WORLD ECONOMIC FORUM

Environment, Social, and Governance (ESG) Imperatives

STRATEGIC INTELLIGENCE BRIEFING

Generated for Liselotte Engstam on 27 December 2024

Contents

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

Economics of Environmental Sustainability
Climate change and rising temperatures promise to severely hinder production and health

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 for Sustainability
Constructively following global guidelines relies on the efforts of both 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

Understanding Climate Risks
Extreme weather, rising sea levels, and food and water scarcity are becoming a reality

Investing in Climate Action
Strategic investments can stimulate economies and build climate resilience

Using ESG to Measure Success
Environmental, Social and Governance performance is not captured in quarterly earnings reports

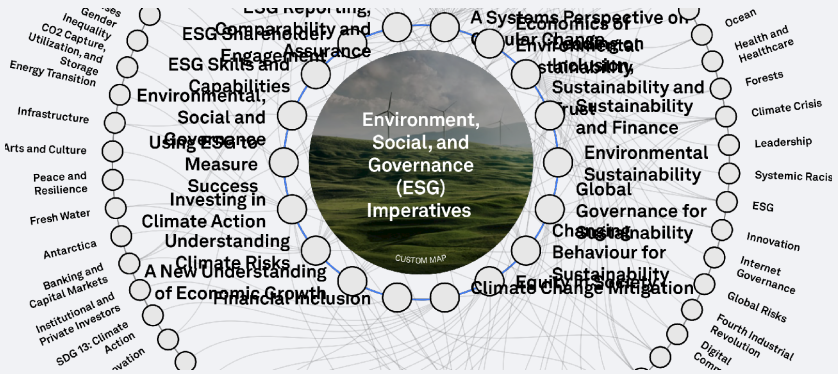
Environmental, Social and Governance
Institutional investors have increasingly focused on ESG while seeking out green bonds and impact investments

ESG Skills and Capabilities
The employees required to assess new layers of corporate performance need a blend of competencies and skills

ESG Shareholder Engagement
Environmental, Social and Governance-based engagement can help drive climate action and address public health issues

ESG Reporting, Comparability and Assurance
Environmental, Social and Governance reporting occurs too infrequently to keep up with evolving expectations

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.


Environment, Social, and Governance (ESG) Imperatives
CUSTOM MAP
Gender Inequality
CO2 Capture, Utilization, and Storage
Energy Transition
Infrastructure
Arts and Culture
Peace and Resilience
Fresh Water
Antarctica
Banking and Capital Markets
Institutional and Private Investors
SDG 13: Climate Action
ESG Skills and Capabilities
Environmental, Social and Governance
Measure Success
Investing in Climate Action
Understanding Climate Risks
A New Understanding of Economic Growth
Financial Inclusion
Climate Change Mitigation
Sustainability and Finance
Environmental Sustainability
Global Governance for Sustainability
Behaviour for Sustainability
Ocean
Health and Healthcare
Forests
Climate Crisis
Leadership
Systemic Racis
ESG
Innovation
Internet Governance
Global Risks
Fourth Industrial Revolution

1 Latest insights

A synthesis of the most recent expert analysis.

Below are your latest updates on the topic of Environment, Social, and Governance (ESG) Imperatives spanning 9 different sources.

1.1 Current perspectives

The Conversation

A gold rush for 'green finance' risks changing our relationship to nature

23 December 2024

Investment in green finance to combat climate change and restore nature is on the rise, but there is a risk of changing our relationship with nature when we commodify it. Putting a price on nature may shift our motivations from a moral obligation to profit-driven conservation. In addition, the commodification of nature can lead to increased inequality, as the ability to profit from nature concentrates in the hands of a few. The push for private finance in green initiatives often overlooks the risks and ethics of commodification, with a focus on commercial concerns. It is important to understand and address these issues to avoid exacerbating the problem.

The Diplomat

'No One Left Behind': UNDP Representative Matilda Dimovska on Mongolia's Development Journey

19 December 2024

The United Nations Development Program (UNDP) has been working closely with the government of Mongolia for the past 50 years to strengthen its democracy, civil society, and development. The UNDP has played a significant role in supporting Mongolia's transition to a market economy and democracy, as well as the achievement of Sustainable Development Goals. Some successful projects include the establishment of key institutions for human rights protection, the National Emergency Management Agency, and the development of the renewable energy sector. Challenges in Mongolia's renewable energy transition include lack of infrastructure and investment, which can be overcome through updating energy systems, regulatory reforms, social protection for vulnerable groups, and a shift in government policy and public attitudes. UNDP is currently supporting Mongolia in overcoming these challenges through the publication of the 2024 National Human Development Paper and initiatives to address air pollution through renewable-based heating solutions.

INSEAD Knowledge

Lessons in Sustainability: Forging a Better Future

18 December 2024

Sustainability must be integrated into business to address the interconnected challenges we face, from climate change to social inequality. Consumer demand for sustainable products is increasing, particularly among younger generations. Long-term thinking and considerations of environmental outcomes and social justice are crucial in decision-making. Sustainability should be fully integrated into all aspects of business, including accounting and finance. Business leaders need to understand and consider the impact of business models on society and the environment. Education and innovative teaching practices are needed to equip leaders with the knowledge and skills to integrate sustainability into business frameworks.

