WORLD ECONOMIC FORUM

COMMITTED TO IMPROVING THE STATE OF THE WORLD

Board Sustainability, ESG & Climate Governance
Dynamic Briefing

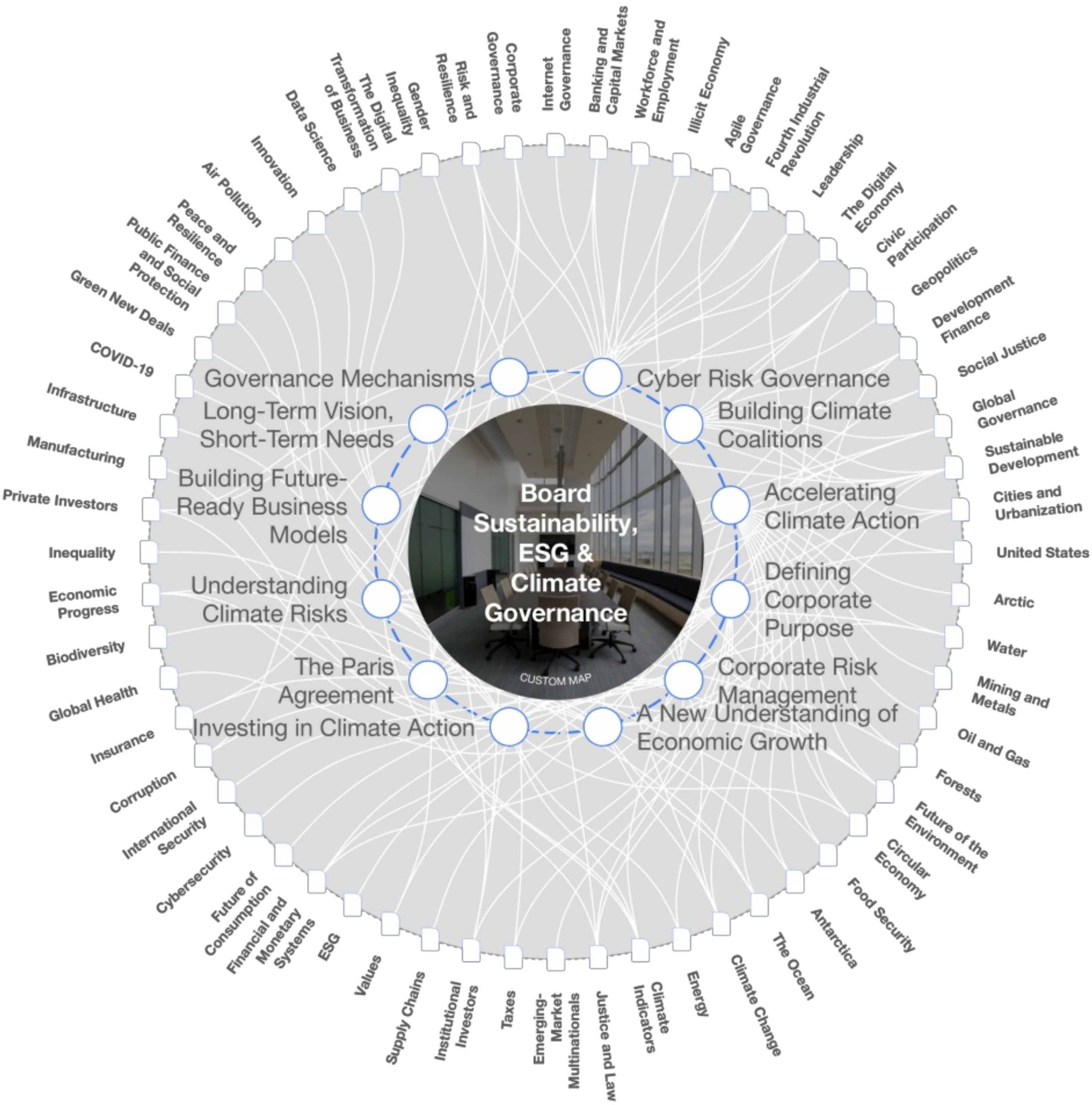
Generated 05 November 2022 for Team Digoshen

Board Sustainability, ESG & Climate Governance

Last review on Sat 19 February 2022

About

This dynamic briefing draws on the collective intelligence of the Forum network to explore the key trends, interconnections and interdependencies between industry, regional and global issues. In the briefing, you will find a visual representation of this topic (Transformation Map – interactive version available online via intelligence.weforum.org), an overview and the key trends affecting it, along with summaries and links to the latest research and analysis on each of the trends. Briefings for countries also include the relevant data from the Forum's benchmarking indices. The content is continuously updated with the latest thinking of leaders and experts from across the Forum network, and with insights from Forum meetings, projects communities and activities.



