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# ESG Credit Trends 2022

'E' and 'S' Nexus More Important as Social Issues Rise in Prominence for Investors, Regulators



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## 'E' and 'S' Nexus More Important as Social Issues Rise in Prominence for Investors, Regulators

'Our ESG credit trends for 2022 emphasise the nexus between social and environmental issues, which are becoming more prominent for issuers, investors, regulators and stakeholders. How these issues evolve in 2022 may reveal intensifying transmission mechanisms of ESG risks into potential credit risks.'

Marina Petroleka, Global Head of ESG Research, Sustainable Fitch

### Related Research

- ESG in Credit – Labour-Related Issues (November 2021)
- Focus Turns to Voluntary Carbon Market Integrity, Costs (October 2021)
- ESG Credit Quarterly – 3Q21 (October 2021)
- Modern Slavery and Labour Risk in Global Supply Chains (February 2021)

### Analysts



**Marina Petroleka**  
+44 20 3530 1072  
[marina.petroleka@fitchratings.com](mailto:marina.petroleka@fitchratings.com)



**Nneka Chike-Obi**  
+852 2263 9641  
[nneka.chike-obi@fitchratings.com](mailto:nneka.chike-obi@fitchratings.com)



**David McNeil**  
+44 20 3530 1942  
[david.mcneil@fitchratings.com](mailto:david.mcneil@fitchratings.com)



**Jingwei Jia**  
+852 2263 9843  
[jingwei.jia@fitchratings.com](mailto:jingwei.jia@fitchratings.com)



**Kwok Wan**  
+44 20 3530 1593  
[kwok.wan@fitchratings.com](mailto:kwok.wan@fitchratings.com)

Investors, regulators and stakeholders in capital markets are paying increasing attention to social issues and this ESG theme will rise in prominence over 2022. In conjunction, the nexus between environmental and social issues will become stronger as ESG integration becomes more sophisticated as more disclosures and data become available. This can manifest in various ways, be it in a greater importance placed on just, or fair, transition issues and the impact of investment strategies have, supply-chain evaluations, or, the issuance of sustainability bonds that encompass social and environmental goals.

Sustainable Fitch's *ESG Credit Trends for 2022* identifies and analyses these strengthening interconnections and their impact on credit risks.

### Increasing Sustainability-Linked Issuance

We expect to see a rising level of issuance of sustainability and sustainability-linked debt as investors combine climate and social objectives under single mandates. The release of the EU's draft Social Taxonomy over 2022 will reflect a growing demand to consider 'S' in ESG integration and evaluation and a need for guidance on how to capture and address wide ranging social issues, from employment to diversity to human rights.

### Just Transition, Adaptation Financing Gap To the Fore

At the core of the social and environmental nexus is a fair transition to a low-carbon economy. Related to this it was notable to see the focus on the emerging market financing gap at COP26, as well as ways to address challenges of incentivising lending and financing to developing markets for mitigation and, especially, adaptation projects.

The Intergovernmental Panel on Climate Change (IPCC) is due to release the second of its sixth Assessment Report Working Group outputs on Climate Change Adaptation in 2Q22, which we expect to increase focus sharply on the relative costs and benefits of adaptation measures to climate change.

### Resilience, Responsibility in Supply Chains

Increasing regulatory attention on environment and social risks, and shifting consumer preferences for sustainable products have emphasised the importance of sustainable, resilient, ethical and transparent supply chains. ESG considerations will mean a longer-lasting structural shift in how companies consider supply and value chains.

### ESG Disclosures Enter Operational Phases

Major ESG disclosures that can affect multiple market participants and jurisdictions will move from the drawing board to fuller implementation over 2022 bringing much-needed consistency and harmonisation.



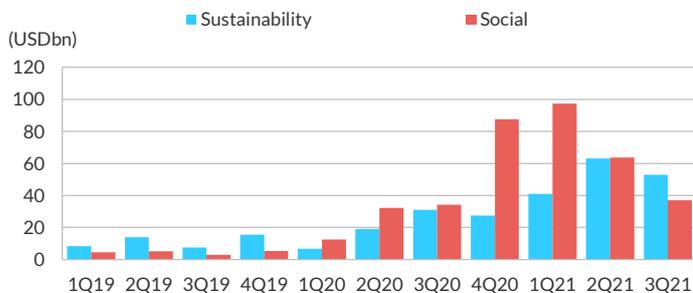
## Social Issues Become More Central, Integrated into ESG

Our 2021 ESG Credit Trends report anticipated that specific social risks would gain attention as a result of two events in 2020 – the Covid-19 pandemic and related socioeconomic effects; and the racial justice movement triggered by the killing of George Floyd. These have indeed increased the focus that corporates, financial institutions and market stakeholders more broadly have paid to such issues as employee wellbeing and diversity, equity and inclusion (DE&I). In 2022, we anticipate that the range of social factors within ESG will expand beyond these topics and become more central to sustainability strategies for a wide range of bond issuers from corporates to sovereigns. This will require a more consistent and comprehensive reporting environment, supported by both regulation and improved market standards.

