
Rice Methane Mitigation	Methane	Spot or Forward purchase of carbon credits/Environmental Attribute Certificate (EAC)	Gain more MRV experience with deployments
Plugging Orphaned Oil & Gas Wells	Methane	Spot or Forward purchase of carbon credits	Resolve key measurement and methodology issues
Industrial N ₂ O	Nitrous Oxide	Spot or Forward purchase of carbon credits	Resolve key methodology additionality issues

Image taken from pg. 9

Key levers for driving corporate superpollutant action (pg. 46-84):

Lever #1: Value chain intervention (pg. 46-62):

- **Some superpollutant hotspots recur across industries and are immediately actionable through market-based interventions. E.g.:**
 - **Agriculture and organic waste:** Capture methane from agricultural and organic waste with anaerobic digesters, convert it to renewable natural gas, and sell it through book-and-claim certificates.
 - **F-gases:** Buy reclaimed refrigerants through forward offtakes or book-and-claim certificates. Engage suppliers to manage F-gases properly throughout their lifecycle and phase out high-GWP gas equipment in procurement cycles.
 - **Industrial nitrous oxide:** Buy clean materials in sectors that rely on nitric and adipic acid (e.g., textiles and agriculture). Provide financing via insetting projects. Engage suppliers on best practices.

- Pages 59-61 include **examples of corporate value chain superpollutant projects.**
- Pages 52-58 provide **a five-step decision framework for value chain superpollutant action**
- Page 62 outlines **priority actions for value chain interventions** over the next 12-24 months and by 2030.

Lever #2: Voluntary carbon markets (VCM) (pg. 64-76):

- By the end of 2025, superpollutants were the **third-largest category of available credits in the VCM** by issuance volume. Around **61 million credits were issued** in 2025, 80% of which came from F-gas and methane projects.
- **Four key criteria for companies selecting superpollutant credits (additional information on pg. 110-115):**
 1. **Scalable:** The project has the technical and market potential for replication, widespread application, and future cost reduction.
 2. **Value:** The project has strong unit economics, a credible path to economies of scale, price/cost transparency, and reasonable verification and diligence costs.
 3. **Quality:** Consider additionality, the net climate benefit across the full lifecycle, and co-benefits.
 4. **Path to policy:** Projects build capacity for future regulation by funding innovation, MRV improvements, and cost reductions.

- Page 75 breaks down how companies can **“stack” superpollutant credits to extend their climate benefit** over time.
- Page 76 outlines **priority actions for companies purchasing superpollutant credits** over the next 12-24 months and by 2030.
- Pages 116-128 include superpollutant credit **case studies**.

Lever #3: Policy engagement (pg. 78-84):

- **Superpollutant policy is unevenly developed and fragmented across authorities** because superpollutants have distinct characteristics and mitigation pathways.
 - Methane policy is accelerating through national and sector-specific rules.
 - F-gases are governed through mature, treaty-backed policy.
 - Nitrous oxide, tropospheric ozone, and black carbon are governed largely through fragmented, indirect, or emerging frameworks.
 - **Companies that engage suppliers, contractors, and sourcing regions early are better positioned for policy changes:** Much of companies’ regulatory exposure sits in value chains rather than direct operations (e.g., F-gas quotas constrain a tech company’s cooling equipment suppliers rather than its data centers).
 - Superpollutant policy is tied to various near-term benefits (e.g., reducing black carbon can improve air quality). Companies that **frame superpollutant strategies around near-term benefits** are more likely to gain support from policymakers and communities.
- Pages 80-81 include a **snapshot of the policy landscape**.
 - Page 82 outlines **five ways companies can help advance superpollutant policy**, from leveraging procurement to including superpollutants in climate planning
 - Page 84 outlines **priority actions to help accelerate superpollutant policies** over the next 12-24 months and by 2030.