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Board Sustainability, ESG & Climate Governance

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Cyber Risk Governance

The number of corporate boards with a dedicated cybersecurity committee is expected to increase sharply by 2025

Governance relies on risk-based decision making as a fundamental means to both drive the efficient use of resources, and to improve confidence in an organization's ability to achieve strategic objectives. All organizations rely on their employees' ability to navigate a world of growing uncertainty, and to dodge threats to their ability to achieve its collective goals. Unfortunately, complex organizations can easily be overwhelmed; each risk demands a distinct analysis and potential investment of additional resources, to respond in ways that adequately reduce exposure. A good governance structure will provide a framework that enables the right managers to make the right decisions, which will help prioritize and allocate resources as needed. All risks don't necessarily require analytic rigour or subsequent investment - immediate hazards like icy sidewalks or commonplace cyber incidents like phishing emails can be addressed at lower management levels. That is not the case for strategic risks like global pandemics or advanced, persistent cyber threats that have the potential to disrupt or damage an organization indefinitely. A structure that effectively prioritizes and adjudicates risks to the right organizational level is required.

Responsibility for risks is typically apportioned in accordance with an organization's willingness to accept them, also called "risk appetite." A risk-appetite statement can be used to direct employees and clarify who has the necessary level of authority to decide how to respond to any given situation. The National Institute of Standards and Technology Special Publication 800-37 addresses the divvying up of risk with a three-tier structure including the organization, the mission, and the system. Meanwhile the ISO 27000 series of standards provides recommendations for the use of policy and organizational structure to reduce risk, and the COSO framework connects governance to culture by highlighting the importance of board oversight, culture requirements, core values, and human resource development. Vigorous, board-level engagement in risk governance is essential for success. Thankfully, boards are increasingly recognizing the importance of cyber risk governance; a study published by Ernst and Young in 2020 found that 81% of board members categorize cybersecurity as "highly relevant," and Gartner researchers predict that 40% of all boards will have a dedicated cybersecurity committee by the year 2025 (currently, just 10% of boards have one).

Related insight areas: Risk and Resilience, Corporate Governance, Internet Governance, Banking and Capital Markets, Workforce and Employment, Illicit Economy, Agile Governance, Fourth Industrial Revolution, Leadership, The Digital Economy

Geneva Centre for Security Sector Governance (DCAF)

#CyberSecMonth is in full swing to build cybersecurity awareness

06 October 2022

Ninety-five percent of cybersecurity breaches are caused by human error. Last year that meant some 22 billion records were exposed by data breaches, with harmful consequences on personal lives and the smooth running of businesses and institutions (World Economic Forum and Risked Based Security). The first step to prevention is to be aware of the risks and learn how to avoid them. For ten years, #CyberSecMonth has offered a full range of tools and resources to do so. Each year in October, hundreds of activities take place across Europe to promote digital security and cyber hygiene, including conferences, workshops, training, and more.

Executive Magazine

A weak position in the undeclared cyber war

28 September 2022

We live in a time when hardly a day goes by without hearing about a cybersecurity incident. The need for a safe and secure digital world significantly grew after the… The post A weak position in the undeclared cyber war appeared first on Executive Magazine .

RAND Corporation

Support to the DoD Cyber Workforce Zero-Based Review

19 September 2022

The zero-based review (ZBR) process described in this report constitutes a transparent, repeatable process with which the U.S. Department of Defense (DoD) can conduct future ZBRs across the DoD cyber enterprise.

Harvard Kennedy School - Belfer Center for Science and International Affairs

The New Frontier of Democratic Self-Defense

23 August 2022

The United States nor its allies alone cannot counter adversarial and criminal cyber activity in the digital domain-– the reach, scale, stealth, and danger are simply too great for any one country to bear. As such, calls for international operational collaboration in cybersecurity and emerging technologies are increasing. Former U.S. State Department Cyber Diplomat Chris Painter noted in a December 2020 Foreign Policy article that there must be more leadership and partnership on global cyber cooperation. What follows represents a thinking-through of what this ought to entail.

Cybernews

Best Compliance solutions: our top picks

18 August 2022

It might seem like a no-brainer to take steps towards meeting your legal obligations as only fulfilling your lowest requirements might result in missed possibilities or painful losses. Occurrences of violations in recent years, especially ones that resulted in lawsuits or loss of reputation, have shown, just how important it is to ensure you stay in compliance with the latest regulations at all times. As your business grows, so does the number of standards and regulations that you need to comply with. Keeping up with all the requirements can be tricky, however there are many companies that can help you out. Best Compliance solutions: a detailed list.

Building Climate Coalitions

Effective action requires engagement with many different stakeholders

Effective climate action will require commitments from a wide variety of players - businesses, national governments, international organizations, cities and regions, just to name a few. Businesses, regions and cities in particular took centre stage during the past few years, after the announcement that the Trump Administration planned to withdraw the world's largest economy from the Paris Agreement on climate change. While that withdrawal effort was later reversed, it provided an opportunity for others to step forward. The We Are Still In coalition, which includes investors, companies, and cities, gathered thousands of signatures in support of a pledge to uphold the Paris Agreement. Meanwhile We Mean Business, a coalition of non-profit organizations dedicated to partnering with the private sector, has engaged more than 1,500 companies (representing nearly $25 trillion in market value) to act on climate change. More than 150 of the companies affiliated with the effort have committed to a goal of 100% renewable power, and many have committed to establishing science-based targets for reducing emissions of greenhouse gases in their operations.