### Issuers Taking an Integrated Approach

Issuance of social and sustainability bonds grew nearly three times in 2020 from the previous year to more than USD250 billion, mostly driven by government pandemic bonds with proceeds allocated to providing social support to industries and workers affected by shutdowns. This compares to growth of about 8% in the green bond market from 2019 to 2020, though notably social and sustainability bonds are growing from a lower base. By 2Q21, the pandemic-related surge in social bonds began to slow and this market segment is now driven by increased issuance of sustainability bonds, which surpassed social bonds in US dollar value for the first time in 3Q21.

### Sustainability and Social Bond Issuances



Source: Fitch Ratings, Bloomberg

The sustainability label has been popular with emerging market sovereigns, for whom an integrated viewpoint on green and social has been heavily informed by the UN Sustainable Development Goals (SDGs), as discussed in an [April 2021 special report](#). Many of the goals, such as Goal 3: Good Health and Well-Being, Goal 7: Affordable and Clean Energy, and Goal 11: Sustainable Cities and Communities, have a mix of intended outcomes related to the environment and social inclusion.

Bonds that finance green infrastructure projects can also be aligned to social objectives through the ICMA Social Bond Principles, which include Access to Essential Services, Affordable Basic Infrastructure, and Socioeconomic Advancement and Empowerment. Sovereign sustainability bonds issued in 2021 by Benin (B+/Stable), Chile (A-/Stable), Mexico (BBB-/Stable), and Slovenia (A/Stable) are based on frameworks that explicitly

reference the SDGs contributed to by each of the green and social activities financed by the proceeds.

The social bond market has been dominated by governments and government-related entities, and uses of proceeds were largely related to low-income housing, unemployment support and other social welfare activities. Sustainability bonds, in comparison, are increasingly being used by corporates that are finding ways to direct a portion of bond proceeds towards socially inclusive activities within the scope of their main business. Issuers of sustainability bonds in 2021 include Toyota Motor Corporation (A+/Stable), Pfizer Inc. (A/Stable), and Kellogg Company (not rated), with their proceeds targeting disability, health vulnerability and food insecurity, respectively.

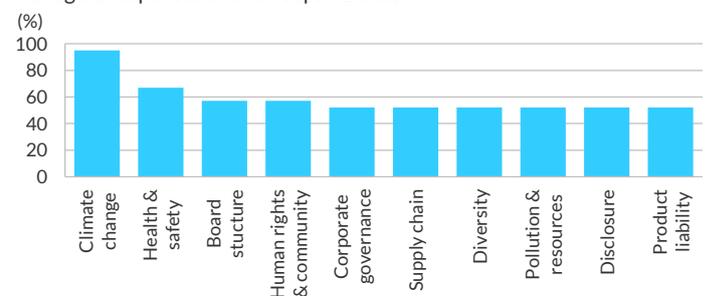
The sustainability-linked bond (SLB) has the potential to further support this integration through its flexibility in both the selection of performance targets and allocation of proceeds. We expect to see growth in SLBs with a combination of green and social targets for issuers that lack the dedicated assets necessary for a use-of-proceeds bond. Of the SLBs issued with social targets in 2021, diversity has dominated and we expect this to continue as companies face continued pressure from both investors and employees to deliver improvements in workplace inclusion. In a May 2021 survey by The Harris Poll, 54% of American workers said they would consider leaving their company if it did not speak out against racial injustice. A sustainable debt finance framework that includes DE&I proceeds or targets can serve to assuage staff concerns about a company's level of commitment to addressing inequality.

### Investors Will Push to Fill Data Gaps

According to external asset managers for Japan's Government Pension Investment Fund (GPIF), which has more than USD1.7 trillion in assets under management, health and safety is the second-most critical ESG issue in the international fixed income market. Human rights and community, supply chain, and diversity also rank in the top ten. GPIF's 20 foreign bond asset managers include some of the world's largest firms, including BlackRock, UBS Asset Management, and Fidelity Investments, so their views reflect a sizeable chunk of the market.

