

WORLD ECONOMIC FORUM

Environment, Social, and Governance (ESG) Imperatives

STRATEGIC INTELLIGENCE BRIEFING

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Executive summary

Explore the interactive version online

Environment, Social, and Governance (ESG) Imperatives Intelligence Map - insights and perspectives curated by Digoshen via World Economic Forum Strategic insights and contextual intelligence.

The key issues shaping and influencing Environment, Social, and Governance (ESG) Imperatives are as follows:

A Systems Perspective on Circular Change
Eliminating wasteful practices and ensuring sustainable consumption requires systemic change

Energy and the Environment
Robust energy systems and environmental sustainability are key to long-term prosperity and competitiveness.

Leading on Inclusion, Sustainability and Trust
Companies have a responsibility to deploy technology in a way that benefits everyone

Sustainability and Finance
Sustainability-focused measures and ESG practices in general have come under criticism

Environmental Sustainability
Small businesses have a big opportunity to tap into the circular and shared economies

Global Governance
Sustainable development is boosted by the efforts of the private sector and civil society

Changing Behaviour for Sustainability
The behavioural sciences can help people and companies behave in more environmentally-sustainable ways

Equity in Society
The crypto industry is heavily tech-centered and there is a great need for it to be centered on the people

Climate Change Mitigation
Climate change is a global coordination problem

Financial Inclusion
There are currently 1.7 billion unbanked people in the world

A New Understanding of Economic Growth
Prioritizing people and ecological systems can create more sustainable economies

Funding Climate Action
Partnerships across sectors can mobilize the finances necessary to fund climate-friendly initiatives.

Sustainability Reporting and Assurance
Regulations are becoming more important to increase the consistency and reliability of sustainability information

Environmental, Social and Governance
Institutional investors have increasingly focused on ESG while seeking out green bonds and impact investments

Sustainability Data Collection
Searching for more independent sources of information about sustainability performance

Shareholder Engagement for Sustainability
Shareholder engagement can help drive climate action

Regulation and Policy-making
Without proper regulation, potentially harmful ”greenwashing” efforts may flourish

Below is an excerpt from the transformation map for Environment, Social, and Governance (ESG) Imperatives , with key issues shown at the centre and related topics around the perimeter. You can find the full map later in this briefing.



In the following sections, we give a comprehensive summary of the latest **Insights and Trends** shaping the topic, a look at potential **Forecasts and Scenarios** based on current and emerging trends, and an overview of the **Strategic Context**.

1 Insights and trends

A synthesis of the most recent expert analysis.

1.1 Current perspectives

Project Syndicate

Unleashing Africa's Women Agripreneurs

16 October 2026

Women dominate agriculture in Sub-Saharan Africa but rarely benefit economically due to legal, social, and financial barriers. While many work in low-paid, informal roles, a growing group of women agripreneurs are successfully building vibrant food businesses, supported by targeted government and donor initiatives. Empowering women through legal reforms, access to finance, market connections, and training–such as Ethiopia's Farmer Field and Business School–boosts productivity and income. Programs that challenge restrictive gender norms and engage communities show significant promise. Unlocking this potential could transform Africa's food systems and tap into a $1 trillion agricultural market by 2030.

German Institute for International and Security Affairs

EU Climate Policy to 2040: Initial Steps towards More Flexibility and Effort Sharing

16 October 2026

The European Union has set a 90% emissions reduction target for 2040, marking a significant shift in its climate policy framework. The European Commission plans to introduce over a dozen legislative proposals addressing international emission reductions crediting within the EU Emissions Trading System, enhanced rules for land use and forestry, and integration of carbon dioxide removal strategies. A key political decision on the role of national targets remains pending. While the EU leads globally with its ambitious target, the use of flexibilities in meeting it raises concerns about policy credibility and effectiveness, highlighting the urgency for the Commission to detail proposals on international carbon credits and regulatory updates.

The Conversation

Councils that restrict harmful advertising won't lose out on profits

14 October 2026

Councils restricting harmful advertising–such as junk food, fossil fuels, ultra-fast fashion, and single-use plastics–do not suffer a loss in advertising revenue, according to research by the University of Portsmouth and Sustain. Analysis of UK councils' data from 2019-2023 shows those adopting healthier or environmentally conscious advertising policies maintained their income levels compared to councils without such policies. Councils can replace harmful product ads with socially beneficial campaigns without financial loss. This approach supports public health and environmental goals and is expanding beyond tobacco and alcohol to include high-carbon products. Examples include Bristol's ban on ultra-fast fashion ads and Portsmouth's inclusion of single-use plastics. The findings suggest councils can confidently implement stronger restrictions aligned with climate and health objectives.

CGAP Research

Can the Emergence of AgFintech Revolutionize Agrifinance?

13 October 2026

Only about 10% of smallholder farmers access credit, facing a $170 billion financing gap and lack of insurance due to financial service providers' limited data and risk assessment capabilities. New AgFinTech solutions leverage public and private data sources to enable cashflow- and farm performance-based lending, moving beyond collateral dependence. Case studies in Africa, Asia,

and Latin America demonstrate improved credit outreach (up to 40%), reduced non-performing loans (below 4%), and lower service costs (80–90%). While promising, widespread impact requires open agri-data infrastructures and incentives supported by public and philanthropic funding. Coordinated efforts by governments, donors, DFIs, and investors can unlock scalable, inclusive agrifinance and enhance food security.

GovLab - Living Library

Professionalizing deliberation: a Social Network Analysis of UK climate mini-publics

14 October 2026

Deliberative mini-publics have become key in UK climate governance, leading to a professional field comprising facilitators, recruitment agencies, advisory bodies, experts, and networks. Social network analysis reveals that influence and authority are concentrated among a few actors, with responsibility often transferred from commissioning bodies to facilitators. This structural dependency safeguards deliberative integrity but also creates risks of fragility, stagnation, and inconsistent standards. Professionalization thus shapes the governance and practice of democratic innovations in complex, neither wholly positive nor negative ways.

LSE Business Review

Ending modern slavery will take more than corporate reporting

16 October 2026

Modern slavery arises where global commercial pressures intersect with vulnerable local labor markets. Although UK companies have increased oversight and reporting on modern slavery, limitations remain in addressing abuses occurring deeper in complex supply chains, such as through intermediaries and subcontractors. The UK government's proposed mandatory reporting reforms improve transparency and extend duties to public authorities, signaling a shared responsibility. However, effective prevention requires stronger collaboration and information sharing between corporate supply-chain governance and local public bodies, which currently operate mostly in parallel. Coordinated efforts are essential to identify and address labor exploitation at both corporate and community levels.

World Economic Forum

Japan is combining tech and human connection to help people live well until 100

15 October 2026

Japan has surpassed 100,000 centenarians, but a significant gap remains between life expectancy and healthy life expectancy, with older adults facing health challenges for about a decade. To address this, Japan integrates technology and social initiatives to promote healthy longevity and delay care needs. Efforts include AI-based cognitive assessments, digital co-living tools to maintain family connections, and mobile supermarkets that enhance social participation for seniors. National programs like the Moonshot Research and Development and Health Care 2035 vision focus on sustaining health and innovation amid demographic and workforce shifts. Extended work opportunities also support active aging.

Asian Development Bank

Closing the Financing Gap for Climate-Resilient Health Systems: High-Level Health Care Climate Action Principle 4

15 October 2026

Financing for climate-resilient health systems remains fragmented, insufficient, and hard to access, especially for vulnerable countries. To address this, five key strategies are proposed: strengthening institutions to mobilize and coordinate finance; aligning domestic public finance for sustainable health systems; improving access to international public finance; engaging the private sector to complement public funding; and deploying innovative financing mechanisms tailored to health system needs. A practical guide is also provided to help policymakers and partners select appropriate financing approaches based on country contexts.