ReliefWeb

Enabling policies for circular economy and climate change mitigation in rice production in Southeast Asia - Bangladesh

13 December 2024

Rice production in Southeast Asia is both affected by and contributing to climate change. The region, which plays a key role in global rice production and trade, is experiencing challenges such as sea-level rise, soil salinization, and extreme weather events. Rice production is responsible for 10% to 20% of greenhouse gas emissions in these countries. Methane emissions from energy, waste management, and agriculture are a significant factor in global warming, and reducing methane emissions can have a rapid impact on slowing global warming. Countries like Bangladesh, Cambodia, and Vietnam have included methane reduction in their climate commitments. Implementing circular economy approaches and utilizing rice straw can contribute to reducing emissions and increasing resilience.

World Economic Forum

These collaborations are already tackling climate-driven health risks but more can be done to find solutions

20 December 2024

Collaborations are tackling climate-driven health risks, but more can be done to find solutions. Climate change is causing extreme weather events, malnutrition, and disease propagation, leading to significant health risks globally. The Baku COP Presidencies Continuity Coalition for Climate and Health was established at COP29, highlighting the importance of health in climate action. All sectors, not just healthcare, must address climate-driven health issues. Collaboration between sectors such as insurance and agriculture is crucial for effective adaptation and resilience. Private sector initiatives, like Swiss Re's collaboration with Climate Resilience for All and Kaiser Permanente's collaboration with California Environmental Justice Network, are examples of effective collaborations. Climate action in the healthcare sector could save lives and significantly reduce economic losses.

Copenhagen Institute for Future Studies

When Models Mislead

23 December 2024

Climate economists are raising concern that the models they rely on to predict environmental, economic, and social changes are flawed. While there is more data available than ever before, the unpredictability of certain climate systems and the occurrence of unforecasted events challenge the accuracy of these models. This uncertainty makes it difficult for policymakers to develop effective policies to address climate change.

Project Syndicate

A Triple Fiscal Crisis Is Jeopardizing Climate Action

16 December 2024

Developing economies face a triple fiscal crisis due to sovereign debt, climate change, and environmental destruction. This crisis hampers economic growth and limits investments in crucial sectors like education and healthcare. Rich countries must fulfill their commitments to finance climate action in poorer nations.

World Economic Forum

How can we transform the economic growth we have into the growth we want?

20 December 2024

Global economic growth is facing several challenges, including environmental problems and inequalities. The World Economic Forum's Global Future Council on the Future of Growth has identified four key foundations for achieving a better quality of economic growth: innovation, inclusivity, sustainability, and resilience. To transform existing economic growth into the desired growth, it is crucial to decouple growth from environmental pressures, uplift low-income and vulnerable countries, and invest in green and digital skills. This new era of growth will require radical changes and global cooperation.

Oliver Wyman

Unlocking Funding To Enable Climate Resilient Health Systems

18 December 2024

Climate change poses a current and escalating crisis, exacerbating health challenges such as vector-borne diseases, food insecurity, and mental health issues. If immediate action is not taken, it could result in over 14 million additional deaths and $12.5 trillion in economic losses by 2050. Defining clear market demand, securing funding, and demonstrating a return on investment are key barriers in addressing the climate-health nexus. To accelerate progress, stakeholders must unlock funding streams, implement supportive policies, and foster collaboration across sectors.
Data-driven approaches, such as AI and predictive modeling, can optimize healthcare responses. Blended financing models and public-private partnerships can unlock capital for scalable solutions. Transitioning to decarbonized healthcare systems and investing in climate-resilient infrastructure are crucial. Integrating environmental considerations into health strategies and leveraging technologies can address the impact of climate change on human health.

World Economic Forum

How multi-stakeholder partnerships drive sustainable development

20 December 2024

Multi-stakeholder partnerships drive sustainable development by harnessing diverse expertise and

resources. Public-private partnerships, multilateral initiatives, and NGO collaborations align shared goals. Examples include the Edison Alliance and First Movers Coalition. Partnership models require a common purpose, open communication, and flexibility. Practical examples from the World Economic Forum include the Edison Alliance for digital inclusion and the First Movers Coalition for net-zero emissions. The Global Alliance for Women's Health addresses gender health equity. Challenges of public-private partnerships exist due to the diverse stakeholders involved.

Eco-Business

Drought in the Amazon: How the world's nature is drying out

19 December 2024

Three-quarters of the world's land has become drier over the past three decades due to human-induced climate change, according to a report by the UN Convention to Combat Desertification. This shift is harming agriculture, nature, and incomes, and affecting regions such as the Amazon rainforest, African grasslands, and the western United States. Drought and land degradation are leading to a decline in water availability, loss of habitat for wildlife, and a decrease in soil fertility and crop productivity. A drier world also worsens water and air quality, intensifies sand and dust storms, and disrupts electricity grids. To combat this, the report suggests investing in water and land management, promoting sustainable land use, and adopting technologies to boost water efficiency. Implementing nature-based solutions, such as tree planting and organic farming, can also help restore land and fight desertification.

Eco-Business

Who are climate migrants and what can the world do for them?

19 December 2024

Climate migration is becoming a significant issue due to the growing impact of climate change. Last year, 26 million people were internally displaced by climate-related disasters, and by 2050, that number could reach 216 million. However, identifying climate migrants is complex, as they may have multiple motives for moving. Many climate migrants relocate within their own country, with cities being a common destination. While some countries are offering support and opportunities to climate migrants, others face challenges in providing adequate resources. It is crucial to prioritize disaster risk reduction and support integration to prevent further displacement and ensure the well-being of climate migrants.