### Top Critical ESG Issues, External Asset Managers for GPIF

Managers responsible for ex-Japan Bonds

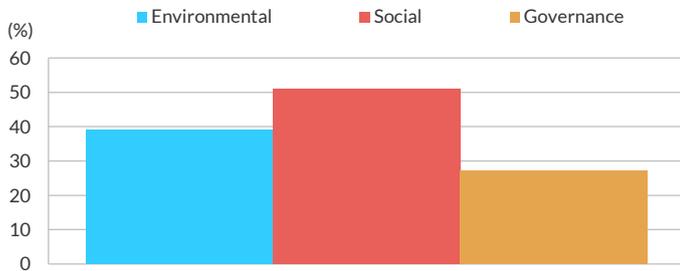


Source: Fitch Ratings, GPIF

Despite the increasing importance investors report placing on social factors, a lack of consistent and numerical data on these issues is a challenge in analysing their impact on issuers' financial performance. More than half of institutional investors in a 2021

BNP Paribas survey said that social components are the most difficult to assess, up from 41% in 2017.

### Which ESG Component Is Most Challenging to Assess?



Source: Fitch Ratings, BNP Paribas (The ESG Global Survey 2021)

Two EU initiatives we expect to clarify the financial materiality of social risks in 2022 are the Corporate Sustainability Reporting Directive (CSRD) and the Social Taxonomy. The CSRD will impose mandatory ESG reporting on almost 50,000 large companies operating in the EU including foreign businesses, a major expansion from the 10,000 companies subject to the current Non-Financial Reporting Directive, which the CSRD will replace. Social reporting under the CSRD is likely to include working conditions, DE&I and supply chains.

The addition of a social framework to the EU taxonomy, expected in the next year, will provide guidance on the private sector's contribution to socially sustainable outcomes and support more issuance of corporate bonds with social targets or use of proceeds. Proposed objectives are divided into two categories: product or service related (vertical dimension) and process related (horizontal).<sup>1</sup> To qualify, entities would have to identify an activity that both offers a social service and is done in a socially responsible manner. This makes a much larger number of entities eligible than the green taxonomy, which targets reducing the impact of emissions on specific economic activities.

While the social vertical and horizontal dimensions are linked to widely agreed-upon international standards, such as the UN Global Compact, the governance component of the draft taxonomy could raise concerns about cultural norms for entities based outside of the EU. As proposed, a social project would need to meet one outcome each from the vertical and horizontal dimensions, and all governance criteria. Suggested metrics for assessing "good sustainable corporate governance" include a corporate's lobbying and political activities, executive remuneration, diversity, and tax planning practices. Under the CSRD, most companies operating in the EU in a position to issue bonds will be required to disclose on these matters, but being taxonomy-aligned would require best practice. This could be further entrenched should the EU develop a social bond standard similar to the [EU Green Bond Standard](#) that was announced this year.

<sup>1</sup> Platform on Sustainable Finance, *Draft Report By Subgroup 4: Social Taxonomy*, July 2021 - [https://ec.europa.eu/info/sites/default/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/sf-draft-report-social-taxonomy-july2021\\_en.pdf](https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/sf-draft-report-social-taxonomy-july2021_en.pdf)

### EU Draft Social Taxonomy

| Vertical dimension (A)   | Horizontal dimension (B)                     | Governance (C)                              |
|--|--|---|
| Promoting adequate living standards                                    | Ensuring decent work                         | Good sustainable corporate governance       |
| Improving accessibility of products and services for basic human needs | Promoting consumer interests                 | Transparent and non-aggressive tax planning |
| Improving accessibility to basic economic infrastructure               | Enabling inclusive and sustainable societies |   |

Source: Fitch Ratings

### Sector in Focus: Technology

Technology firms have increased their activity on the social side of the sustainable bond market. Following Alphabet Inc.'s (not rated) landmark USD5.75 billion sustainability issuance in 2020 – the largest ever from a corporate – HP Inc. (BBB+/Stable), Baidu, Inc. (A/Stable), Alibaba Group Holding Limited (A+/Stable), and salesforce.com Inc (not rated) are among global tech sector firms that launched their own sustainability bonds in 2021.

This has occurred in the backdrop of an increased focus on the social effects of technology products and platforms.