Public-sector coalitions engaging local and regional governments are also becoming more prominent. The C40 Cities Climate Leadership Group, for example, is made up of more than 90 cities that have committed to 10,000 distinct "actions" to combat climate change. C40 cities represent about one quarter of the global economy and roughly 8% of the world's population, and aim to stir a global conversation that hastens progress towards a low-carbon economy. The Global Covenant of Mayors for Climate & Energy provides a similar platform for more than 9,000 cities that in total comprise about 10% of the world's population. Climate Action 100+ is yet another example of a global initiative systematically engaging with major corporate greenhouse gas emitters around the world. In addition, the World Economic Forum's Alliance of CEO Climate Leaders has sought to foster public-private collaboration that can support the Paris Agreement and the United Nations' Sustainable Development Goals. By joining forces with these coalitions, policy-makers, organizations, and companies can demonstrate a real commitment to climate action, share best practices, and demonstrate leadership.

Related insight areas: Civic Participation, Geopolitics, Development Finance, Social Justice, Global Governance, Agile Governance, Sustainable Development, Cities and Urbanization, United States

Brookings

Pivoting from global climate laggard to leader: Kigali and American HFC policy

23 September 2022

Barry G. Rabe Nonresident Senior Fellow - Governance Studies Imagine a climate policy scenario in which the United States in less than two years adopted comprehensive legislation with broad bipartisan support, produced a 69-to-27 Senate super-majority to formally enter a binding global regime, and prepared to lead international efforts to assure full implementation. Metaphysical impossibility? It just happened.

Carbon Brief

Media reaction: What Joe Biden’s landmark climate bill means for climate change

17 August 2022

On Tuesday 16 August, US president Joe Biden signed a bill into law that he... The post Media reaction: What Joe Biden’s landmark climate bill means for climate change appeared first on Carbon Brief .

Accelerating Climate Action

Urgent action is required now to head off the impending climate catastrophe

Climate change poses an urgent threat to our existence. 2019 was the second-hottest year on record, according to the National Oceanic and Atmospheric Administration and NASA, and current temperatures are believed to be roughly 1°C above pre-industrial levels due to human activity. Temperatures are now poised to reach 1.5°C above pre-industrial levels - with terrible consequences for millions of people in the form of rising sea levels, agricultural impact and natural disasters - barring decisive action, according to the United Nations' Intergovernmental Panel on Climate Change. People around the world are already experiencing extreme impacts of climate change, including drought, floods, and wildfires. In Australia, for example, the worst fire season on record began in late 2019 - killing dozens of people, destroying thousands of homes, and burning an area nearly the size of England. One of the United Nations Sustainable Development Goals, which were established in 2015, calls for taking urgent action to combat climate change. A UN report published in 2019 found that while some progress had been made on the goal, "far more ambitious plans and unprecedented changes" are necessary.

2020 marks a crucial inflection point for the Paris Agreement on climate change, which entered into force in 2016 and aims to limit warming this century to well below 2°C above pre-industrial levels (though the US, the world's second-biggest emitter of greenhouse gases, said it began the process of withdrawing from the deal in 2019) - because participating countries are being asked to submit their next set of climate commitments. It is now more vital than ever that climate efforts being made by states, businesses, cities, and regions are consolidated, in order to ignite sufficient change and halt the climate crisis. World leaders gathered at the UN Secretary-General's Climate Action Summit in September 2019 in New York to prepare for the critical year ahead. In the wake of this landmark summit and a surge in climate activism on the part of young people all over the world, the Secretary-General has prioritized a set of action portfolios with the potential to effectively curb greenhouse gas emissions. These action portfolios cover a range of critical areas including energy, industry, nature-based solutions, and urban infrastructure. Building resilience, and increasing financial support, are also high on the agenda.

Related insight areas: Arctic, Water, Mining and Metals, Oil and Gas, Forests, Future of the Environment, Global Governance, Circular Economy, Food Security, Antarctica, The Ocean, Climate Change, Energy, Climate Indicators

Asian Development Bank

Your Questions Answered: How Do We Achieve Decarbonization?

08 August 2022

Jonathan Walters, an economist and senior advisor for the infrastructure consulting firm Castalia and Akiko Terada-Hagiwara, an ADB Principal Economist, answer questions on how to work through the issues towards decarbonization in Asia and the Pacific.

Defining Corporate Purpose

An organization's reasons for being should extend well beyond financial gains

The Business Roundtable, an association of CEOs of the largest American companies, has departed from a longstanding view that corporations exist solely to serve their shareholders. In 2019, the organization declared that companies should benefit all stakeholders, including customers, employees, suppliers, and communities - in addition to shareholders. This strongly reinforced the idea that profits are not the sole purpose of a business, and that corporations should exist to solve problems and provide services. If they are successful at doing this, long-term shareholder returns can increase, as society in general is better served. Establishing purpose is not an abstract exercise; it has proven to be essential for guiding decision making and for establishing priorities. London Business School Professor Alex Edmans has noted that as virtually all of the major decisions a company makes involve trade-offs, one of the main benefits of having a strong purpose is to guide these trade-offs. Purpose must not only be explicitly defined, however - it must also be implemented. Shareholders must understand the organization's purpose, and be able to identify the metrics (both quantitative and qualitative) related to delivering on it.