CLIMATE RESILIENCE

A World in Balance 2026: The Resilience Reset

By Capgemini Research Institute

[View the full report here](#)

Notable Highlights

- ◆ **Climate and water are becoming material business constraints:** Nearly 90% of organizations report climate-related supply chain disruptions, and 61% of executives believe **water scarcity will constrain** business growth **more than energy availability** over the next five years.
- ◆ **Most organizations are still building the capabilities needed to quantify and manage their climate and water exposure:** Only 15% have fully quantified the financial impact of climate-related disruptions, 27% have assessed climate risks across their value chain, and around 50% have a water stewardship program.
- ◆ Growing climate and geopolitical disruptions are leading companies to **reposition sustainability around resilience**: 68% are now prioritizing climate adaptation in their business strategy, and 71% say securing **access to critical resources influences** sustainability decisions **more than emissions-reduction targets**.
- ◆ **64% are using AI to achieve their sustainability agenda.** However, concern for AI's environmental impact is outpacing companies' ability to measure it: only **54% have responsible AI governance**, and 46% optimize AI to reduce environmental impacts.
- ◆ The following Report Findings include **actions to enhance business growth and resilience, and scale sustainability using AI**.

Objective

- To examine how companies are building climate resilience, including addressing climate, water, and geopolitical risks; balancing emissions goals with resilience; scaling sustainability investment; and harnessing AI.

Background

- The data in this fifth annual report is based on a survey of 2,100 senior executives at 701 organizations with over \$1 billion in annual revenue across 13 countries; interviews

with senior sustainability and business leaders; and a survey of 6,500 global consumers (methodology on pg. 12, 61, 63).

- Companies are assessed through a sustainability maturity index and categorized across three dimensions: Front-Runners (significant progress in value chain processes, sustainability enablers, and tech accelerators), Experimenters (low maturity in one or two dimensions), or Beginners (low maturity across all three dimensions).

Report Findings

Climate and water are becoming critical business constraints (pg. 15-33):

- **44% of companies say they are underprepared** for climate-related impacts.
- **Water is becoming a strategic business constraint**, though companies are still building the capabilities to act:
 - **51% now treat water risk with the same rigor as climate**, energy, or carbon risk.
 - 65% understand which operations are in water-stressed or high-risk basins.
 - Around **50%** are redesigning production processes to consume less water; 42% are adapting operations in water-stressed regions; and 35% are using AI to manage risks.
- Pages 18-19 include **examples** of corporate adaptation actions.

Sustainability is increasingly being anchored to resilience (pg. 35-48):

- 60% of executives say their organizations are **balancing emissions-reduction goals with resilience, security, and continuity** due to geopolitical disruptions.
- Companies are **increasing investment in energy security** (67%), supply chain **localization** (66%), supplier **diversification** (56%), and **energy efficiency** (55%).
- **Half of manufacturing organizations are investing** in material substitution, recycling, and product redesign **to reduce reliance** on critical minerals.

Value creation is fueling sustainability investment (pg. 51-59):

- **69% report a net-positive ROI** from sustainability initiatives (up from 49% in 2025).
- **83% expect to increase sustainability investment** over the next 12-18 months (unchanged from 2025), and only 11% report deprioritizing sustainability initiatives. (Page 55 includes **examples** of investments.)
- **76% plan to increase adaptation investment** over the next year.
- **Geopolitical disruptions are reshaping investment plans, not derailing them.**
 - Geopolitical disruptions have led companies to make faster progress on priority sustainability goals (60%) and accelerate investment in local, resilient, sustainable supply chains (57%).
 - At the same time, **36% report greater reliance on carbon-intensive energy** or materials, and 23% report delays or scaling back of circular economy programs.
- **Consumers expect companies to continue sustainability efforts** despite geopolitical challenges (64%) or higher costs (54%), **and to communicate transparently** despite a risk of criticism (71%). Meanwhile, **51% of executives say political/public scrutiny has made their organization more cautious** about communicating sustainability ambitions.

There is a gap between sustainability ambitions and execution (pg. 61-71):

- **Corporate sustainability maturity fell for a second year: Only 5% of organizations qualify as Frontrunners** (making significant progress across value chain processes, sustainability enablers, and tech accelerators). **76% are Experimenters** (low maturity in 1-2 of those dimensions), and 19% are Beginners (low maturity in all dimensions).
- Only **42%** of organizations are **on track to meet 2030 or interim emissions targets**.
- 74% say **sustainability regulations are driving increased spending** on data, transparency, and reporting capabilities.
 - 72% are investing in **digital systems** to capture and report sustainability data.
 - 66% are enhancing **product-level environmental footprint** reporting.
 - **Data gaps are hindering efforts**, including fragmented supplier data (87%), limited visibility beyond Tier 1 suppliers (71%), and inconsistent standards (66%).