A California law passed in September will raise standards for worker safety and wellbeing, following increased demands placed on warehouse and logistics workers at internet retailers and report of elevated injury rates. China introduced a series of technology sector regulations in areas including internet content for children and working conditions for e-commerce delivery drivers. This led Fitch to assign ESG Relevance Scores of '4' in Labour Relations & Practices and Exposure to Social Impacts to several Chinese issuers subject to the new laws.

The growth of artificial intelligence and algorithm-based analysis has the potential to create unforeseen issues related to access and affordability, bias and discrimination, and privacy. These systems are in use in financial services, social media, advertising, and human resources and could have enormous impacts if more widely adopted without consideration of these unintended consequences. For example, a 2017 Princeton University study found that a commercial AI software program rated European names more highly than African-American names, and linked female names with family characteristics over professional ones.<sup>2</sup> Fitch's ESG Relevance Score framework could capture these risks under one of three social general issues – Human Rights & Community Relations, Customer Welfare, Employee Wellbeing, or Exposure to Social Impacts.

### Just Transition Concerns in Focus

The concept of 'just transition' seeks to ensure that the benefits of the transition to a low-carbon economy are spread widely, while

<sup>2</sup> Semantics derived automatically from language corpora contain human-like biases, A. Caliskan, J.J. Bryson, A. Narayanan, *Science*, Vol. 356, Issue 6334, 14 April 2017

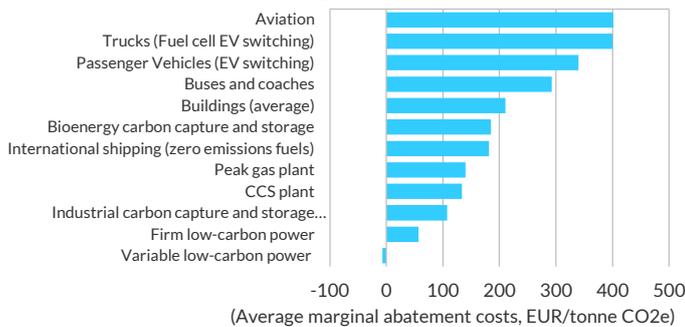


recognising the disruptive nature of this transition and the need to support those who stand to lose economically – whether countries, regions, industries, communities, workers or consumers. While these concerns have in the past been implicit for policymakers, as climate policy moves beyond a narrow focus on the energy and industrial sectors towards a wider range of economic activities we expect the focus on distributional impacts as well as popular support for these policies to increasingly come into focus.

The EU’s Green Deal makes specific provisions for such socioeconomic disruptions via the Just Transition Fund launched in 2021 and the proposal for the social taxonomy says this issue is one of the main parameters for consideration in the low-carbon transition.

Costs of emissions abatement are significantly higher in the transportation and built environment sectors than power generation, and costs are more likely to affect low-income groups as a result.

### Abatement Costs Differ Significantly by Sector, Activity



Source: Fitch Ratings, Frontier Economics, Committee on Climate Change, Hasan et al (2021), Teagasc, Wood Group, IPCC, Global CCS Institute, Johnsson et al (2020)

Support for climate and environmental action is strong in principle across many countries – 81% of EU citizens polled in 2021 said that more public support should be given to transition to green energy, even if this means removing fossil fuel subsidies. In practice, citizens have often taken exception to measures that they perceive as lowering their living standards. Swiss voters rejected their country’s climate plan over cost of living concerns in a referendum in June 2021 and research by the Centre for Progressive Policy has indicated that nine million people across 74 areas of the UK are at risk of economic dislocation from a poorly managed transition, owing to a concentration of employment in high-emission sectors.

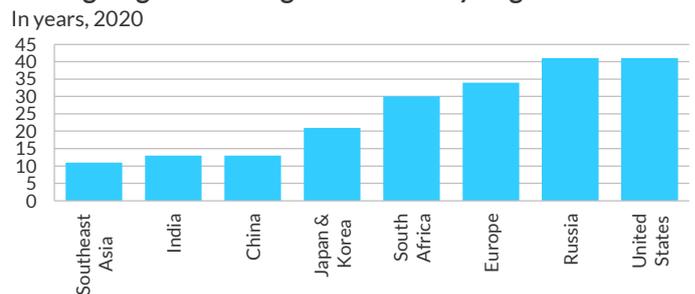
Increasingly, these concerns are seen to act as a constraint on the ambition of climate policies, particularly in emerging markets, where development concerns are paramount.