The Conversation (French)

Dans nos déchets organiques, du plastique qui limite l'efficacité de la collecte

17 October 2026

La collecte des biodéchets, généralisée en France depuis 2024, vise à valoriser ces déchets organiques via le compostage ou la méthanisation. Cependant, son efficacité est freinée par la présence de plastiques, souvent introduits par méconnaissance ou confusion entre plastiques biosourcés, biodégradables et compostables. Or, tous ne sont pas compatibles avec la méthanisation, un procédé anaérobie sensible à la pollution plastique, ce qui complique la valorisation énergétique. Des recherches sont en cours pour développer des matériaux adaptés aux contraintes de tri et de traitement des biodéchets.

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Geneva Centre for Security Sector Governance (DCAF)

Commitments into action: Women, Peace, and Security in defence budgeting

16 October 2026

Global military spending has nearly doubled over

the last decade, while official development assistance is expected to drop by 31% from 2024 to 2029. Despite many countries adopting Women, Peace and Security (WPS) policies, only 29 of 113 with WPS National Action Plans included budgets at adoption. Integrating WPS commitments into defence budgets involves embedding gender analysis throughout all budgeting phases rather than creating separate budget lines. Practical measures include involving gender advisers, conducting gender impact assessments, using gender-disaggregated data, and gender-responsive audits. Risks include isolating WPS funding or overly securitizing the agenda. Recommendations urge linking WPS to budget processes, enhancing gender expertise, and combined scrutiny of military and social spending to ensure defence growth does not undermine development funding.

Stockholm Environment Institute

EU sustainability reporting rules and municipal governance

13 October 2026

Recent changes to EU corporate sustainability reporting rules indirectly impact municipal governments by influencing the sustainability data obtained from municipal companies, banks, suppliers, and climate investment programs. Although municipalities are not directly required to report under EU law, these rules affect their reporting practices and decision-making processes. Municipalities can take practical steps to enhance the quality of sustainability information for better governance and planning.

GovLab - Living Library

From Data Stewardship to Model Stewardship: Extending Governance Frameworks for AI Era Health Data Use

13 October 2026

Existing governance frameworks for secondary health data use are inadequate for AI model training, which produces persistent, deployable artifacts that encode local clinical patterns as generalizable knowledge. Building on two decades of stewardship framework development, a shift from data stewardship to model stewardship is proposed to extend governance and better address the challenges posed by AI-era health data use.

World Economic Forum

How to measure the energy, food and water nexus

15 October 2026

Energy, food, and water systems form a complex nexus where vulnerabilities and trade-offs in one can impact the others. Accurate hyperlocal data collection, such as rainfall measurement in Indian villages, is crucial to managing this nexus effectively. India's Atal Bhujal Yojana groundwater scheme highlights challenges of unreliable local data collection and the need for precise, small-scale research to inform resource management. Studies show that renewable energy development must consider local social, environmental, and resource constraints. Hyperlocal analyses reveal opportunities like agri-voltaics in horticultural zones and highlight nexus-related issues, such as energy shortages affecting dairy farming in drought-prone Madhya Pradesh. Tailored local solutions advance sustainable management of interconnected energy, food, and water resources.

The Conversation (French)

Gare aux boycotts ! En temps de guerre, les entreprises doivent protéger leur réputation

17 October 2026

Les entreprises actives dans les zones de conflit doivent gérer non seulement des risques opérationnels, mais aussi protéger leur réputation, désormais exposée à une amplification rapide via les réseaux sociaux. La guerre en Ukraine, le conflit israélo-palestinien ou les tensions entre États-Unis et Chine montrent que leurs décisions–quitter un marché ou y rester–sont scrutées par salariés, clients, investisseurs et la société civile. Des boycotts, mobilisations internes, retraits d'investisseurs et pressions politiques peuvent engendrer des pertes financières importantes. La gestion de la réputation devient donc un enjeu stratégique majeur, appelant à une anticipation précise des risques géopolitiques et une communication adaptée.

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NextBillion

Impact Entrepreneurship During the Polycrisis: An Interview with Laurie Lane-Zucker

15 October 2026

Impact entrepreneurship demonstrates that business can generate lasting social and environmental benefits by embedding mission into ownership, governance, and capital structures to sustain impact beyond founders or market changes. Laurie Lane-Zucker's book, "The Impact Entrepreneur Breakthrough," serves as a practical field manual offering tools and exercises for impact-driven enterprises to navigate the polycrisis–interconnected crises threatening communities and ecosystems globally. Key advice includes designing systems that share power rather than entrench it and addressing root causes strategically, ensuring ventures remain regenerative and resilient across changing conditions.

LSE Business Review

The hidden uncertainty behind emissions data produced by British supermarkets

16 October 2026

British supermarkets report Scope 3 carbon emissions, covering the full value chain from production to customer use, which comprise nearly all their carbon footprints. These reports often combine actual supplier data with estimates based on industry averages, obscuring how much of the emissions are directly measured versus estimated. Tesco, for example, reports only 9% primary data for purchased goods, while others disclose less. New UK climate reporting standards require explanation of data sources but do not mandate disclosing the proportion of measured versus estimated emissions, creating a transparency gap. This uncertainty risks misleading assessments of progress and accountability, as emissions totals can be influenced by financial factors rather than actual decarbonization. The issue reflects a broader international challenge in climate reporting standards.

The Conversation (Spanish)

Desde bioplásticos a envases inteligentes y activos: cuando la sostenibilidad exige más ciencia

15 October 2026

Los envases sostenibles como bioplásticos, papel o materiales reciclados reducen el impacto ambiental, pero requieren rigurosos análisis para garantizar la seguridad alimentaria. Materiales biobasados, aunque ecológicos, pueden contener tóxicos o alérgenos, por lo que deben evaluarse individualmente. El uso de plásticos reciclados enfrenta retos debido a contaminantes y migración de sustancias hacia los alimentos. Los envases inteligentes y activos ofrecen beneficios adicionales, pero exigen estudios estrictos para evitar riesgos. La química analítica avanzada es crucial para detectar contaminantes y asegurar que estas innovaciones cumplan con los estándares de seguridad.

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Asian Development Bank

Teflon Capitalism: Geopolitical Risk and Investment Funds

14 October 2026

Stock markets demonstrate resilience to geopolitical risks as declines in valuations of exposed firms lead to higher expected returns, attracting investment funds to purchase these undervalued assets. Investment funds, especially those with greater risk tolerance and weaker past performance, actively acquire such stocks, helping to rapidly restore valuations. This strategy results in increased portfolio concentration, partially balanced by holding higher cash reserves. Conversely, ultimate investors tend to withdraw from funds exposed to geopolitical risk.

The Conversation (Spanish)

¿Cómo contribuyen las emisiones españolas de CO_2 al cambio climático y los fenómenos extremos?

13 October 2026

El calentamiento global, causado principalmente por la acumulación de gases de efecto invernadero como el CO_2, impulsa fenómenos extremos como olas de calor e incendios en Europa. España aporta aproximadamente el 0,6 % de las emisiones globales, por lo que su reducción, aunque necesaria, tiene un impacto limitado en la temperatura mundial. El calentamiento afecta especialmente al Atlántico Norte, Ártico y zonas mediterráneas, contribuyendo a la pérdida de biodiversidad y riesgos crecientes como incendios y sequías. La concentración de CO_2 continúa en aumento, y el calentamiento global se aproxima a un aumento de 1,5 °C, límite previsto por el Acuerdo de París, que se espera alcanzar en esta década.