How companies are using AI for sustainability (pg. 73-88):

- The **top three AI use cases for sustainability** are supply chain/logistics optimization (61%), energy efficiency and reducing energy use (52%), and reporting and data checks (50%) (see **examples** of company use cases on pages 83-84 and 86).
- Executives say AI has significantly **increased their organization's GHG emissions (45%) and water usage (35%)**.
- **Data foundations are businesses' biggest barrier to scaling AI for sustainability**, with the **top three challenges** being limited access to value chain emissions data (76%), a lack of the right data management tools and technologies (70%), and a lack of a centralized platform to consolidate emissions data (65%).

Actions to enhance business resilience and growth through sustainability (pg. 90-98):

- **Shift sustainability from a compliance and reporting exercise to a source of resilience and business value. E.g.:**
 - **Link sustainability priorities** to specific business outcomes, including growth, cost efficiency, resilience, risk mitigation, and innovation.
 - Identify and prioritize **sustainability-driven value pools** across products, services, operations, and supply chains.
 - **Establish governance**, executive ownership, and accountability mechanisms.
- **Build resilience against climate-related disruptions. E.g.:**
 - Incorporate climate and resilience scenarios into **strategic planning**, capital allocation, and risk management processes.
 - **Enhance visibility** into supply chain risks through monitoring and early-warning mechanisms.
 - **Establish accountability** and performance metrics to ensure climate risks and resilience priorities are managed consistently over time.
- **Strengthen resource security. E.g.:**
 - **Map risks and dependencies** related to constrained resources across operations and supply chains.
 - Invest in **circular approaches** like reuse, resource recovery, and renewables.
 - **Engage and collaborate** with suppliers on high-risk resources, especially water.
- **Leverage climate tech to accelerate sustainability outcomes.**

- **Build consumer confidence by ensuring sustainability claims and communications** are supported by measurable outcomes and verifiable data; aligned across products, brands, reports, and stakeholder channels; and backed by certifications, reporting standards, and third-party assurance.

Actions for harnessing AI to scale sustainability (pg. 98-102):

- **Build agentic AI operations for sustainability. E.g.:**
 - **Embed AI and agentic systems** into emissions management, climate adaptation, resource optimization, supplier engagement, and reporting.
 - Enable **proactive interventions** by using AI to continuously monitor and predict climate, energy, water, resource, and supply chain risks.
 - Deploy **cross-functional networks** of AI agents to identify opportunities, coordinate action, and optimize outcomes.
- **Use AI to design lower-carbon, resource-efficient, and circular products/services. E.g.:**
 - Apply AI-driven simulation, digital twins, and lifecycle assessment tools to evaluate environmental impacts earlier in the design process.
- **Establish a sustainable AI control plane to govern AI systems at scale. E.g.:**
 - Establish **enterprise-wide AI governance**, including accountability, transparency, policy enforcement, and auditability.
- **Build the right data foundations and mastery. E.g.:**
 - Define a **sustainability data strategy** that aligns data investments, governance, and architecture with sustainability and business outcomes. Prioritize the data sources, products, and capabilities required to **support AI-enabled execution**.
 - Integrate internal and external sustainability data into a **trusted data foundation** by combining operational, financial, and value-chain data on a common platform.
 - **Standardize methodologies**, metrics, and business rules across the enterprise to calculate sustainability measures consistently.
 - **Encode standardized sustainability** metric definitions, business rules, and domain expertise so AI systems generate reliable insights, support decision-making, and execute sustainability actions at scale.

SUPPLY CHAINS

State of Supply Chain Sustainability 2026

By *MIT Sustainable Supply Chain Lab*

[View the full report here](#)

Notable Highlights

- ◆ **Companies integrating sustainability into their supply chain** reported improved visibility, **operational efficiency**, and **compliance** with regulations and customer requirements (61%), higher risk identification, **supplier performance**, **resilience** to disruptions, and waste reduction (55%), and **lower operating costs** (51%).
- ◆ While **83% of executives rate sustainability as important/very important** to long-term business success, **only about half** of companies with public sustainability goals **have a formal cross-functional sustainability team**.
- ◆ Over **70%** of companies regularly **use sustainability criteria in supplier selection**, training and resources, emissions-data requests, and long-term contracts.
- ◆ **63% use AI to estimate emissions** where supplier data is missing and aggregate data across sources.
- ◆ Half of **companies using AI for emissions tracking are very confident in the accuracy** of their Scope 3 estimates, compared with about 15% for those that are not.