A global deal on thermal coal phase-out proved elusive at COP26 owing to the reluctance of many countries with a strong economic dependence on coal. In India, where more than 70% of power is generated at coal power plants, the government recently announced a target to produce a billion tonnes of coal by 2024 to secure the country’s energy needs. In the largest coal-producing state of Jharkhand, the sector provides more than 300,000 direct jobs and over a million indirect jobs in the supply chain, as well as several million more informal jobs, such as coal scavengers. Coal taxes and royalties drive revenue at many levels of local and state government.

The role of state-owned enterprises in the fossil fuel value chain is also a consideration. South Africa saw protests in 2016, when state-owned Eskom Holdings SOC Ltd. (B/Negative) announced plans to close six coal power plants. The company, which generated nearly 90% of national electricity consumption in 2020, is building two of the world’s largest coal power plants, expected to be in operation until 2060. At the same time, Eskom has pitched a USD10 billion plan to lenders, including the World Bank, for the early closure of coal assets with renewables taking their place. Fitch’s Negative Outlook for the company is partly informed by unsustainable levels of capex given the poor state of generation assets and weak cost recovery. This highlights the need for sovereign support to state-owned enterprises experiencing competitive pressures on fossil fuel assets.

Relative age of assets is another rising concern for climate policy: while the average age of coal assets in the US is 41 years, towards the end of their useful life, it is only 13 in Canada and India. A rapid shift away from coal would leave these operators with far greater losses from accelerated depreciation of assets. Risk transfer from asset stranding, including direct losses as well as losses in tax revenue and rising unemployment benefit costs, is likely to become increasingly important as falling costs of solar and wind power put competitive pressure on fossil fuel assets.

### Average Age of Existing Coal Assets by Region



Source: Fitch Ratings, International Energy Agency

In the US, the decline of the thermal coal power sector has generally been gradual and structural since the early 2000s, albeit with a more rapid acceleration since 2018, when the cost of building new solar and wind capacity fell below that of operating most of the country’s national coal fleet. By 2025, three-quarters of coal capacity is projected to be uneconomic. As a consequence, there has been growing interest in securitisation to help manage the costs and risks of coal retirement, although this has normally required legislative changes and policy support.

At least nine U.S. states, including Colorado, New Mexico, Kansas and Missouri, have recently enacted laws to allow securitised bonds to refinance unpaid investment in coal-power plants upon early retirement, as part of aggressive emissions reduction goals. Securitisation has the benefit of far lower interest rates than debt or equity capital and negates the need to compensate investors for foregone profits from early closures. Both schemes include cost containment mechanisms to protect consumers and have a specific focus on just transition concerns: Colorado allows the bonds to include funding for community transition, while New Mexico requires green energy replacements to be located in the same community as the retiring power plant and specifies funding requirements for community and worker mitigation.

Other US states, including Montana, have enacted similar policies in the absence of aggressive decarbonization targets in recognition of competitive pressures on fossil fuel assets. Falling costs of solar and wind are likely to compound these pressures in 2022, even in jurisdictions where climate policies are more limited in scope, leading to stronger focus on just transition concerns.

Australia, which recently ranked last in the international Climate Change Performance Index, does not have any federal policies regarding the phase-out of fossil fuels but expects to meet its 2050 net zero target and interim 2030 emissions reduction pledge through targeted support and price competitiveness of low-carbon technologies, including renewables and hydrogen. The country has had a poor record of managing socioeconomic dislocation of structural shifts in the power sector: privatisation in the 1990s led to concentrated job losses in many regions, while the closure of coal power plants by overseas investors over the past decade has often occurred rapidly and with little government support for workers. Engie S.A.'s (A-/Stable) closure of its 1,600MW Hazelwood brown coal stations in 2016 came with five months' notice. The limited assistance to employees was largely drawn from state resources.

Economic dislocation from the shift to low-carbon technologies is likely to be an issue of concern to all major economies in 2022, and lessons can perhaps be drawn from the closure of Germany's black coal industry in recent decades, which was driven by economic rather than climate concerns. Employment and social impacts were given a high priority, with mine ownership consolidated into one company and financing support provided across successive governments to limit forced redundancies.

This highlights the need for support to an orderly transition. In the private sector, interest in specialist investment vehicles or securitisation to assist with managing the costs and risks of transition is likely to grow, but will require incentive structures based on some degree of government support.