Some of these metrics incorporate the traditional concepts behind corporate social responsibility (CSR), such as maintaining positive working conditions and employee satisfaction, cultivating workforce diversity, and focusing on client satisfaction and product quality. But purpose can go well beyond CSR - one example is the clothing company Patagonia, which states that its reason for being is to help protect life on Earth. This is (presumably) understood by its investors, and implemented by designing, producing and selling products in the most environmentally sustainable way possible, and by building its supply chains and customer service around the circular economy ideas of repairing, reusing, and recycling. Responsible corporations create value for society and are motivated by the desire to do so. Survey results published by researchers at Stanford Graduate School of Business in 2018 showed that 65% of Americans believe CEOs at large companies should use their positions to address broad social, political, and environmental issues. That is to say, most Americans realize that corporations need to be committed to providing solutions and value to everyone - and that businesses have a responsibility to society.

Related insight areas: Justice and Law, Emerging-Market Multinationals, Taxes, Institutional Investors, Supply Chains, Values, ESG, Circular Economy, Sustainable Development, Financial and Monetary Systems, Future of Consumption, Leadership

Eco-Business

Lego and the Toy Makers: How Sustainability Comes to Play Land

14 October 2022

In this report, we aim to research LEGO's ESG performance when compared with other toy makers in the industry by examining their environmental (including carbon emissions), social and governance initiatives. We evaluated LEGO's ESG performance by referring to our ESG framework, which covers 18 initiatives of ESG reporting. Overall, we found LEGO takes the lead in ESG reporting. In particular, LEGO has voluntarily published its sustainability since 2007 and started following GRI (Global Reporting Initiative), and assured its reports by a third party since 2009. We also found LEGO has an ambitious goal of reducing GHG emissions and controlling landfills. However, we do find that its disclosure on pollutants and risk management is missing, and overall disclosures on corporate governance are weaker than other sections.

World Economic Forum

Why trust is key to leading companies unlocking value

11 August 2022

Lack of trust is eroding confidence in stakeholder capitalism and ESG claims. Corporate leaders must work even harder to build and maintain trust. Three core components can help cultivate trust and build stakeholder confidence. Corporate leaders today are measured by a new yardstick. The supreme test of a CEO and board of directors is now the value they create not just for shareholders, but for all stakeholders.

Corporate Risk Management

For boards, the volatility of risk scenarios is only increasing

Every organization is confronted with some type of risk - operational, financial, technological, environmental, regulatory - which can have devastating consequences. Effective corporate governance requires continuous and systematic management of all types of risk, both current and anticipated. First, risks must be prioritized, and here the board of directors can play a key role by deciding in what priority they should be addressed, what is to be deemed simply unacceptable, and how they should be addressed from a structural perspective. For example, evidence gathered from the 2007 global financial meltdown indicates that banks with boards that had identified a need to establish a separate risk management committee managed the crisis better than those with integrated committees. The benefits of this type of separation have become only more evident as fiduciary duties have come to include oversight of a broad range of matters, including compliance with international accounting rules and stability measures that require banks to set aside capital in case of potential losses. Implementing a robust risk management system requires the integration of different parts of an organization, including the board's risk committee, internal auditing, finance, legal, and operations.

Increasingly complex and rapidly changing economic, environmental, social, and technological conditions have multiplied potential risk scenarios. Worsening climate change, geopolitical tensions, trade wars, and social upheaval like the protests that spread in Hong Kong in 2019 require corporate governance that is proactive when it comes to identifying risks and addressing them. Determining an appropriate board structure and approach to risk management will depend upon both a company's industry and stage of its life cycle; risk exposure is very different for financial institutions than it is for petrochemical firms. Even within the financial sector, different approaches are required - from insurers exposed to extreme weather events related to climate change, to retail banks making loans to small businesses during volatile periods. Organizations are dealing with complexity and litigiousness like never before, forcing their boards to assess current and past organizational exposure. Still, there are some strategic advantages to taking risks; after all, achieving sustained growth requires some degree of risk-taking. Incorporating risk management into corporate strategy is therefore crucial.

Related insight areas: Cybersecurity, Illicit Economy, International Security, Corruption, Banking and Capital Markets, Financial and Monetary Systems, Risk and Resilience, Climate Change, Justice and Law, Civic Participation, Insurance, Development Finance

Kellogg School of Management

Tesla Deserves an A for Its Financial Management

02 November 2022

Finance & Accounting Nov 2, 2022 Tesla Deserves an A for Its Financial Management Elon Musk should be commended for being in the position to even think about stock buybacks right now. Yevgenia Nayberg In Tesla's earning call last week, Elon Musk said that the company could pursue a $5 billion to $10 billion share buyback.