Objective

- To assess the state of corporate supply chain sustainability, including internal governance, Scope 3 emissions, Industrial vs. Agentic AI, freight transportation, and warehouse automation.

Background

- The data in this seventh annual report is based on a survey of 1,810 sustainability, supply chain, logistics, and operations professionals across 91 countries, including a subset of 348 respondents from freight transportation companies and about 368 from companies with warehouse/distribution operations (methodology on pg. 12-13, 40, 48).
- “Industrial AI” refers to AI that supports prediction, optimization, and decision-making in operational processes. “Agentic AI” refers to AI that autonomously or semi-autonomously makes and executes decisions with limited human intervention.

Report Findings

How companies are integrating sustainability in supply chains (pg. 22-25):

- Sustainability is primarily managed as an operating consideration rather than a design principle. **Companies should explicitly consider sustainability in transportation and logistics** (39%), followed by procurement and sourcing (35%), warehousing and distribution (34%), and product and packaging design (33%).
- **Companies' toughest supply chain sustainability challenges:**
 - **Environmental:** energy consumption (39%), waste reduction and recycling (33%), water scarcity (21%), climate-related supply chain disruptions (20%)
 - **Operational:** End-to-end supply chain visibility (33%), tech and data integration (31%), supplier compliance and performance (29%)
 - **Financial:** cost pressures and justifying the business case (29%), high cost and effort required for sustainable data (21%)

Scope 3 emissions (pg. 26-29):

- Around **75% now use both spreadsheets and carbon accounting software** as Scope 3 tools, with spreadsheets remaining embedded in emissions workflows to bridge fragmented data sources. About 60% use life-cycle assessments or custom solutions.
- **Industry collaboration on Scope 3 is sharply increasing:**
 - Participation in joint supplier engagement and decarbonization programs nearly doubled from 2025 (from ~31% to 58%)
 - Partnerships to manage shared suppliers' emissions more than doubled to 55%.
 - Cross-sector partnerships rose from 28% to 47%.

Public sustainability ambition is outpacing internal governance (pg. 18-20):

- 57% of companies with a formal **cross-functional team** frequently or always **build sustainability into day-to-day decisions**, compared to only 13% of those where responsibility sits in a single function.
- Only around half of companies (**52%**) **have oversight at the executive/management level**, 33% have board oversight, and 15% have no formal oversight.

Companies using AI for supply chain sustainability (pg. 30-39):

- **47% of companies use AI while continuing to weigh or monitor its environmental impact**; 37% fully embrace it, believing its benefits clearly outweigh its environmental impact; and 9% avoid or limit it because of environmental concerns.
- **AI adopters report strong operational gains**, including reducing material waste (86%), identifying emissions-reduction opportunities (84%), and lower energy/fuel use (81%).
- **Industrial AI** (which supports decisions) **is still more common than Agentic AI** (which makes and executes decisions) across every supply chain function.
 - Within supply chain operations, Industrial AI is most used for demand forecasting and inventory planning (46%), procurement and risk management (45%), and production scheduling (44%). Agentic AI is most used for production scheduling (28%).
 - Industrial AI is most used for energy efficiency and carbon reduction (74%), product innovation and eco-design (73%), and sustainable sourcing and materials (69%).
 - Among companies using **Agentic AI**, **only 19% have fully integrated** autonomous decision support across most of the organization.

Geopolitics are impacting companies' ability to deliver on sustainability (pg. 14-18):

- 59% of sustainability professionals say their **companies became more committed to sustainability after President Trump's re-election** and the US withdrawal from the Paris Agreement, while 13% became less committed.
- 84% say that ongoing **geopolitical conflict is limiting the effectiveness** of their organization's climate action.
- 68% say **tariff uncertainty has led their organization to scale back**, delay, or compromise sustainability strategies.
- About 33% say tariff changes or **trade disputes have increased their operational emissions** due to rerouted freight, supplier switches, or less efficient sourcing locations.