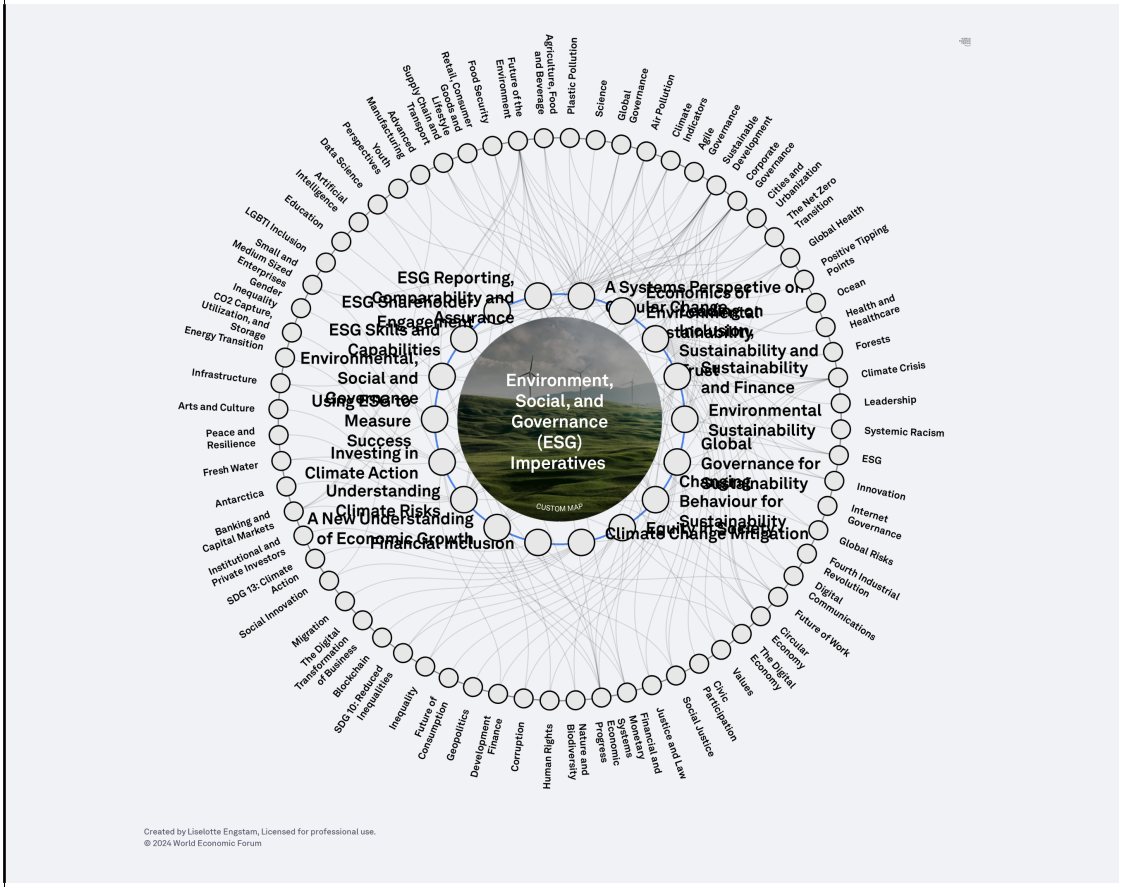
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2 Strategic context

The key issues shaping Environment, Social, and Governance (ESG) Imperatives .

The following key issues represent the most strategic trends shaping the topic of Environment, Social, and Governance (ESG) Imperatives . These key issues are also influenced by the other topics depicted on the outer ring of the transformation map.

FIGURE 1 **Transformation map for Environment, Social, and Governance (ESG) Imperatives**



2.1 A Systems Perspective on Circular Change

Eliminating wasteful practices and ensuring sustainable consumption requires systemic change

In general, most materials are under-utilized and discarded after short periods - and efforts to correct this problem often treat its symptoms rather than root causes. Our individual consumption, as well as that of organizations and entire countries, must be considered in the context of both social needs and planetary boundaries (beyond which we subject the planet to existential risk). There is an urgent need for a

fundamental rethink of industrial systems, coupled with changes in behaviour and governance. However, this can only occur through unprecedented collaboration among manufacturers, retailers, and governments. When it comes to materials like textiles, food, and plastics, entire value chains need to be aligned around a shared vision. High-level commitments, smart incentives, and action are required from everyone with a stake in the way materials cycle through an economy. In the textile industry, for example, if fashion brands and retailers can commit to a standard garment collection scheme, the volume of what is recovered could justify the necessary investment in technology and infrastructure. In the case of food, farmers, food brands, retailers, and city governments can similarly collaborate on a broad scale.

Eventually, a shift could get underway to systems where all of the food we eat is designed to be part of a regenerative cycle of edible products and fertilizers. When it comes to plastics, however, there are particularly complex challenges in terms of how we use them to package and consume things. Still, people around the world are responding to these challenges by changing the way they shop, what they choose to eat, and how they live - and substantial sums are being invested in removing plastic from the ocean, rivers, and streets. All of this work will be for nothing, though, if increasing amounts of plastic continue to be landfilled, burned, or otherwise deposited into the environment. Businesses and governments need to work together more closely to design ways to produce, consume, and re-use materials, and a systems approach to developing such a circular economy means tying together the various social and ecological systems that underpin economies - and adopting a more expansive view. The products and services likely to result would be both decentralized and interconnected, and would depend on meaningful collaboration among businesses, governments, and communities.

Related topics: Climate Indicators, Future of the Environment, Food Security, Global Governance, Agile Governance, The Net Zero Transition, Air Pollution, Science, Logistics, Corporate Governance, Cities and Urbanization, Sustainable Development, Future of Manufacturing, Plastic Pollution

2.2 Energy and the Environment

Robust energy systems and environmental sustainability are key to long-term prosperity and competitiveness.

The transition to secure, affordable and sustainable energy is not only a climate imperative but also a key economic opportunity for countries that are trying to leapfrog to cleaner technologies and build energy and economic security. Investments in renewables, energy storage, electrification and digitalization are creating significant economic opportunities – from job creation and industrial competitiveness to new market development. Global clean energy investments surpassed $2 trillion in 2024, supporting over 16 million jobs and catalysing innovation hubs worldwide, according to the Forum's 2025 Fostering Effective Energy Transition report. However, realizing this potential requires massive capital mobilization, particularly in emerging and developing economies, where investment gaps and higher financing costs persist. Balancing energy security, affordability, decarbonization and economic growth also presents complex synergies and trade-offs. Energy security now encompasses not only supply reliability but also grid resilience, access to critical minerals and protection against systemic risks. Affordability remains a challenge, especially in regions facing high capital costs and energy poverty. In the Forum's Making the Green Transition Work for People and the Economy report, 37% of executives pointed to rising energy and commodity costs as a barrier to remaining competitive in the green transition, a figure that rises to nearly 50% in low-income economies. Policy-makers must ensure equitable access while advancing sustainability, through targeted subsidies, innovative financing and inclusive policy design.

Embedding environmental and resource resilience into national and global growth strategies is essential for sustainable progress, particularly as climate change influences migration patterns, and systemic thinking is required to convert these challenges into economic opportunities. Integrating natural capital into economic and development strategies is increasingly vital to sustaining competitiveness and resilience. Protecting biodiversity and restoring natural systems not only safeguard ecological resilience but also create new opportunities for innovation in sectors such as sustainable agriculture, bioeconomy, tourism and nature-based solutions. Collaborative governance, international cooperation and inclusive policy frameworks are critical to scaling best practices, mobilizing investment and ensuring that the benefits of the green transition are widely shared. An equitable transition – one that supports affected workers, communities and regions – is essential to maintaining social cohesion and enabling broad-based participation in the green economy.