Eco-Business

Sustainability innovations that made headlines in 2024

18 December 2024

Investments in climate tech startups have decreased, as have investments in alternative meats. However, renewable energy investments are expected to reach $2 trillion in 2024. Some promising sustainability innovations that caught attention this year include a tool that uses machine learning to detect oil slicks, a cell-based coffee brand that requires less land and water, ice stupas that store glacial meltwater for irrigation, a satellite imagery tool to identify and clean up plastic debris on beaches, and thin, lightweight solar panels with high efficiency. Additionally, scientists in Singapore have developed an artificial worm gut to accelerate the breakdown of plastics.

1.2 Potential scenarios

In this section, we use experimental artificial intelligence to surface a range of scenarios related to the topic. These are not predictions but are provided to anchor discussions and help you think through and anticipate potential opportunities and risks.

Please note that this section is part of our ongoing trials using experimental artificial intelligence technology to enrich our user experience and bring our members the very latest developments and trends. We'll continue to innovate and refine our efforts based on these pilots.

1. A coalition of developing countries demand greater financial support for climate action

A group of developing countries form a coalition to demand greater financial support from developed countries to help them transition to a low-carbon economy and adapt to the impacts of climate change. The coalition is successful in securing significant new funding commitments from developed countries, but there is also criticism that the funding is not sufficient to meet the scale of the challenge. The coalition continues to push for more ambitious action on climate change, and becomes a powerful voice for climate justice on the global stage.

Related topics: Investing in Climate Action

2. A major ESG lawsuit shakes investor confidence

A major ESG lawsuit is filed against a company, alleging that it has misled investors about its ESG performance. The lawsuit leads to a significant loss of trust in the company and in ESG more broadly, as investors and the public question the reliability of ESG data and reporting. The incident prompts calls for greater regulation and oversight of ESG practices, but also highlights the need for companies to develop strong ESG skills and capabilities in order to avoid similar lawsuits in the future.

Related topics: Using ESG to Measure Success, ESG Skills and Capabilities, ESG Reporting, Comparability and Assurance

3. A major regulator introduces new rules for the crypto industry

A major global regulator announces plans to introduce new rules and standards for the crypto industry, aimed at promoting greater transparency and accountability. The new rules will require crypto companies to disclose more information about their operations and risk management practices, and will subject them to regular audits and inspections. The announcement is expected to have a significant impact on the industry, driving greater governance and regulation.

Related topics: Financial Inclusion

4. A circular economy startup develops a new business model

A circular economy startup develops a new business model that enables the sharing of goods and services among individuals and businesses. The model is hailed as a breakthrough in the circular economy, but also raises concerns about the potential for increased inequality and the displacement of workers in traditional industries.

Related topics: A New Understanding of Economic Growth

5. AR and VR technologies promote environmental sustainability

The widespread adoption of AR and VR technologies leads to a new era of environmental sustainability, as individuals become more aware of the impact of their behaviour on the environment. This has a significant impact on changing behaviour for sustainability, as individuals can now experience the consequences of their actions in a virtual environment. Additionally, businesses can use these technologies to create more sustainable products and services, leading to a more environmentally conscious economy.

Related topics: Changing Behaviour for Sustainability

6. A major financial institution shifts focus towards sustainability and finance

A major financial institution announces plans to shift its focus towards sustainability and finance, investing heavily in renewable energy and other environmentally-friendly initiatives. This move is driven by increasing demand from customers and investors for socially responsible banking practices, and leads to greater profitability and a more positive public image for the institution.

Related topics: Sustainability and Finance

A variety of articles have been used by our artificial intelligence in order to formulate these scenarios. These acted as our "signposts" and provide clues or hints about what the future may entail. We recommend reading them for further context:

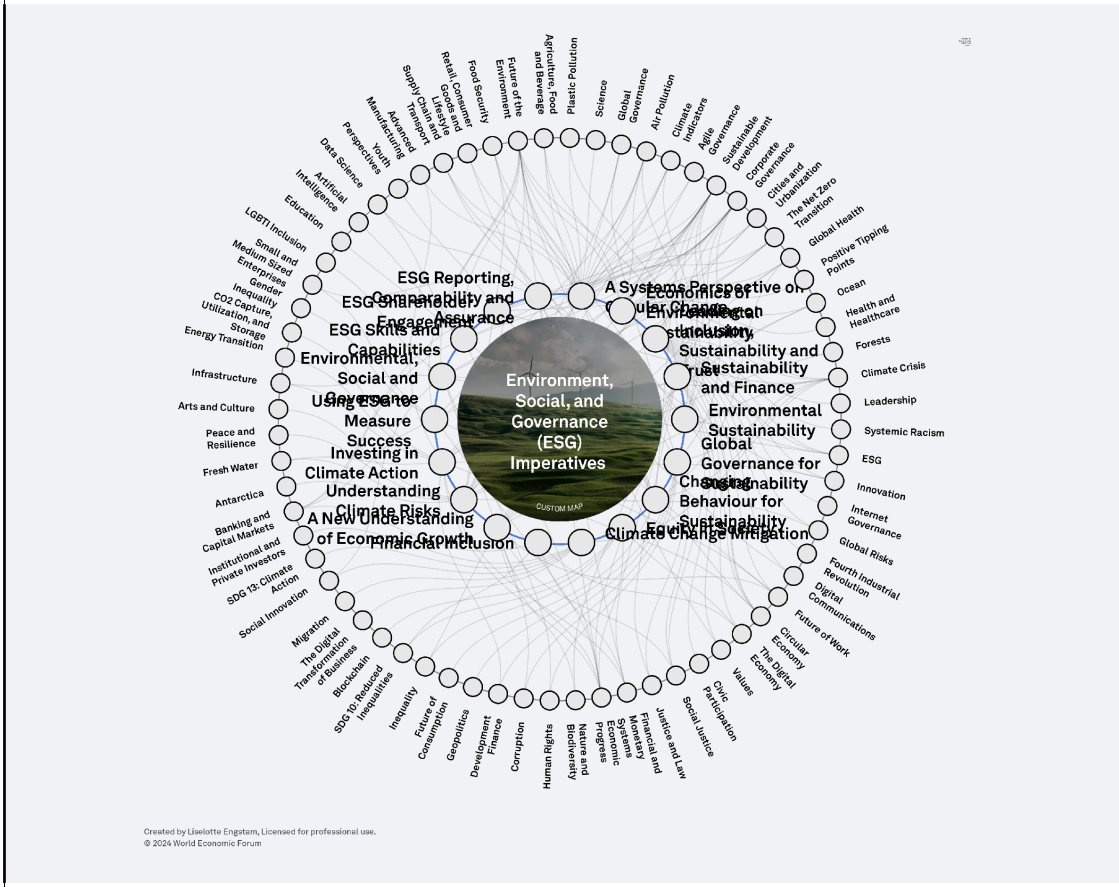
- Is your industry at risk of a cyberattack?, *World Economic Forum*
- Why U.S. Regional Banks Are Still in Crisis, *Kellogg School of Management*
- Global Governance in an Age of Fracture – LSE Phelan US Centre Event Review, *London School of Economics and Political Science*
- Here's how we can make our food system more sustainable, *World Economic Forum*
- Central banks' rate push a risk to growth, and other economy stories to read this week, *World Economic Forum*
- Research on improving teaching and learning often lacks a holistic focus—a new collaborative research project hopes to change this, *The Brookings Institutions – Center for Universal Education*
- Respecting human rights: Why the CSDDD needs to go beyond social auditing, *Business and Human Rights Resource Centre*
- Top Business Sustainability Issues of 2023, *Network for Business Sustainability*
- 2022 was a hard year for crypto — but it may have been just what the industry needed, *World Economic Forum*
- Where Cryptocurrency, Water and Conflict Collide, *United States Institute of Peace*
- The Path Forward For Digital Assets and Crypto in 2023, *Marsh McLennan*
- Guidelines for Improving Blockchain's Environmental, Social and Economic Impact, *World Economic Forum*
- Climate change is changing the way trees grow. Here's how, *World Economic Forum*
- Bonn climate talks: Key outcomes from the June 2023 UN climate conference, *Carbon Brief*
- How to Scale Local Innovations in Big Companies, *Harvard Business Review*

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: Advanced Manufacturing, Supply Chain and Transport, Retail, Consumer Goods and Lifestyle, Food Security, Future of the Environment, Agriculture, Food and Beverage, Plastic Pollution, Science, Global Governance, Air Pollution, Climate Indicators, Agile Governance, Sustainable Development, Corporate Governance, Cities and Urbanization, The Net Zero Transition

2.2 Economics of Environmental Sustainability

Climate change and rising temperatures promise to severely hinder production and health

The intersection of economic progress and environmental sustainability has become critical. The Forum's 2024 Global Risks Report highlighted the profound economic implications of climate change, with environmental risks dominating its top global threats to economic stability. The economic consequences of environmental degradation are no longer theoretical; they are measurable, and immediate. Advanced economies are experiencing substantial financial impacts, with climate-related disasters causing over $250 billion in global economic losses in 2023 alone. Developing countries face more significant challenges, with projected income reductions of up to 20% by 2050 due to environmental disruption. However, innovative economic models are emerging that prioritize sustainable development. The circular economy concept has gained traction, as companies like Unilever and Apple implement more regenerative business practices that reduce environmental impact while creating economic value. These approaches demonstrate that environmental sustainability can be a driver of economic innovation, instead of a constraint.

Technological advancement is crucial for achieving both economic and environmental objectives. Renewable energy has become a significant economic engine; the solar and wind industries create millions of jobs, and have attracted over $500 billion in annual investment. The green technology market in total is projected to exceed $12 trillion by 2030. Financial institutions are increasingly integrating environmental, social, and governance (ESG) criteria into their investment strategies. Global banks have committed to financing sustainable infrastructure and low-carbon transitions, and recognize that long-term economic resilience is linked to environmental stewardship. The economic argument for sustainability is no longer about mitigation, it is about adaptation and opportunity. Governments and corporations that proactively embrace environmental considerations could enjoy competitive advantages in an increasingly resource-constrained world. The financial numbers generated by the green transition are not just numbers, they mark a fundamental restructuring of global economic opportunity. As climate challenges intensify, economies can turn ecological constraints into sources of innovation, employment, and relative resilience.