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 insight areas: Global Health, Sustainable Development, Biodiversity, Climate Change, Workforce and Employment, The Ocean, Social Justice, Economic Progress, Cities and Urbanization, Inequality

Eco-Business

Fisherfolk incentivised to collect trash from Indonesia's waters

18 October 2022

The Indonesian government has launched a program that will pay thousands of traditional fishers to collect plastic trash from the sea. The four-week initiative is part of wider efforts to cut marine plastic waste by 70 per cent by 2025. The Ministry of Marine Affairs and Fisheries said on Oct. 4 that it had budgeted 1.03 billion rupiah ($67,600) to pay 1,721 fishers across the archipelago for any plastic trash they collected daily from Oct. 1-26. It said the money, which works out to about 150,000 rupiah ($10) per fisher per week, would serve as compensation for their not fishing during this period. That’s slightly more than the 140,000 rupiah ($9) per week that the ministry estimates they earn from fishing.

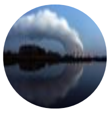
Investing in Climate Action

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 insight areas: Climate Indicators, Cities and Urbanization, Private Investors, Economic Progress, Development Finance, Circular Economy, Sustainable Development, Manufacturing, Financial and Monetary Systems, Institutional Investors, Infrastructure, COVID-19, Water, Green New Deals, Energy



VoxEU

Green versus sustainable loans: The impact on firms' ESG performance

03 November 2022

Investor demand, political movements, and regulatory changes have increased the focus on sustainable finance in recent years. This has led to the development of a new green market offering sustainable debt instruments, which has marked a volume of more than $1 trillion in 2021. This column investigates the effectiveness of two green lending instruments, green and sustainable loans, in terms of their impact on firms' environmental, social, and governance profiles. It finds that firms which issue green loans improve their environmental performance but neglect their social performance, whereas issuing sustainable loans increases a firm's overall ESG performance.

Carbon Brief

Interactive: Who wants what at the COP27 climate change summit

02 November 2022

Thousands of diplomats and officials from all over the world will soon arrive at the Egyptian resort town of Sharm el-Sheikh for COP27. There, they will negotiate the next steps for international climate action while also pursuing their own specific geopolitical interests. With the details of the Paris Agreement "rulebook" finally decided at COP26 last year, the Egyptian presidency wants this to be an " implementation COP ". What this means in practice remains to be seen. There are several key issues on the table that demand attention from the international community, including progress on ramping up emissions cuts to keep the Paris Agreement's warming targets within reach.

Project Syndicate

How Developing Countries Can Reach Net Zero

02 November 2022

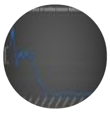
To phase out fossil fuels, the global shift to renewables must be just. To reach carbon neutrality, the international community must provide developing countries with a positive vision and ensure that the shift to renewable energy creates shared prosperity.

UN Climate Change

Carbon Removals & COP27

01 November 2022

Carbon removals can increase our resilience, create jobs, and positively impact human health and biodiversity. Scaling efforts now can help us to achieve a just transition. The post Carbon Removals & COP27 appeared first on Climate Champions .



World Economic Forum

Explained: Carbon offsetting, and why we can no longer ignore it

01 November 2022

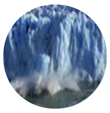
After spending years at the periphery of the climate change debate, carbon offsetting is emerging as one of the clearest ways that we can reduce emissions. The key to this effort is reliable data on emissions and offsets — something not previously available, but now the technology is delivering. Carbon offsetting could also be an avenue through which the promised $100bn can be transferred from the Global North tc the South. In trying to save ourselves from catastrophic climate change, we are overlooking an incredibly powerful tool: carbon offsetting. Carbon offsetting means paying others to reduce or remove emissions in order to compensate for one's own emissions, because it is cheaper or otherwise easier for them to do so.

Carbon Brief

UNEP: Meeting global climate goals now requires 'rapid transformation of societies'

27 October 2022

The world faces a "rapidly closing window" to meet the Paris Agreement's goals, warns the... The post UNEP: Meeting global climate goals now requires 'rapid transformation of societies' appeared first on Carbon Brief .



VoxEU

Green QE and carbon pricing: Looking at potential tools to fight climate change

07 October 2022

A growing number of central banks have committed to integrating climate change considerations into their monetary policy frameworks. This column analyses the effectiveness of green quantitative easing (QE) in limiting global warming compared with a carbon tax. By shifting its portfolio to exclusively contain 'green' bonds, central banks can limit the rise in global temperatures, although these effects are modest, and significantly smaller than a carbon tax. Nevertheless, green QE can still be an effective complementary tool to fiscal policy, particularly in the case of insufficient coordination of carbon taxes on a global scale.

The Paris Agreement

It provides a framework for climate action, though COP26 demonstrated that we're falling behind on its goals

The Paris Agreement was negotiated at the annual United Nations climate summit in 2015, and provides a means for participating countries to respond to the environmental, social, and economic effects of climate change. The agreement was a significant milestone because it achieved consensus on the need to limit the rise in global average temperature to well below 2°C above pre-industrial levels. 181 countries ratified the deal and submitted initial pledges - called Nationally Determined Contributions - to reduce their own emissions and to help regions most vulnerable to climate change adapt. One of the UN's Sustainable Development Goals, adopted in 2015 to guide development for the next 15 years, encourages countries to incorporate their climate commitments into national policies, and urges companies to de-carbonize their operations and supply chains. In addition, the Kigali Amendment to the Montreal Protocol (on Substances that Deplete the Ozone Layer) bolsters the Paris Agreement by preventing the equivalent of an estimated one billion tons of carbon dioxide emissions every year (about 40 billion tons of yearly emissions currently result from human activity).