Related topics: Climate Crisis, Migration, Just Transition, Global Risks, Energy, Water & Land Nexus, Sustainable Development, Future of Consumption, Positive Tipping Points, Forests, Development Finance, Future of the Environment, Air Pollution

2.3 Leading on Inclusion, Sustainability and Trust

Companies have a responsibility to deploy technology in a way that benefits everyone

Businesses must address growing concerns about how technology affects inequality, personal freedoms, and access to decent jobs. Many company leaders are faced with calls from their own customers and employees to make a more positive contribution to society. In 2019, the Business Roundtable, an organization that includes the CEOs of some of the most prominent companies in the world and once defined a company's purpose as serving shareholders, re-defined that purpose to include a commitment to all stakeholders. COVID-19 has underlined the risk of leaving half the world cut off from the internet and the digital economy - at a time when schools have closed, many people have lost jobs, and social media has been needed to both expose racial injustice and rally efforts to confront it. In a digital-first world, there is an opportunity to fundamentally redefine business and reinvent models with renewed purpose. Technology can help ensure the health and well-being of often-remote workforces, increase the transparency of supply chains, reduce carbon emissions, responsibly handle personal data, promote racial equality, and accommodate a more diverse array of potential customers and users.

Many companies have deployed digital tools to support the response to COVID-19. A smartphone app developed by South Korea's KT Corporation, for example, can inform users of outbreaks near their location, and educate them about symptoms and prevention. IBM has meanwhile provided access to its artificial-intelligence-powered technologies to help researchers develop potential treatments for the disease. Other companies have used technology to look after their own employees, such as Bank of Ireland's increased employee access to a wellness program that includes an app and interactive courses on mental, physical, and financial health. Companies can also advance digital transformation in ways that reduce environmental impact, and provide a means for more people to gain access to important information and services. Though roughly half of the global population still does not use the internet, businesses and governments have an opportunity to collaborate in a way that that better addresses this digital divide. Ultimately, research suggests that those companies that orient their digital transformation plans around a higher purpose are likely to better gain the trust of users, and to be more competitive.

Related topics: Future of Leadership, Global Risks, Systemic Racism, Future of Work, The Digital Economy, Digital Communications, Corporate Governance, Innovation, Sustainability Reporting, Climate Crisis, Circular Economy, Sustainable Development

2.4 Sustainability and Finance

Sustainability-focused measures and ESG practices in general have come under criticism

The roles that banks and capital markets play in catalysing environmental and social change need to be relitigated and renewed. In the five years that passed between the dual launch in 2015 of the Paris Agreement on climate change and the UN Sustainable Development Goals (SDGs), and the rapid spread of COVID-19 throughout the world in 2020, sustainable finance and ESG ("environmental, social, and governance") investing enjoyed almost uninterrupted and unchallenged progress. Spurred by the G20, national financial regulators, and at times by their own customers and staff, banks progressively added sustainability objectives to their agendas. However, that direction of travel has been more recently challenged on at least two fronts. First, concerns about climate change and biodiversity loss have been pitted against more immediate concerns about energy and food security. Instead of framing this as a holistic (albeit wicked) challenge that will require systems-level, non-linear changes, there is a tendency to instead frame planetary and security concerns as antithetical. In addition, this debate has taken on political and populist dimensions, amid serious anti-ESG backlash from powerful sources.

Sustainability and ESG practices have also come under criticism as a result of perceived and genuine tokenism, inauthenticity, and greenwashing. Some related initiatives have failed to truly account for persistent, multi-dimensional challenges - for example the need for a "just transition" for workers who will require new skills in a more sustainable world, especially in developing countries. For banks, this environment presents a fork in the road. There must be a clearer distinction between those approaching sustainability as a surface exercise that is defensive and compliance-oriented, and those that embed sustainability into their corporate purpose, identity, and strategy. For those pursuing the latter, there is little room for mixed messages, foot dragging, or a half-measures. They will need to lean in even further, using a bold voice to help implement and support ESG practices where they are most required. There remain tremendous related opportunities for capital markets, ranging from carbon trading to green and blue bonds. And there is

untapped potential for derivatives and securitization professionals to design sustainability-linked investment products capable of drawing in capital from multiple sources.

Related topics: Social Justice, Justice and Law, Sustainability Reporting, Economic Growth, Circular Economy, Corporate Governance, Future of the Environment, Sustainable Development, Civic Participation, Financial and Monetary Systems, Nature and Biodiversity

2.5 Environmental Sustainability

Small businesses have a big opportunity to tap into the circular and shared economies

Consumer preference for more sustainable and ethically sourced products continues to grow globally, in ways that have encouraged small businesses to adopt related practices. Circular and shared economy models emphasize sustainability and community involvement; they can be facilitated by digital platforms such as apps and websites that help small businesses offer sizeable sharing services, rent out equipment, or participate in community-based resource-sharing initiatives with minimal overhead costs. By reusing materials, minimizing waste, and optimizing resource use, small businesses can decrease their own production costs and increase profitability, while having broad, positive societal impacts by helping to decrease collective environmental footprints and fostering community collaboration. Government support - in the form of regulatory incentives, grants, support for participation in green supply chains, and funding for green initiatives - can be game changing.

Related topics: Future of the Environment, Sustainable Development, Plastic Pollution, Circular Economy, Sustainability Reporting, Logistics, Air Pollution, Climate Indicators

2.6 Global Governance

Sustainable development is boosted by the efforts of the private sector and civil society

In a globalized world, governance through treaties and international organizations is crucial for success. Each sovereign country may have its own laws, but international rules and norms help regulate their relations with one another. They can also foster global common goods like the natural environment, the ocean and space, alongside global communication and international trade. Since World War II, the United Nations has played a central role in shaping international cooperation, providing a platform for countries to develop shared rules, norms and approaches to issues ranging from human rights and climate change to development and international peace and security. Over time, global development efforts have increasingly emphasized the need for more integrated approaches that account for different perspectives and sectoral priorities, for example through the designation of UN Resident Coordinators in many countries. Roles like these are central to aligning international support with national development priorities.

The High-Level Political Forum (HLPF) for Sustainable Development is a UN subsidiary body responsible for monitoring policies and for making recommendations to member states. Similarly, the UN Sustainable Development Cooperation Framework supports coordinated and context-specific engagement at the country level, while initiatives like UNDP Accelerator Labs operate in multiple countries to test and scale innovative solutions and pool funding mechanisms that support strategic investments. Like many other international agreements, UN resolutions are not legally binding. Their effectiveness, therefore, depends on the willingness of each member state to integrate recommendations and decisions into local policies. As a result, the private sector and civil society can play key roles as advocates at the national level. The experience of the Sustainable Development Goals illustrates both the strengths and shortcomings of global development frameworks. The SDGs established a common language and set priorities for governments, international agencies, civil society and the private sector, while drawing attention to measurable development outcomes. However, progress has often lagged behind the goals, highlighting ongoing challenges related to financing, implementation and coordination. As the 2030 Agenda's final year approaches, the focus should not just be on creating a new set of global targets. It should also be on enhancing international cooperation to better support locally owned and context-specific development priorities, with a stronger emphasis on accountability and increased participation from countries and communities in the Global South.