Related topics: Global Health, Sustainable Development, Positive Tipping Points, Ocean, Air Pollution, Health and Healthcare, Forests, Agile Governance, The Net Zero Transition, Agriculture, Food and Beverage, Climate Crisis, Future of the Environment

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: Leadership, Systemic Racism, ESG, Corporate Governance, Innovation, Internet Governance, Global Risks, Fourth Industrial Revolution, Digital Communications, Future of Work, Circular Economy, Climate Crisis, Sustainable Development, The Digital Economy

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: Values, ESG, Civic Participation, Circular Economy, Social Justice, Justice and Law, Sustainable Development, Financial and Monetary Systems, Economic Progress, Nature and Biodiversity, Corporate Governance, Future of the Environment

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: Air Pollution, Future of the Environment, Supply Chain and Transport, ESG, Sustainable Development, Plastic Pollution, Circular Economy, Climate Indicators

2.6 Global Governance for Sustainability

Constructively following global guidelines relies on the efforts of both 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. The United Nations has been the at the centre of the global agenda since World War II. Its agreements, conventions, and treaties apply to human rights, climate change, and many other topics, and it can propose development policies for member states; the UN system can help build technical and financial capacity to implement these proposals. In 2015, the UN's 2030 Agenda for Sustainable Development was approved alongside 17 related goals, or SDGs. This approach requires accounting for different perspectives and sectoral agendas - and creates a need to shift from a governance structure of distinct agendas to a more integrated approach. One related change was the reform of the UN development system and designation of Resident Coordinators in many countries. This position, based in the UN Development Programme (UNDP), is central to promoting the fulfilment of the 2030 Agenda.

The High-Level Political Forum for Sustainable Development is a UN subsidiary body responsible for monitoring policies and making recommendations to member states. And the UN Sustainable Development Cooperation Framework (formerly UN Development Assistance Framework), is implemented in member states through specific agreements; it is meant to enable a more comprehensive approach to the development agenda in each location, through consultation with a broad set of stakeholders (including the private sector). Specific related initiatives include the UNDP Accelerator Labs, established in more than 90 countries to incubate innovative approaches to making progress on the 2030 Agenda, and the Joint Sustainable Development Goals Fund - an instrument for strategic investment in activities deemed necessary to achieve the SDGs. Like many other international agreements, the UN General Assembly resolution that approved the 2030 Agenda is not binding on countries. Its effectiveness therefore depends on the willingness of each member state to factor 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. Also playing a significant role: international cooperation instruments (technical and financial), and the transparency of mechanisms for measuring progress.

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

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: Sustainable Development, Circular Economy, Future of the Environment, Agriculture, Food and Beverage, Food Security, Future of Consumption, Global Health, Climate Crisis, Retail, Consumer Goods and Lifestyle

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 Progress, Inequality, The Digital Economy, SDG 10: Reduced Inequalities, Blockchain

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: The Digital Transformation of Business, Migration, Climate Crisis, Social Innovation, SDG 13: Climate Action, Institutional and Private Investors

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: SDG 10: Reduced Inequalities, Banking and Capital Markets, Financial and Monetary Systems, The Digital Economy

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

2.12 Understanding Climate Risks

Extreme weather, rising sea levels, and food and water scarcity are becoming a reality

All ten of the hottest years on record have occurred since 2005. The global average temperature is now about 1°C above the pre-industrial average, and increasing at a rate of about 0.2°C per decade. This warming is largely the result of human activity. Carbon dioxide released by burning fossil fuels, and through agricultural activity like farming, has raised the pre-industrial concentration of carbon dioxide in the

atmosphere by about one-third to more than 400 parts per million - which has in turn intensified the trapping of heat. Global warming is causing sea levels to rise and is changing precipitation patterns, with increased rainfall in some regions and more extreme drought in others. The world experienced a staggering number of climate-related disasters in 2020 - causing damage from hurricanes, wildfires, droughts, and floods that resulted in financial losses totalling more than $200 billion, according to the German reinsurer Munich Re. The US National Climate Assessment issued in late 2018 projected yearly related losses of $300 billion in the US alone by the end of this century.

The Paris Agreement on climate change aims to limit global average temperature rise to well below 2°C above pre-industrial levels. However, a 2018 report published by the Intergovernmental Panel on Climate Change vividly illustrated the need to limit warming to no more than 1.5°C; many ocean ecosystems, including the majority of the world's warm water coral reefs, are likely to disappear if warming exceeds this level. The average global rise in sea level - which is projected to be about half a metre by 2100, if warming reaches 2°C - could be reduced by 20% by hitting the 1.5°C target, thereby protecting an estimated 10 million vulnerable people. A slower temperature rise would also help affected regions better adapt to climate change. In order to meet the 1.5°C target, however, countries must go well beyond their initial Paris Agreement pledges and commit to net-zero emissions by the year 2050. Achieving this will require far-reaching changes to many aspects of modern society as we know it, but would also help create a more sustainable, equitable world.