Public commitments targeting greenhouse-gas emissions have been gaining momentum, albeit unevenly. Unified progress on global climate goals was shaken in 2017, when the Trump Administration announced its intention to withdraw the US from the Paris Agreement at the earliest allowed date - which, ironically, was a day after the 2020 US presidential election. The Biden Administration promptly returned the US to the agreement. A new round of revised reduction pledges are expected in 2022, following a bittersweet COP26 climate summit that was held in Glasgow - which will signal how much real progress can be made. The COP26 Climate Pact does include provisions aimed at increasing transparency and accountability, and countries are expected to increasingly report on their actions and progress made on climate-change mitigation, on adaptation measures, and on related support that is provided or received. COP27 is expected to take place in November 2022 in Sharm El-Sheikh, Egypt, where activists hope more awareness will be raised about the severe climate impacts being felt in Africa, and more related support will be both promised and delivered.

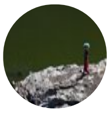
Related insight areas: Sustainable Development, United States, Risk and Resilience, Corporate Governance, Future of the Environment, Economic Progress, Climate Indicators, Justice and Law, Public Finance and Social Protection, Civic Participation, Global Governance

World Resources Institute

What can be Monitored can be Managed: Air Quality Monitoring in Smart Cities

14 October 2022

What can be Monitored can be Managed: Air Quality Monitoring in Smart Cities The World Health Organization (WHO) recently revised its decade-old air quality guideline that now clearly indicates air pollution impacts human health at lower levels than previously understood. Home to ... Read more.



Brookings

Success of the Paris Agreement hinges on the credibility of national climate goals

30 September 2022

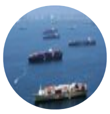
A new report shows that the likelihood of a country being able to achieve its national climate goals hinges on whether it has strong, stable institutions, and whether it has set itself ambitious goals.

University of St. Gallen

"Much less is being invested than was promised"

23 September 2022

Moves to rescue the climate are stumbling. Not only are reduction plans by the signatory countries not sufficient enough to achieve the goals of the Paris Agreement but the funding promised by industrialized countries to fight climate change in developing countries also falls far short of promises made. This is the conclusion of a new study by the University of St.Gallen (HSG) and the ETH Zurich. An interview with co-author Dr. Anna Stünzi from the Institute of Political Science at HSG.



Project Syndicate

A Faster Route to Greener Shipping

05 September 2022

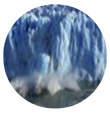
The recent United Nations Ocean Conference sent a clear message to the international maritime transportation industry: The current target of halving its emissions by 2050 is insufficient. The sector must instead aim to become carbon-neutral by mid-century and also set aggressive interim emissions-reduction goals.

International Institute for Sustainable Development

Background Note on Fossil Fuel Subsidy Reform

30 August 2022

As the fossil fuel subsidies are expected to swell following the rapidly rising energy prices, IISD offers a background note on the rationale and international initiatives for the reform of fossil fuel subsidies.



Frontiers

Communicating leakage risk in the hydrogen economy: Lessons already learned from geoenergy industries

10 August 2022

Hydrogen is set to play a part in delivering a net zero emissions future globally. However, previous research finds that risk perception issues are particularly challenging for emerging and potentially unfamiliar technologies. Hydrogen as a fuel falls into this category. Thus, while the hydrogen value chain could offer a range of potential environmental, economic and social benefits, it is imperative that the roll-out of hydrogen fits with societal expectations of how risk ought to be managed—and by whom.

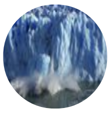
Understanding Climate Risks

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 insight areas: The Ocean, Sustainable Development, Future of the Environment, Peace and Resilience, Corporate Governance, Antarctica, Air Pollution, Global Governance, Climate Indicators, Food Security, Risk and Resilience, Water, Forests



SpringerOpen

Capping carbon emission from green data centers

11 October 2022

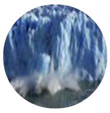
Abstract The world has witnessed a global surge in energy consumption and carbon footprint since the industrial revolution. Data centers are claimed to be the second most significant contributor of the havoc greenhouse gasses. This paper deals with modeling carbon footprint of green data centers. Initially, we use a panel dataset of a green data center that mostly relies on green energy resources for power. Our study reveals that in spite of massive renewable energy usage, the carbon footprint trend of this data center is quite significant. Alongside, due to massive nuclear energy usage in this data center, a hefty amount of nuclear waste is generated causing a global threat to sustainability. This is a novel paper that pinpoints that though green data centers claim they are zero-carbon data centers but the reality is different.

Carbon Brief

‘Top 1%’ of emitters caused almost a quarter of global emissions since 1990

29 September 2022

Just 1% of the world’s population was responsible for almost a quarter of greenhouse gas... The post ‘Top 1%’ of emitters caused almost a quarter of global emissions since 1990 appeared first on Carbon Brief .