Related topics: Future of the Environment, Human Rights, Justice and Law, Climate Crisis, Global Governance, Corporate Governance, Corruption, Social Justice, Geopolitics, Development Finance

2.7 Changing Behaviour for Sustainability

The behavioural sciences can help people and companies behave in more environmentally-sustainable ways

The climate crisis has created a need for more sustainable use of natural resources and a longer-term, more global perspective. Humanity often struggles to act in its own future best interests. People may aspire to consume less, save more energy and water, and purchase more sustainable products, but they nonetheless often fall back on bad habits and preferences. Traditional approaches to tackling this "intention-behaviour gap" often fail. Simply informing people about the importance of sustainability is often not enough to affect their behaviour, as decision-making is often guided by more ephemeral influences like mood, short-term desire, or habit. More often than not, people are also lazy - in the sense that they do not consider all available information when making decisions, or prefer convenient and accessible options over rational ones. To circumvent this, behavioural scientists investigate not only how persuasion can be more effective, but also how subtle changes to one's environment, or so-called "nudges," can make it easier for people to act in line with their aspirations.

Such nudges should always allow for the retention of consumers' freedom of choice. For example, the Flemish government in Belgium was able to increase sales of local regional and seasonal foods by up to 30% simply by placing them at eye level for shoppers. Defaults can also work as powerful nudges; a 2008 study by researchers from the Max Planck Institute for Human Development and the Massachusetts Institute of Technology published in the Journal of Environmental Psychology showed that the proportion of people choosing a green, sustainable energy source over a less expensive, less sustainable source like coal can be substantially increased by simply making the green option the default on a registration form. People do not like deviating from what is displayed as the default - possibly because they think it indicates a recommendation, or prevailing norm. Information about established norms is also effective in nudging people to behave more sustainably. A 2008 study published in the Journal of Consumer Research described guests at a US hotel re-using their towels more frequently if a sign informed them that the majority of guests in the same room had re-used their towels. And a 2011 study published in the Journal of Public Economics showed that providing US citizens with monthly reports about their energy consumption, alongside comparisons to that of their neighbours, reduced their energy consumption by about 2% relative to a baseline. Even small, behaviourally-informed changes to the environments in which we make our decisions, or to the narratives we use to make sense of the world around us, can help us better act in accordance with the planet's best interests.

Related topics: Future of the Environment, Climate Crisis, Future of Consumption, Sustainable Development, Circular Economy, Global Health, Food Security

2.8 Equity in Society

The crypto industry is heavily tech-centered and there is a great need for it to be centered on the people

The power of blockchain can create a more equitable and inclusive society. Those oppressed or facing barriers in the current financial systems can benefit from decentralization which drives a diverse ecosystem by enabling anyone to contribute and collaborate on the systems. The impact on society can transcend beyond the economic benefits of crypto if designed in a way that is accessible and user friendly for all communities.

Related topics: Economic Growth, Inequality, Blockchain, Parity and Inclusion, The Digital Economy, SDG 10: Reduced Inequalities

2.9 Climate Change Mitigation

Climate change is a global coordination problem

There are more than 200 million people that are likely to migrate over the next three decades because of extreme weather events or the slow degradation of their environments, with most being displaced within their home country. The current legacy system has failed to coordinate effective policies and capital investment into the commitments necessary to address the most pertinent threat to humanity. Global coordination technologies that can transcend the mass bureaucratization of climate action are urgently needed. This is where blockchain and web3 technologies can be leveraged to achieve positive climate action.

Related topics: Migration, Climate Crisis, Social Innovation, The Digital Transformation of Business, SDG 13: Climate Action

2.10 Financial Inclusion

There are currently 1.7 billion unbanked people in the world

Crypto promises an inclusive alternative financial system for those that are financially excluded from the traditional banking system. Despite consensus on crypto's potential to democratize financial access, there's been little research on how crypto-based financial services and products could benefit communities, particularly those that have been systematically excluded.

Related topics: The Digital Economy, Financial and Monetary Systems, SDG 10: Reduced Inequalities

2.11 A New Understanding of Economic Growth

Prioritizing people and ecological systems can create more sustainable economies

Traditional economic systems and growth expectations generate unhealthy tension by being extractive by design. On one hand, such linear, extractive approaches have generated unprecedented economic gains and prosperity - by 2015, a record low 10% of the global population was living in extreme poverty, according to the World Bank. And, these approaches have generally spurred the provision of natural resources and workers in ways designed to achieve optimal profitability and productivity. On the other hand, any extractive economy will eventually be faced with potentially dire threats to biological and cultural diversity, an inevitable increase in the intensification of resource exploitation, and an ever-present threat of resource scarcity. There is also no guarantee that the short-term gains afforded by this model will be equally shared and accessed. Its trajectory usually involves simply regenerating itself by shifting focus to a new type of resources to be extracted and exploited - which by definition is not sustainable. This pattern often results in periods of relative short-term abundancy, followed by periods of progressive scarcity prior to the identification of new resources to tap.

It is important to understand exactly how a circular economy approach can break the vicious cycle inherent in linear and extractive economies - and forge a new way forward. According to the United Nations, the conception and application of a circular economy has the potential to positively impact the progress made on several of its Sustainable Development Goals, which provide a framework for putting the global economy on a healthier, more sustainable path by 2030. The potential for a circular economy to limit the extraction of resources and instead regenerate the material necessary for further production can bolster Sustainable Development Goal 12, ensuring sustainable consumption and production, not to mention SDG 6 (ensuring the availability of water and sanitation for everyone), SDG 8 (promoting sustainable economic growth and decent work), SDG 11 (making cities more inclusive and sustainable), SDG 13 (taking urgent action to combat climate change), SDG 14 (sustainably use the ocean and seas), and SDG 15 (halting and reversing land degradation biodiversity loss). Ultimately, the circular model also has positive implications for SDG 10 - reducing inequality.

Related topics: Inequality, Future of Work, Cities and Urbanization, Economic Growth, Social Justice, Ocean, Climate Crisis, Nature and Biodiversity, Sustainable Development, Global Health

2.12 Funding Climate Action

Partnerships across sectors can mobilize the finances necessary to fund climate-friendly initiatives.

As political landscapes shift globally, regional and local government decision-making remains at the forefront of climate action, including through activities such as investing in clean energy, building green infrastructure and promoting climate adaptation and resilience measures. Alongside public engagement, private-sector actors – from asset managers and venture funds to manufacturers and retailers – are also driving change, channelling trillions into climate solutions by applying sustainability criteria, setting science-based targets for carbon removal goals and deploying internal carbon pricing. Green bonds finance renewables and resilience, private equity backs breakthrough technologies and companies use supplier engagement and digital

traceability to cut supply-chain emissions. Voluntary coalitions like RE100 and the Net-Zero Asset Owner Alliance foster collaboration and advocacy, yet transparent, standardized reporting and proactive regulatory engagement remain essential to ensure genuine, science-aligned decarbonization.

More recently, the public and private sectors have been collaborating to magnify their climate impact, often with significant success. Public-private partnerships – based on long-term, performance-based contracts that largely shift risk and management of a public project to private actors – have become increasingly common and successful. Private investment is essential for funding the trillions of dollars per year needed to finance global climate action, and may also help to increase innovation, efficiency and timeliness. Less formal methods of public-private collaboration are also available. For example, businesses may enter into dialogues with local entities to develop Climate Action Plans or voluntarily pledge support for similar emissions reduction targets as public entities. Though these associations are generally unenforceable, joining and staying with them usually comes with large reputational benefits. This convergence, however, faces critical challenges. Public institutions often struggle with short-term political cycles, regulatory capture or underfunded climate plans. Private actors, meanwhile, may prioritize shareholder returns over long-term sustainability or exaggerate progress through greenwashing. To address these tensions, governments must build enabling environments by setting clear climate targets, implementing predictable regulations and promoting inclusive governance that allows private actors to innovate responsibly. Businesses, in turn, must align strategies with scientific thresholds, disclose risks transparently and engage in policy advocacy that supports – not undermines – ambitious climate action.