Related topics: Future of the Environment, Global Governance, Antarctica, Food Security, Sustainable Development, Ocean, Fresh Water, Climate Indicators, Forests, Peace and Resilience, Arts and Culture, Global Risks, Air Pollution, Corporate Governance

2.13 Investing in Climate Action

Strategic investments can stimulate economies and build climate resilience

Investments in green transportation, sustainable agriculture, and climate-resilient infrastructure can have a multiplier effect. According to the Business Commission for Sustainable Development, investing $320 billion annually in sustainable business models in developed economies could unlock $2.3 trillion in additional annual investment by 2030. A report published by the Organisation for Economic Co-operation and Development found that better integrating economic and climate action could increase average economic output in G20 countries by almost 3% by 2050. And, the International Finance Corporation has identified nearly $23 trillion in climate-smart investments in emerging markets through 2030. Investment in decarbonization surpassed $500 billion for the first time in 2020, despite COVID-19, according to Bloomberg New Energy Finance, and direct investment in electrical power capacity from renewable energy exceeded $300 billion for the second time (following 2017) - including $50 billion in offshore wind. Corporations are signing long-term, large-scale renewable energy contracts, and the Green Climate Fund (an element of the Paris Agreement) is sponsoring nearly 150 projects in developing countries with over $7 billion in committed financing - though still short of the $100 billion targeted to be available annually by 2020.

Governments can catalyse private investment in climate resilience by providing incentives and funding innovation. Businesses can reinforce government action in turn, by making climate-smart investments and by supporting the United Nations 2030 Agenda for Sustainable Development. According to the New Climate Economy report published in 2018 by the Global Commission on the Economy and Climate, $90 trillion will be spent globally through 2030 on new infrastructure - which exceeds the value of all current infrastructure stock. Developing countries are expected to account for roughly two-thirds of this new infrastructure investment, which can be made sustainable and compatible with climate goals through relatively modest additional upfront costs. Ultimately, these upfront costs can be more than offset by efficiency gains and fuel savings. The potential rewards are enormous; the Global Commission on the Economy and Climate's report projects an economic gain of $26 trillion through the year 2030 if investments are made in low-carbon technologies and resilient infrastructure, rather than conducting business as usual. Such investments offer an unprecedented opportunity to leapfrog the wasteful, polluting infrastructure of the past, and accelerate the global transition to efficient, climate-resilient, and low-carbon economies.

Related topics: Sustainable Development, Development Finance, Circular Economy, Innovation, Advanced Manufacturing, Fresh Water, Climate Indicators, Infrastructure, Energy Transition, CO2 Capture, Utilization, and Storage, Economic Progress, The Net Zero Transition, Financial and Monetary Systems, Cities and Urbanization

2.14 Using ESG to Measure Success

Environmental, Social and Governance performance is not captured in quarterly earnings reports

At its root, ESG is about expanding our appreciation of a firm's performance and impact. While quarterly earnings reports might convey key figures, they leave much hidden related to both the causes and effects of the firm's success. By widening our view, we may see that a mining firm's profits come at the expense of workers, communities, and the environment, for example - while another firm in the same industry may be investing in worker safety and environmental efforts in ways that aid long-term performance, but do not show up in a balance sheet. This wider view helps determine whether firms can be considered "sustainable," and so it is essential to enable broad access to it. While firms can constrain their own future success if they negatively impact the people, customer and community trust, or natural resources they depend upon, one key challenge relates to how broad the view of these impacts and risks should be. What should be in scope when assessing "non-financial performance" for technology firms, relative to automotive companies, mining interests, or financial firms? And, how long should our time horizon be when considering related risks and impacts?

There are no easy answers to these questions, and different countries and institutions define sustainability differently. ESG has become an umbrella concept for hundreds of issues, practices, and metrics used to hold firms accountable. One MIT study of ESG rating agencies found that 50% of the significant divergence in ratings was caused by differences in scope and definition. The World Economic Forum and its partners have sought to lessen these differences by developing the "Stakeholder Metrics Initiative," designed to make ESG metrics comparable across industries and regions; more than 150 companies have so far adopted them. Writing and publishing reports may increase transparency, but it does not change practices. And while buying and selling equities based on ESG information is increasingly common, the effects on firms (and society in general) are indirect at best. ESG information can only improve the world under certain conditions: when C-suite executives actually use it to guide decision making, when it attracts the best employees, customers, suppliers, and capital, when it influences regulatory action, or when it impacts shareholder voting - which can make non-financial information truly material.

Related topics: Future of Work, Economic Progress, Future of the Environment, Air Pollution, The Net Zero Transition, Corporate Governance, Gender Inequality, Small and Medium Sized Enterprises, Banking and Capital Markets

2.15 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: Infrastructure, Corruption, Climate Crisis, Human Rights, Social Innovation, LGBTI Inclusion, Corporate Governance, Sustainable Development, Future of the Environment, ESG

2.16 ESG Skills and Capabilities

The employees required to assess new layers of corporate performance need a blend of competencies and skills

As the Environmental, Social and Governance marketplace grows, every firm involved is in need of people equipped with up-to-date sustainable business and investment skills. Banks and asset managers have been staffing up their ESG departments to help them analyse the non-financial performance of firms, and integrate that information with more traditional financial data in order to more comprehensively inform their investment decisions. Entirely new financial firms are also emerging, to supply the market with sustainable investment products like green bonds and access to activist shareholder funds and clean technology-focused venture capital investments. Their employees need a combination of foundational financial analysis skills and fluency in the language of carbon emissions, living wages, political activity, and other ESG matters - as well as an ability to critically consume related information. Non-financial firms need sustainability departments capable of measuring and monitoring firm performance, and communicating in an accurate and timely way to the capital markets and other stakeholders. The necessary related skillsets include an ability to engage and collaborate with business leaders while bringing a broader set of stakeholder concerns to the table.