SpringerOpen

Can information and communication technology and institutional quality help mitigate climate change in E7 economies? An environmental Kuznets curve extension

15 September 2022

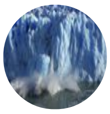
Understanding the role of information communication and technology (ICT) in environmental issues stemming from extensive energy consumption and carbon dioxide emission in the process of economic development is worthwhile both from policy and scholarly fronts. Motivated on this premise, the study contributes to the rising studies associated with the roles of economic growth, institutional quality and information and communication technology (ICT) have on CO2 emission in the framework of the 21st Conference of the Parties (COP21) on climate convention in Paris. Obtaining data from the emerging industrialized seven (E7) economies (China, India, Indonesia, Russia, Mexico, Brazil and Turkey) covering annual frequency from 1995 to 2016 for our analysis achieved significant outcome.

Carbon Brief

Guest post: The 50th anniversary of a remarkable global-warming prediction

01 September 2022

Today marks the 50th anniversary of a remarkable research paper on global warming. Written by... The post Guest post: The 50th anniversary of a remarkable global-warming prediction appeared first on Carbon Brief .



LSE Business Review

Market-based metrics for the systemic risk in climate transition

17 August 2022

The transition to a low-carbon economy carries potential ramifications for financial stability. If unanticipated, changes in climate policy and regulation, technology, and consumer and investor preferences can cause sudden market price readjustments. Javier Ojea Ferreiro, Juan C. Reboredo, and Andrea Ugolini have developed an empirical setup to assess various sets of scenarios. They write that an early warning indicator … Continued.

Building Future-Ready Business Models

Business model choices and strategies will shape long-term growth and successell-being

Successful companies look beyond linear value chains and industry boundaries, to create dynamic value “maps.” They use technology to encourage collaboration, and create shared value in broader digital ecosystems. Instead of well-defined value pools and homogenous competitors, these companies thrive in networked, overlapping value pools with heterogeneous competitors. They invest in creating value that delivers for both the business and all of its stakeholders.

A Forum report published in 2020 highlighted the accelerating shift to “digital-at-the-core” business models - adaptive, data-led, asset-light, and based on services rather than products. Instead of extending traditional models and channels (such as brick-and-mortar stores) while enabling digital channels, companies are orchestrating entirely digitally-enabled platforms and marketplaces.

KEY INSIGHTS FROM THE DISCUSSIONS

For many firms, there has been more change over the past 12 months than over the previous decade. What has occurred is an acceleration of trends that were already underway, rather than entirely new concepts. Organizations that were already planning for the future were well positioned to quickly adapt.

Platform or ecosystem approaches to value creation require a mindset shift for most firms, which were not built to collaborate and share. At the same time, the speed of digital transformation during the pandemic has highlighted the importance of organizational cultures that foster innovation, and education on new tech and business models across organizations - especially at senior levels.

Future-ready organizations are enabling greater flexibility and upskilling across workforces. For example, Publicis launched an internal "gig marketplace" that has enabled greater mobility for the organization and cross-skilling for employees.

In order to avoid disruption, one approach is to view compliance as an opportunity for innovation. NatWest , for example, has seen complying with open banking data-sharing requirements as a strategic opportunity to rethink how products are designed and delivered.

Increasingly, countries will need to bridge the digital divide to build inclusive economies (through initiatives like the EDISON Alliance). They will also need policy and regulatory frameworks that can quickly adapt to new technologies and business realities.

Across industries there is a desire to retain cultural habits that have emerged over the past year, such as greater collaboration and moving at speed. ESG and purpose have also come to the forefront and the hope is for them to remain there. Additionally, there is a strong sentiment that this is the time to double down on investments, not the time to withdraw, in order to properly invest in the future.

When asked about business model opportunities, more than 63% of participants selected “alignment with environmental sustainability goals,” 56% selected both “increased value from digital platforms and marketplaces” and “value from data-sharing and collaboration,” 53% selected “expanding digital ecosystem and partnerships,” and 34% chose “data/AI-driven customer insights and personalization.”

Related insight areas: Innovation, Data Science, The Digital Economy, Fourth Industrial Revolution, The Digital Transformation of Business

MIT Sloan Management Review

What Outperformers Do Differently to Tap Internal Talent

17 October 2022

In a tight labor market, companies are in trouble when career growth opportunities within the organization are misaligned with the needs of employees. Additionally, lateral moves and promotions allow employees to experience professional growth and develop new skills. Yet our research finds that only 10% of job opportunities today are filled with internal lateral hires. While often overlooked as a lever for talent, offering employees lateral moves can be an untapped gold mine for companies. By adopting leading practices for internal mobility, companies can better deploy existing worker capacity and benefit from more successful hires who hit the ground running in new roles with greater institutional knowledge, higher levels of engagement and retention, and even improved gender equity.