Related topics: Water, Development Finance, Future of Manufacturing, CO2 Capture, Utilization and Storage, Circular Economy, Innovation, Sustainable Development, Financial and Monetary Systems, Infrastructure, Economic Growth, Climate Indicators, Cities and Urbanization, Energy Transition Index

2.13 Sustainability Reporting and Assurance

Regulations are becoming more important to increase the consistency and reliability of sustainability information

Corporate sustainability reporting has become common practice for large firms, and is the most widely used source of information about sustainability performance. A KPMG survey in 2024 found that 96% of the world's largest 250 firms report on sustainability, and 95% publish carbon targets. One major challenge regarding such reporting is related to inconsistencies in data, due to the different ways firms measure and reflect sustainability factors. For example, some firms may report only direct greenhouse gas emissions, while others include emissions from their entire supply chain. As a result, companies with more comprehensive and rigorous reporting can appear to perform worse than those using less thorough approaches. For this reason, standards have been essential for the development of sustainability reporting. The most relevant example of mandatory disclosure regulation is the EU's Corporate Sustainability Reporting Directive (CSRD), though it is still unclear as to which companies will finally be covered by the directive until legislative processes are finalized, which is slated for the end of 2025. The CSRD and similar regulations typically require disclosure across a broad set of topics, including climate risks, carbon emissions, social impacts and governance practices. In parallel, regulatory attention is expanding beyond climate to include nature and biodiversity, with the development of frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD). Reporting on biodiversity remains voluntary, apart from in the EU under the CSRD, but is steadily increasing as companies recognise the material risks associated with nature loss and ecosystem degradation.

Generating sustainability reports can be labour-intensive and costly. The necessary data collection often requires dedicated staff and consultants, making it more difficult for smaller firms with fewer resources. Many companies continue nevertheless to invest in sustainability reporting. Internally, companies may find that it aids in identifying inefficiencies, managing risks and aligning operations with long-term goals. Externally, transparent sustainability reporting can enhance a company's reputation, attract investment, build stakeholder trust and secure its social license to operate. Companies are also aware that in the longer term they will have no choice but to deal with the risks and opportunities related to the impacts of climate change and that mandatory reporting regulation is likely to increase. One key related development has been an increase in the auditing and assurance of corporate sustainability reporting. The CSRD, for example, requires companies to initially obtain limited assurance over their reported sustainability information, with a shift towards reasonable assurance expected over time, elevating the reliability and credibility of disclosures to a level closer to that of financial reporting. According to a KPMG 2024 survey, 54% of the top 100 companies in 49 countries are obtaining independent assurance on their sustainability information. As regulatory requirements for sustainability reporting increase, these figures are also likely to increase.

Related topics: Future of the Environment, Corporate Governance, Global Gender Gap, Small and

Medium-Sized Enterprises, Economic Growth, Future of Work

2.14 Environmental, Social and Governance

Institutional investors have increasingly focused on ESG while seeking out green bonds and impact investments

A paradigm shift began after the 2008 financial crisis illustrated the interdependence of individual financial choices, markets, economies, and global challenges like climate change. Since then, stagnant economic growth, mounting populism, and rising inequality have created serious challenges for governments. Against this backdrop, new preferences are forming, particularly among young people. A growing share of consumption is of goods and services that conform to collective responsibility, while general awareness of the climate crisis is spreading, and sustainability has become (at least) a key buzzword as many corporations focus on environmental, social and governance - or ESG - standards. Institutional investors have also embraced the ESG concept. More than 1,500 investors and managers, representing nearly $60 trillion in assets under management, have signed the United Nations-backed Principles for Responsible Investment. Yet, many investors struggle to convert related commitments into practice. According to McKinsey, less than 1% of the total capital at the 15 largest US public pension funds is allocated to ESG-specific strategies, such as ESG-screened passive indexes. Many institutional investors continue to treat ESG as a marketing tool, rather than an integral part of a strategy.

In recent years, a number of related initiatives have emerged that have boosted both the adoption of ESG and (occasionally) resistance to it. One of the most promising developments is so-called ”green bonds,” or traditional fixed income instruments used to exclusively finance environmentally sustainable projects. Another financial innovation gaining ground is impact investing, where commercial returns are coupled with socio-economic or environmental effect. Institutional investors such as endowments and sovereign development funds have been particularly active as part of this new investment model, which aims to achieve a triple bottom-line measured according to profit, environmental impact, and social benefit. Only time will tell if ESG can comfortably become mainstream. The extent to which institutional investors begin to access and promote ESG objectives requires an assessment of where they align with existing asset classes and investment products - and an understanding of strategies that can further specific ESG goals. This shift in perspective will enable institutional investors to play a larger role in shaping the future of various industries, as they incorporate these criteria into their investment portfolios.

This key issue is curated in partnership with Bernardo Bortolotti, Professor of Economics and Finance, Università degli Studi di Torino and Director of the Sovereign Investment Lab at the Paolo Baffi Center of Central Banking and Financial Regulation at Bocconi University in Milan.

Related topics: LGBTI Inclusion, Social Innovation, Climate Crisis, Sustainable Development, Corruption, Infrastructure, Corporate Governance, Sustainability Reporting, Human Rights, Future of the Environment

2.15 Sustainability Data Collection

Searching for more independent sources of information about sustainability performance

Given the obstacles presented by the coverage, comparability and reliability of companies’ self-reporting on their sustainability performance, investors and other stakeholders are beginning to seek out alternative and independent sources of information. This is driving greater innovation when it comes to data collection and analytics. Areas of innovation include physical sensors (which power the Internet of Things), satellite imagery and remote sensing capabilities more generally. For example, satellite images of flaring at oil and gas company operations can be used to detect and ultimately eliminate this prominent source of greenhouse gas emissions. Newer satellites equipped with high-resolution imaging technology can be used to detect concentrated sources of methane emissions from livestock–a significant cause of harmful global warming gasses–and problematic areas of fossil fuel extraction. Similarly, AI-powered analytics can identify subtle patterns such as changes in vegetation health or thermal anomalies, enabling early identification of environmental risks like drought and wildfires, while small robotic sensors can be deployed to patrol sewage systems near corporate facilities and identify disease outbreaks.

Another category of sustainability information comes from alternative digital sources that offer external perspectives on corporate behaviour, such as e-government and social media sites. Scraping information from publicly available government databases can help track down filed lawsuits, workplace injuries, reports

of environmental pollution and other indicators of sustainability risk. Social media sites such as X (formerly Twitter), LinkedIn and Glassdoor, as well as blogs and traditional news sources, can reveal the prevailing sentiment about firms among current, prospective and former employees, customers and investors. Natural language processing models have become more refined and multilingual, allowing for better detection of sentiment, controversy or emerging risks across a wider range of platforms, languages and cultural contexts. The analytics that become possible when combining such data sources with self-reported information from firms can be invaluable. Machine learning algorithms may be able to identify and predict sustainability risks using physical, social media-based and reported data with greater reliability than a single data source, helping investors and other stakeholders to identify social and environmental hazards likely to occur. Blockchain technology adoption is in its early stages, but it can also be used to enhance transparency and traceability of supply chains. For example, Volvo Cars has implemented blockchain systems to trace the origins of raw materials used in its electric vehicle batteries.