To better connect businesses and disparate stakeholders, there is a growing industry of data providers, analytics and artificial intelligence firms, rating agencies, and other services designed to help process new layers of information about corporate performance. The necessary skillsets for this combine data analytics, computer science, and consulting with a deep understanding of sustainability. To develop a new generation of professionals equipped with these skills, business schools can further integrate sustainability into their curricula, and collaborate with operational and financial disciplines. Meanwhile academic programs in the environmental and social sciences can prepare people to apply their expertise to capital markets. Professional associations of investors, auditors, and accountants can provide continuing ESG education via organizations like the CFA Institute. Because ESG skills are often hybrid, the necessary certification and credentialing has been idiosyncratic - MBAs and Master of Finance degrees appear in credentials alongside degrees in environmental science or labour economics. While some people may have dual degrees covering such fields, others pursue specific sustainability certificates. As the ESG field matures and solidifies, employers may begin to seek more such harmonized certifications and credentials.

Related topics: Education, Banking and Capital Markets, Artificial Intelligence, Corporate Governance, Future of the Environment, Future of Work, Economic Progress, Sustainable Development, Data Science

2.17 ESG Shareholder Engagement

Environmental, Social and Governance-based engagement can help drive climate action and address public health issues

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: Banking and Capital Markets, Global Health, Digital Communications, Corporate Governance, Youth Perspectives, Climate Crisis, Sustainable Development

2.18 ESG Reporting, Comparability and Assurance

Environmental, Social and Governance reporting occurs too infrequently to keep up with evolving expectations

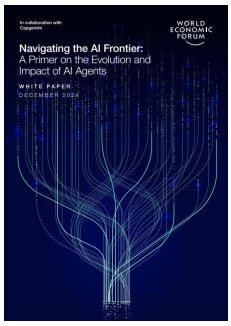
Corporate sustainability reporting has become common practice for large firms, and is the most widely used source of information about ESG performance. A KPMG survey in 2020 found that among 5,200 top-earning firms in 100 different countries, 80% were doing sustainability reporting - which rises to 96% for the world's 250 largest firms. However, generating sustainability reports can be labour-intensive and costly. The internal data collection necessary often requires dedicated staff and consultants, making it prohibitive for smaller firms. Even firms that do report on ESG factors only do so on an annual basis, even as quarterly reporting of financial results remains the norm. This lower frequency ESG reporting may be insufficient to keep up with rapidly increasing social and regulatory expectations on matters like greenhouse gas emissions. Another issue stems from the varying definitions of and expectations for ESG and sustainability. A firm may decide an issue is not worth disclosing, though investors and other stakeholders might disagree. As a result, if the only source of ESG data is corporate reporting, markets may not be able to react to some critical issues and stakeholders may seek out greater innovation in related data collection.

Another challenge is related to inconsistencies in data pulled from corporate reports, due to the different ways firms measure and reflect ESG factors. For example, firms might count greenhouse gas emissions only from their direct operations, or more comprehensively from their supply chains; those that are more rigorous and inclusive in their measurement might appear to be doing worse than those reporting in a more cursory way. For this reason, standards have been essential for the development of ESG reporting - such as the GHG Protocol, CDP, GRI, SASB, and the newly established International Sustainability Standards Board under the IFRS Foundation. There is also the issue of reliability and trustworthiness, given the incentive firms have to indulge in greenwashing that makes their operations appear less risky and more virtuous. One key related development has been an increase in the auditing and assurance of corporate sustainability reporting. The KPMG survey found that 2020 was the first year in which a majority of large firms had invested in the independent assurance of sustainability reports (51% of the 5,200 top firms in 100 in countries, and 71% of the world's 250 largest). As regulatory requirements for ESG reporting increase, these figures are also likely to increase.

Related topics: Corporate Governance, Data Science, Supply Chain and Transport, Innovation, Values, Future of the Environment, Financial and Monetary Systems, Small and Medium Sized Enterprises, Economic Progress

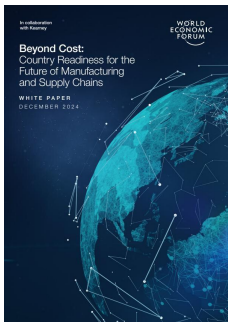
3 Further exploration

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



16 December 2024

Navigating the AI Frontier: A Primer on the Evolution and Impact of AI Agents

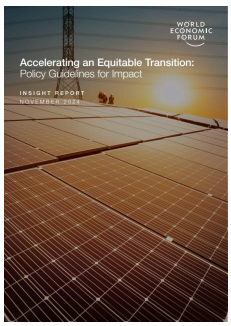


10 December 2024

Beyond Cost: Country Readiness for the Future of Manufacturing and Supply Chains

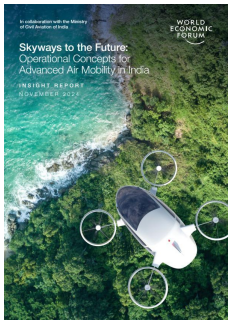
18 November 2024

Schwab Foundation for Social Entrepreneurship: Annual Report 2023-24



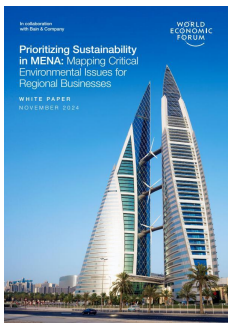
14 November 2024

Accelerating an Equitable Transition: Policy Guidelines for Impact



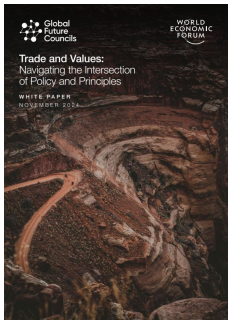
13 November 2024

Skyways to the Future: Operational Concepts for Advanced Air Mobility in India



07 November 2024

Prioritizing Sustainability in MENA: Mapping Critical Environmental Issues for Regional Businesses