Freight transportation (pg. 40-47):

- **Over 90% of freight companies are testing or scaling emission-reduction measures**, including scaling or embedding route optimization (76%), load consolidation (~70%), driver behavior and carrier performance requirements (both ~67%), modal shifts (63%), alternative fuels (61%), and electric vehicles (54%).
- 60% of European companies have scaled or embedded EVs in operations (vs. 36% in North America), and 63% have scaled or embedded alternative fuels (vs. 50%).
- **8% have fully converted their fleets to low-emission energy**. 43% still operate on conventional diesel, and 19% run on low-emission sources for half or more of the time.
- **24% are running hydrogen pilots** or planning to deploy it in 1-3 years, 6% are deploying it at meaningful scale, and approximately 8% have ruled it out entirely.

Warehouse automation (pg. 48-55):

- **Higher operational efficiency correlates with a larger emissions footprint:** Moderately automated warehouses report higher energy use (59%) and waste (54%) since implementing AI, and advanced or fully automated report 78% and 76%.
- **88% measure**, manage, or oversee **sustainability** at the warehouse level.

ENERGY TRANSITION

Energy Transition Monitor 2026

By *Energy Transitions Commission*

[View the full report here](#)

Notable Highlights

- ◆ **Global renewable capacity has grown ~60% since 2022 but must nearly double again by 2030** (from 5.7 TW to 11 TW) to meet COP28's tripling goal.
- ◆ **Energy efficiency improvements** have recovered to ~3% per year after years of weak progress **but must accelerate to 4%** per year to meet COP28's doubling goal.
- ◆ **Solar installations have grown 27% per year** and exceeded IEA forecasts, while **module costs have fallen 20%** per year since 2010.
- ◆ **Global annual clean energy investment reached a record \$2.1 trillion** in 2025, but investment remains concentrated in Europe, the U.S., and China. Reaching **net zero will require \$3.5 trillion** per year through 2050.
- ◆ **Climate damage costs reached \$1.4 trillion in 2024**, about 1% of global GDP. The pace of the energy transition will shape how much they increase. They are **projected to reach 10-18% of GDP** by 2050 under current policies, vs. ~4% under net zero.
- ◆ **Clean electrification can abate around 60% of global emissions at little to no cost.** However, three **key barriers** must be addressed: (1) Unabated **coal generation** is not being phased down; (2) Renewables are only keeping pace with **rising electricity demand**; (3) Building **heat electrification** is lagging. Heat pump sales must grow 2.8x by 2035.
- ◆ **US data centers are driving demand for both new gas and clean power:** They account for 50% of new corporate clean PPAs, while \$27 billion in new gas investments went to power data centers directly.

Objective

- To assess the global energy transition, including global and regional progress; sector decarbonization priorities and gaps; and the impact of geopolitics and the Strait of Hormuz closure.

Background

- The report data is based on third-party data (mainly from the [IEA](#), [BNEF](#), [Ember](#), [MPP](#), and [Carbon Brief](#)) and [Systemiq](#) analysis (additional sources found in the footnotes).
- Most forward projections use the BNEF Economic Transition Scenario (driven by market economics) or Net Zero Scenario (net zero by 2050) in the [2026 New Energy Outlook](#).

Report Findings

Growth in clean technologies (pg. 5-17):

- **Clean electricity grew at 2.3x the rate of overall energy supply in 2025** but accounted for only around 40% of overall energy demand growth.
- **Battery prices continue to decline.** Battery energy density is approaching ~230 Wh/kg, the point at which electric trucks carry no payload penalty vs. diesel.
- **Solar-plus-battery setups** in “sunbelt” regions (U.S., Australia, India, South Africa, Brazil) **can now deliver 24/7 power** at costs equivalent to fossil fuels.
- **EV sales surpassed diesel sales in the EU.** Passenger EVs are expected to make up 27% of global vehicle sales this year, with China at over 55% market share.