Related topics: Sustainable Development, Corporate Governance, Artificial Intelligence, Internet of Things, Economic Growth, Future of Work, Education and Skills, Future of the Environment

2.16 Shareholder Engagement for Sustainability

Shareholder engagement can help drive climate action

In addition to shaping their portfolios through ESG integration, investors may choose to actively drive related improvements at companies through greater shareholder engagement. Evidence suggests this is a far more effective way of shaping corporate behaviour than simply buying and selling stock. The ways in which investors can approach this depends on asset class, however. Private equity investors, for example, are likely to have relatively large ownership stakes and therefore more direct access to management teams (large PE funds like KKR and TPG regularly engage with senior and middle managers, as well as front line workers, to identify ESG issues and encourage development of related strategies, measurement, disclosures, and operational practices). For buyers of public equities, the style of engagement depends on their scale and objectives. Large asset managers with long-term investment styles are likely to have greater and more prolonged access to management teams, similar to what is afforded to private equity backers. Meanwhile activist hedge funds tend to take large stakes in firms for short periods of time, through leveraged capital and borrowing - and then use that time to mount aggressive campaigns.

Examples of ESG-centred shareholder engagement include Aviva Investors' push for Apple to address youth smartphone addiction, and Engine No. 1's campaign to drive stronger climate action at Exxon Mobil by replacing board members. Smaller, socially-responsible asset management firms like Boston Trust Walden, and values-based asset owners like religious pension funds, often engage firms by initiating shareholder proxy votes that call for stronger ESG strategies. Individual retail investors can join campaigns mounted by larger activists, though most delegate their voting power to index fund managers like BlackRock or Vanguard (which tend to follow shareholder voting guidance from firms like ISS and Glass Lewis). ESG shareholder action tends to focus on three objectives: disclosure, target setting, and governance. Disclosure, the most common, relates to the frequency of, quality of, and auditor assurances behind ESG information. Target setting can occur once ESG data is made available, and can be used to improve things like greenhouse gas emissions. In terms of governance, investors may simply ask for more rigour from a firm - both for its own sake, and as an enabler of the greater good through instruments like aligning executive compensation with sustainability goals.

Related topics: Just Transition, Sustainable Development, Corporate Governance, Digital Communications, Youth Perspectives, Climate Crisis

2.17 Regulation and Policy-making

Without proper regulation, potentially harmful "greenwashing" efforts may flourish

As the market for sustainable investing has expanded rapidly, firms have frequently made claims about the environmental and social performance of the investments they offer. For non-financial firms like technology companies, such claims may take the form of sustainability reports designed to attract certain equity and debt investors, while financial firms have developed product labels like "green bond" and "sustainable growth fund." If left unregulated, however, the potential for rampant "greenwashing" presents a serious challenge. Firms and financial actors have an incentive to make their activities appear green, even if they have not gone

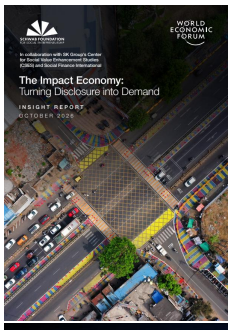
through the trouble of carefully measuring, auditing and improving sustainability performance. If firms are rewarded despite failing to live up to their sustainability claims, it could further exacerbate bad behaviour. When deceptions inevitably come to light, the resulting decline in trust could cut demand for sustainability performance, erode the incentives for good behaviour and even collapse the sustainable investing market.

Capital markets need more ways to reliably and systematically validate sustainability claims, whether through industry self-monitoring and auditing, non-governmental organizations, government regulation or technologies like blockchain. The first significant efforts to regulate sustainability were made through non-governmental organizations like the Global Reporting Initiative, the Sustainability Accounting Standards Board and the Financial Stability Board's Task Force on Climate-Related Financial Disclosures. In recent years, governments have also developed stronger regulations. The EU has been a frontrunner, with its Corporate Sustainability Reporting Directive (CSRD), which came into force in January 2023. Under the CSRD, companies must disclose both how sustainability issues affect their business and how their activities impact people and the environment. While the US Securities and Exchange Commission has halted the implantation of climate disclosure rules that were finalized in March 2024, individual states are taking steps to introduce requirements for companies in their jurisdiction. Laws passed or introduced in California, New York, Illinois and other states, for example, require reporting on greenhouse gases and climate-related risks, in line with International Sustainability Standards Board (ISSB) standards. The ISSB, launched at the COP26 climate summit, aims to develop standards that can be used to form a global baseline of sustainability information and which can be adopted into local laws and regulations. Many capital market regulators have begun processes to adopt ISSB regulations, and 36 jurisdictions have, so far, announced their intention to adopt or align with them in local regulatory frameworks. The need for convergence among non-governmental and governmental standards has shown the importance of harmonizing institutions like the World Economic Forum's Stakeholder Metrics Initiative, The Value Reporting Foundation and the Impact Management Project.

Related topics: Agile Governance, Innovation, Financial and Monetary Systems, Economic Growth, Corporate Governance, Future of the Environment, Small and Medium-Sized Enterprises

3 Further exploration

Explore the latest World Economic Forum reports related to Environment, Social, and Governance (ESG) Imperatives .



08 October 2026

The Impact Economy: Turning Disclosure into Demand



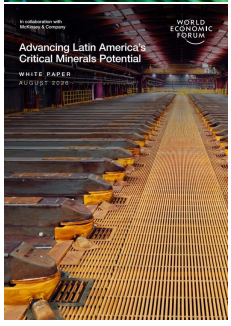
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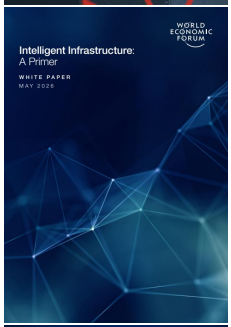
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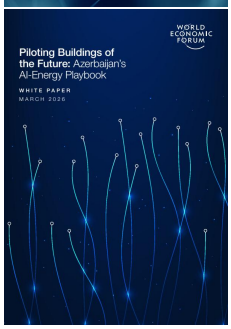
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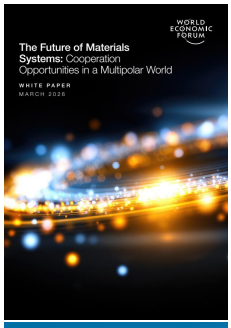
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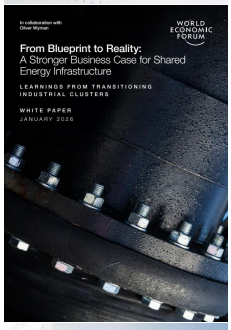
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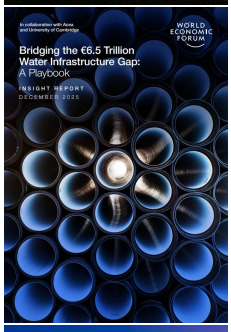
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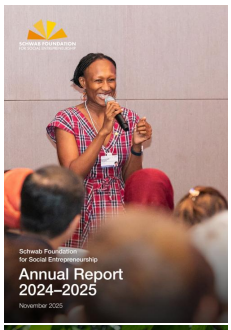
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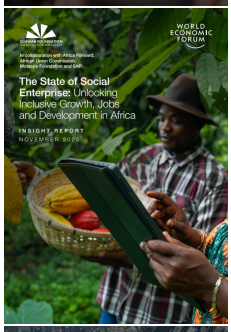
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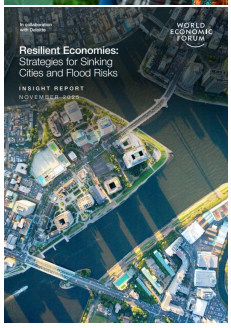
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Schwab Foundation for Social Entrepreneurship Annual Report 2024–2025



17 November 2025

The State of Social Enterprise: Unlocking Inclusive Growth, Jobs and Development in Africa



13 November 2025

Resilient Economies: Strategies for Sinking Cities and Flood Risks

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About Strategic Intelligence

Our approach

In today's world, it can be difficult to keep up with the latest trends or to make sense of the countless transformations taking place. How can you decipher the potential impact of rapidly unfolding changes when you're flooded with information - some of it misleading or unreliable? How do you continuously adapt your vision and strategy within a fast-evolving global context? We need new tools to help us make better strategic decisions in an increasingly complex and uncertain environment.