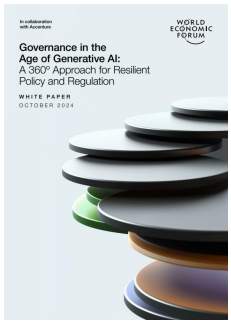


07 November 2024

Trade and Values: Navigating the Intersection of Policy and Principles

15 October 2024

Clean Air Actions in Cities



08 October 2024

Governance in the Age of Generative AI: A 360° Approach for Resilient Policy and Regulation

07 October 2024

Climate and Health: The Social Innovation Landscape in Latin America and Asia-Pacific

References

1. The Conversation, *"A gold rush for 'green finance' risks changing our relationship to nature"*: theconversation.com
2. The Diplomat, *"'No One Left Behind': UNDP Representative Matilda Dimovska on Mongolia's Development Journey"*: thediplomat.com
3. INSEAD Knowledge, *"Lessons in Sustainability: Forging a Better Future"*: knowledge.insead.edu
4. ReliefWeb, *"Enabling policies for circular economy and climate change mitigation in rice production in Southeast Asia - Bangladesh"*: reliefweb.int
5. World Economic Forum, *"These collaborations are already tackling climate-driven health risks but more can be done to find solutions"*: www.weforum.org
6. Copenhagen Institute for Future Studies, *"When Models Mislead"*: farsight.cifs.dk
7. Project Syndicate, *"A Triple Fiscal Crisis Is Jeopardizing Climate Action"*: www.project-syndicate.org
8. World Economic Forum, *"How can we transform the economic growth we have into the growth we want?"*: www.weforum.org
9. Oliver Wyman, *"Unlocking Funding To Enable Climate Resilient Health Systems"*: www.oliverwyman.com
10. World Economic Forum, *"How multi-stakeholder partnerships drive sustainable development"*: www.weforum.org
11. Eco-Business, *"Drought in the Amazon: How the world's nature is drying out"*: www.eco-business.com
12. Eco-Business, *"Who are climate migrants and what can the world do for them?"*: www.eco-business.com
13. Eco-Business, *"Sustainability innovations that made headlines in 2024"*: www.eco-business.com
14. World Economic Forum, *"Is your industry at risk of a cyberattack?"*: www.weforum.org
15. Kellogg School of Management, *"Why U.S. Regional Banks Are Still in Crisis"*: insight.kellogg.northwestern.edu
16. London School of Economics and Political Science, *"Global Governance in an Age of Fracture – LSE Phelan US Centre Event Review"*: blogs.lse.ac.uk
17. World Economic Forum, *"Here's how we can make our food system more sustainable"*: www.weforum.org
18. World Economic Forum, *"Central banks' rate push a risk to growth, and other economy stories to read this week"*: www.weforum.org

19. The Brookings Institutions – Center for Universal Education, *"Research on improving teaching and learning often lacks a holistic focus—a new collaborative research project hopes to change this"*: www.brookings.edu

20. Business and Human Rights Resource Centre, *"Respecting human rights: Why the CSDDD needs to go beyond social auditing"*: www.business-humanrights.org

21. Network for Business Sustainability, *"Top Business Sustainability Issues of 2023"*: nbs.net

22. World Economic Forum, *"2022 was a hard year for crypto — but it may have been just what the industry needed"*: www.weforum.org

23. United States Institute of Peace , *"Where Cryptocurrency, Water and Conflict Collide"*: www.usip.org

24. Marsh McLennan, *"The Path Forward For Digital Assets and Crypto in 2023"*: www.marshmclennan.com

25. World Economic Forum, *"Guidelines for Improving Blockchain's Environmental, Social and Economic Impact"*: www.weforum.org

26. World Economic Forum, *"Climate change is changing the way trees grow. Here's how"*: www.weforum.org

27. Carbon Brief, *"Bonn climate talks: Key outcomes from the June 2023 UN climate conference"*: www.carbonbrief.org

28. Harvard Business Review, *"How to Scale Local Innovations in Big Companies"*: hbr.org

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.

Transformation maps

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.

Continue online

Our suite of Strategic Intelligence tools are available to help you keep up to date across over 300 topics.

On the web

Visit Strategic Intelligence on your desktop or laptop. All modern browsers supported.

In the app stores

You can find our Strategic IQ app on the Apple App Store, Google Play Store or Huawei App Gallery.

Download on the App Store

GET IT ON Google Play

You can also follow Strategic Intelligence on Twitter.

Acknowledgements

Content Providers featured in this briefing

Copenhagen Institute for Future Studies

Eco-Business

INSEAD Knowledge

Oliver Wyman

Project Syndicate

ReliefWeb

The Conversation

The Diplomat

World Economic Forum

WORLD ECONOMIC FORUM

COMMITTED TO IMPROVING THE STATE OF THE WORLD

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.

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