Global warming and climate costs are outpacing investment (pg. 19-26):

- **The world is expected to exceed the 1.5°C threshold between 2026 and 2030.** Under current or stated energy policies, 2.5-3°C is expected by 2100.
- **Water shocks are the most acute short-term risks**, with flood risk rising where heavier rainfall overwhelms rivers, drainage systems, and vulnerable infrastructure.
- Around **\$76 billion is being invested in climate adaptation per year**—well short of the estimated **\$187-359 billion needed annually**. The gap is set to widen as physical climate risks intensify.

Regional energy transition progress (pg. 45-69):

United States:

- US emissions rose in 2025 after two years of decline.
- **21 GW of renewables have been canceled** since January 2025 following the federal rollback of clean energy tax credits.

- 2,300 GW of projects are sitting in **grid connection queues**, with a median wait of over four years.
- The end of U.S. clean hydrogen tax credits by 2028 puts **95% of announced U.S. hydrogen capacity at risk**.

Europe:

- Renewables have driven **Europe's emissions to 60-year lows**; however, **buildout is slowing**.
- Europe has the **world's strongest carbon price** (EU ETS at ~\$80/ton of CO₂), but a **proposed reform would delay the phase-out** of free allowances from 2034 to 2038.
- **Clean industry investment is lagging**: Only 9% of the 70 near-zero steel plants needed by 2030 have reached a Final Investment Decision, and green hydrogen costs are uncompetitive with other regions.

China:

- **China installs as much renewable capacity as the rest of the world combined** (though grid bottlenecks are slowing buildout). It also leads clean manufacturing for batteries, solar, and heavy industry and has the largest share of clean industrial projects reaching a Final Investment Decision.
- A **weak carbon price** (~\$11/ton of CO₂ vs. the EU's ~\$80/ton) is limiting decarbonization in heavy industry.

India:

- India has the **world's lowest renewable auction prices** (solar-plus-storage is now 50% cheaper than coal), **but China installs renewables 9x faster**.
- **Surging power demand** (6.4% per year) **keeps coal use rising**, compounded by weak state utility finances (44 GW of awarded solar stranded without signed PPAs) and grid constraints (~3% of renewable generation curtailed).
- **Green hydrogen is scaling fast**, with a record-low bid of ~\$3/kg (less than half the EU cost), but sector targets and carbon pricing lag.

Sector decarbonization priorities and gaps (pg. 28-43):

- Of the approximately **1,000 clean industry projects announced globally, fewer than 20% have reached a Final Investment Decision.**
 - China accounts for over 60% of new clean industry and supplies 45% of plant equipment for clean industry outside the country.
- **Three areas** are critical to keeping 1.5°C within reach but **are falling behind:**
 - **Global deforestation** is slowing compared to past decades but may miss the COP26 pledge to end it by 2030.
 - Demand for **carbon removal** remains far below what's needed, and cost projections for **direct air capture** have been revised upward.
 - **Methane intensity fell by only 8%** in the past three years, and agricultural and bio-based emissions fell just 2%.
- **Carbon pricing/mandates are strengthening** in the industry, maritime, and aviation sectors, **but more supportive policy is needed** to unlock projects (details on pg. 39).

The impact of geopolitics and the Strait of Hormuz closure on the energy transition (pg. 71-83):

- **Three geopolitical challenges are delaying the global energy transition:**
 - Carbon costs are increasingly built into trade, but **fragmented standards can create friction:** For example, the EU's **CBAM** entered its definitive phase in 2026, linking the carbon cost of imported goods to EU carbon prices.
 - The lowest-cost clean tech is largely **concentrated in China**, with clean tech trade set to triple by 2035. However, tariffs and local rules can raise costs.
 - **A shift in a major power**, such as the U.S. or EU, **can delay global rules** and weaken investment certainty: For example, U.S.-led pressure delayed adoption of the **IMO's shipping fuel and carbon pricing rules**.
- **The Strait of Hormuz is the world's most critical energy chokepoint**, carrying a third of global crude oil trade, a fifth of LNG trade, a third of fertilizer trade, and around 85% of crude oil and LNG for Asia.
 - Governments are responding to the closure with **a mix of crisis management and clean energy acceleration** (see examples on page 77).
- **Open, resilient international markets are critical** to accelerating the energy transition. Diversified supply chains and international cooperation can improve competitiveness and energy security while accelerating emissions reductions.