This live briefing on Environment, Social, and Governance (ESG) Imperatives , harnesses the World Economic Forum's Strategic Intelligence platform to bring you the very latest knowledge, data and context from our 300+ high quality knowledge sources. Its aim is to help you understand the global forces at play in relation to Environment, Social, and Governance (ESG) Imperatives and make more informed decisions in the future.

Each day, our Strategic Intelligence platform aggregates, distills and synthesizes thousands of articles from around the world. We blend the best of human curation with the power of machine learning to surface high-quality content on over two hundred global issues to our one million users globally. Our hand-picked network of content partners from around the world means that we automatically exclude much of the noisy clickbait, fake news, and poor quality content that plague the Internet at large. We work with hundreds of think tanks, universities, research institutions and independent publishers in all major regions of the world to provide a truly global perspective and we are confident that our data are well positioned when it comes to the intrinsic biases inherent to open text analysis on uncurated content from the Internet. For further context on our approach, you may be interested to read Strategic trend forecasting: anticipating the future with artificial intelligence and These Are The 3 Ways Knowledge Can Provide Strategic Advantage.

Overview of methodology

Our Transformation Maps are dynamic knowledge visualisations. They help users to explore and make sense of the complex and interlinked forces that are transforming economies, industries and global issues. The maps present insights written by experts along with machine-curated content. Together, this allows users to visualise and understand more than 250 topics and the connections and inter-dependencies between them, helping in turn to support more informed decision-making by leaders.

The maps harness the Forum network's collective intelligence as well as the knowledge and insights generated through our activities, communities and events. And because the Transformation Maps are interlinked, they provide a single place for users to understand each topic from multiple perspectives. Each of the maps has a feed with the latest research and analysis drawn from leading research institutions and media outlets around the world.

At the centre of each map is the topic itself. This is surrounded by its "key issues", the forces which are driving transformation in relation to the topic. Surrounding the key issues are the related topics which are also affected by them. By surfacing these connections, the map facilitates exploration of the topic and the landscape within which it sits.

The framework extends beyond mapping current trends by incorporating forecasts and scenarios to project potential future states of the system. Forecasts are based on observable patterns, while scenarios explore broader possibilities, including low-probability but high-impact events. These elements contextualize key issues and related topics within potential future trajectories, enhancing strategic thinking and decision-making.

Harnessing collective intelligence from the Forum network and leading research institutions, the maps synthesize diverse insights into a cohesive view. By integrating these insights with the latest research and analysis, the framework provides a comprehensive understanding of how transformations unfold and interrelate, empowering users to navigate the evolving landscape effectively.

Scenarios

In-line with best practice on the use of artificial intelligence in products and systems, in this section we provide full transparency on how artificial intelligence is used in our scenario generation automation.

In complex and fast-moving environments, it is difficult to maintain a clear view of what may change next, and which uncertainties deserve attention. Scenario planning helps by offering a structured way to explore alternative futures, test assumptions and clarify decisions under uncertainty.

We generate scenario packs using artificial intelligence within a defined methodology and on which we have been guided by our Global Strategic Foresight Community. The process follows the same broad logic used in scenario workshops: move from issue framing, to key uncertainties, to a 2×2 matrix, and then to four distinct scenario narratives. In an automated setting, each step includes validation to avoid weak axes and indistinct scenarios.

Each scenario pack included in our briefings includes a 2×2 scenario matrix defined by two critical uncertainties (axes), four scenario narratives and a *throughline* that connects each scenario back to the matrix.

Our process is as follows:

1. Topic framing and inputs. First, we ground our scenario design in our high-quality, expert curated content. Our topic summaries, key issues and related knowledge are used to anchor scenarios in the topic space.

2. Abstraction of underlying forces. Topic issues are often technical and uneven in granularity. Our AI agents abstract them into a small set of cross-cutting forces and tensions that can support scenario work across domains. This creates a conceptual frame that is usable for uncertainty and axis generation.

3. Identification of drivers and uncertainties. From that conceptual frame, an AI agent identifies drivers that could shape outcomes and that carry genuine uncertainty. Drivers are defined with directional poles so that they can support different regime logics rather than incremental variation.

4. Axis generation and validation. An AI agent then proposes multiple candidate axes of uncertainty and

another agent then evaluates them against criteria commonly used in facilitated scenario work: strength of the tension between poles, relevance to the topic and its drivers, and decision utility, meaning whether different positions would change strategic choices. Candidate axes are then combined into matrix pairs and tested for distinctiveness. This step is designed to avoid quadrant ”collapse”, where scenarios converge in practice despite different labels. Candidate pairs that do not yield clearly differentiated quadrants are rejected and alternatives are tried.

5. Quadrant blueprints using STEEPLE. Once an axis pair is selected, our AI develops a structured blueprint for each quadrant. Blueprints define the internal logic of that world and describe how the system behaves across STEEPLE domains (Social, Technological, Economic, Environmental, Political, Legal and Ethical), with attention focused on the domains that are most consequential for that quadrant. This stage is designed to establish coherence and contrast before narrative writing begins.

6. Grounding and counter-grounds. Our AI then builds an evidence set from the Strategic Intelligence knowledge base, drawing on our curated network of trusted content partners. Evidence is used to strengthen and challenge the emerging interpretation of each quadrant. In practice, our AI compiles supporting evidence for key mechanisms implied by the blueprint, as well as counter-evidence and constraints that suggest limits, failure modes or alternative dynamics. This step functions as a stress test. It identifies claims that are too thin, overly linear, or inconsistent with available knowledge, and it provides material used to refine the narrative direction before writing begins.

7. Narrative development within a constrained world. Once a narrative direction has been selected for a quadrant, our AI produces the scenario narrative within a constrained ”world”, mirroring workshop practice where participants explore a defined quadrant logic and then build out a coherent future state. At this stage, our models are instructed to remain consistent with the quadrant blueprint, incorporate supporting evidence where it adds credibility and specificity, reflect counter-evidence as tensions, constraints, trade-offs or contested dynamics, and describe a plausible future state rather than a transition story, prediction or recommendation. The result is a scenario that remains anchored to a defined structure while allowing creative exploration of how that structure could plausibly play out. Our AI also generates a short throughline for each scenario explaining how it expresses its position on the axes, as well as a matrix summary describing the uncertainty space and what differentiates the four futures.

8. Quality checks and transparency. Finally, an AI agent performs quality checks intended to prevent common failure modes in automated scenario generation: axes that lack meaningful tension or strategic relevance, quadrant ”collapse” where scenarios become minor variations of the same future, internally inconsistent causal logic across STEEPLE domains, and narratives that drift away from the quadrant blueprint. Intermediate artefacts (candidate axes, evaluations, quadrant blueprints, and grounding materials) are retained so results can be reviewed, compared over time, and improved.

We welcome feedback on our approach as we continue to refine and evolve our use of artificial intelligence in strategic foresight.

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World Economic Forum
91–93 route de la Capite
CH-1223 Cologny/Geneva
Switzerland
Tel.: +41 (0) 22 869 1212
Fax: +41 (0) 22 786 2744
contact@weforum.org
www.weforum.org