Long-Term Vision, Short-Term Needs

Balancing short- and long-term pressures is one of the most difficult business leadership challenges

There is a commonly-held view that investors pursue short-term profit at the expense of long-term value. According to the results of a survey published by the Rock Center for Corporate Governance at Stanford University in 2019, 70% of CEOs and CFOs at S&P 1500 Index companies were facing pressure to maximize short-term returns at the expense of long-term growth. When firms focus on the short term, it often translates into lower investment in the long-term sustainability of a company at the expense of other stakeholders. Management has to be able to both articulate a long-term strategy and deliver sufficient short-term returns in order to ensure support and continued investment. Consistent metrics for measuring the success of long-term strategies are important. Corporate governance can play an important role in this regard by implementing incentives and pay aligned with these long-term metrics. Another means to tilt the balance towards a longer-term approach has been the increased adoption of Environment, Social and Governance (ESG) criteria in corporate strategies and investment decisions - which can draw the attention of shareholders zeroing in on firms with a longer-term, socially-conscious approach.

According to a white paper published by the World Economic Forum in 2019, quarterly reporting requirements are not the sole reason for short-termism - though corporate leaders describe them as a “necessary evil.” According to the white paper, these leaders must become better storytellers about their companies, by framing each quarter as a step in a longer-term story. Management and their boards must engage in constant conversation about how the company will grow, and the risks it will take to get there. Leaders of global companies have been signing a World Economic Forum compact for responsive and responsible leadership, committing them to ensure that their boards oversee the definition and implementation of corporate strategies that pursue sustainable long-term value creation, to encourage the periodic review of corporate governance, long-term objectives and strategies at the board level, to promote meaningful engagement between the board, investors, and other stakeholders that builds mutual trust and promotes the highest possible standards of corporate conduct, and to implement policies, practices, and long-term strategies aimed at cultivating sustainable growth for the benefit of all stakeholders.

Related insight areas: Future of the Environment, Corruption, Banking and Capital Markets, Sustainable Development, Leadership, Values, Private Investors, Institutional Investors

Harvard Business School Working Knowledge

Larry Fink at BlackRock: Linking Purpose to Profit

20 September 2022

In 2014, Larry Fink started writing letters to the leaders of some of the largest publicly listed companies, urging them to consider the importance of environmental, social, and governance (ESG) issues. Fink is the chairman and CEO of BlackRock, one of the largest asset management houses in the world. The firm's success was rooted in its cost-effective, passive investment products that rely more on tracking indices and funds. But Fink wanted his firm to engage with the companies in which they invest and hold them accountable for their social and environmental impacts.

Governance Mechanisms

Corporate governance relies on a handful of mechanisms to align executives with owners and other stakeholders

Corporate governance involves establishing mechanisms to align the goals of a company's executive team with those of owners and other stakeholders (customers, local communities) in the interest of fostering sustainable and long-term development. One of the main mechanisms is the board of directors. It plays a vital role in keeping the executive team both accountable, and on track relative to its stated purpose and long-term goals. There has been a lot of discussion about the most effective structure for a board - which tends to depend on the nature of the organization, its market, and its regulatory environment. For a board to be truly effective it must decide on its optimal size, the independence of its members, the means to assess potential risks, and the renewal process necessary to maintain effectiveness. There has been heated debate about how to add diversity (in terms of both skills and backgrounds) to boards, in the interest of enhancing strategic guidance. Another high-profile topic is incentives, or setting the right type of compensation for top executives in order to encourage long-term decision making that is in line with the organization's purpose.

The compensation debate revolves around not only pay levels but also structure: short-term vs long-term, preferred stock vs. options, performance vesting options as well as discretionary bonuses. Research has shown that setting variable incentives tied to long-term horizons is conducive to long-term profitability, an increase in innovation, and increases in employee and client satisfaction. One key mechanism is the ability of shareholders to engage with management and discuss material matters, and to (most importantly) vote on proposals at annual meetings. Shareholders can include anyone from founding families to institutional investors like pension funds, and a significant share will likely be participating via retirement plans. Shareholder engagement keeps managers on their toes - and while not every form of activism genuinely adds value, making managers respond to shareholder pressure helps them to avoid becoming entrenched and insulated. There has been a marked increase in corporate responsiveness to shareholder pressure related to climate and gender equality issues in recent years, as well as a greater emphasis on long-term strategic plans - reflecting the fact that many shareholders now have longer-term investment horizons.

Related insight areas: Taxes, Private Investors, Justice and Law, Climate Change, Gender Inequality, Sustainable Development, Civic Participation, Future of the Environment, Institutional Investors, Insurance

Harvard Business School Working Knowledge

Gen Xers and Millennials, It's Time To Lead. Are You Ready?

08 September 2022

Generation X and Millennials—eagerly waiting to succeed Baby Boom leaders—have the opportunity to bring more collaboration and purpose to business. In the book True North: Emerging Leader Edition, Bill George offers advice for the next wave of CEOs.

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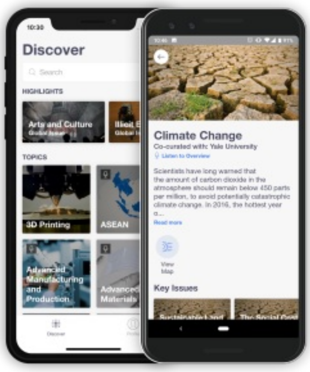

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World Economic Forum
91-93 route de la Capite
CH-1223 Cologny/Geneva
Switzerland
Tel.: +41 (0) 22 869 1212
Fax: +41 (0) 22 786 2744
contact@weforum.org
www.weforum.org