### Just Transition Focus Expected in Developing Economies

Just transition concerns are especially critical in emerging markets due to the potential for economic disruption from climate change. Tropical and sub-tropical regions in Latin America, sub-Saharan Africa and Asia have significant exposure to physical climate change risks, such as sustained high temperatures and sea-level rise, threatening millions of livelihoods. At the same time, countries in these same regions are among those most dependent on the sectors that contribute to it: fossil fuel production and agriculture. This presents a challenge for developing economies, as both climate change itself and the transition to mitigate it are sources of economic risk.

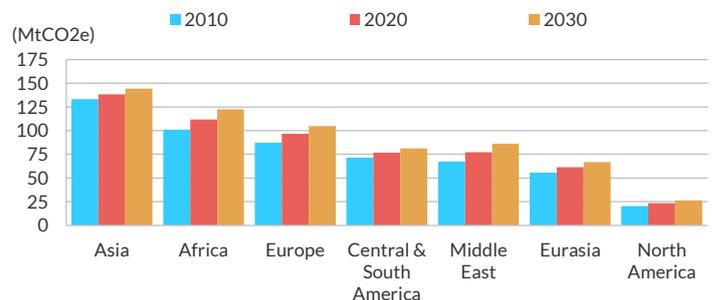
Pledges to stop deforestation and reduce methane gas emissions by 2030 agreed at COP26 will sharpen policymakers' and other stakeholders' focus on greening agriculture from 2022. These targeted and time-bound commitments present a challenge to many emerging economies that rely on agriculture for export earnings and food security. Agriculture is the top priority sector for emissions reduction in the Association of Southeast Asian Nations' (ASEAN) green taxonomy; the sector is the largest contributor to

the region's greenhouse gas (GHG) emissions and accounts for more than 10% of GDP in half of its member countries.

Forest clearing to grow palm oil releases carbon dioxide and further damages the role of forests in carbon absorption and temperature regulation. Expansion in palm oil production is driven by global demand for manufactured goods and packaged food products, although policies that target the production of the crop in Indonesia and Malaysia, its main growing countries, could affect employment for plantation workers and incomes for smallholders. Despite signing the global deforestation pledge, Indonesia's environment minister acknowledged that achieving the goal would have to be balanced against economic development.

About 90% of the world's rice is grown in Asia and paddy rice production is the region's main source of methane emissions. Investments into targeted irrigation instead of flooding or gas-capture technology can mitigate the amount of methane released, but these are beyond the means of a typical rice grower. In its 2020 Nationally Determined Contribution, Vietnam committed to widely implementing a low-cost rice cultivation method called alternate wetting and drying, which reduces both water consumption and methane emissions – a policy that equally considers farmers' financial resources and the need to increase climate change mitigation activities.

### Landfill Methane Emissions Projections



Source: Fitch Ratings, H. Zhao, Columbia University

Waste landfills account for a fifth of global methane production. More than a third of global solid waste is sent to landfills, but the figure is much higher in parts of Africa and Asia, the regions that produce the most landfill methane emissions. Circular economy policies, such as the [one introduced by China in 2021](#), aim to reduce landfill reliance and encourage recycling. Hong Kong approved a solid waste charging scheme in 2021 as it approached its physical limits of usable landfill space. While similar policies have reduced the volumes of waste sent to landfills, they can also affect poorer people in two main ways – placing a user fee on a previously free public service can be a financial burden; and making waste picking (an informal economic activity in many developing countries where people collect rubbish to sell) more difficult. The World Bank estimates that there are more than 15 million informal waste pickers worldwide, with most coming from vulnerable groups like women, the elderly, the unemployed and migrants.<sup>3</sup>

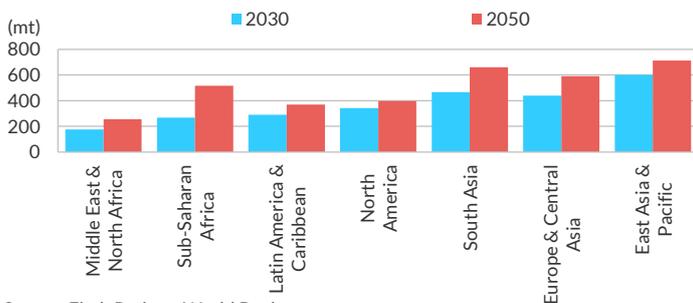
Balancing socioeconomic needs with environmental outcomes can be challenging and consequences may be difficult to predict before

<sup>3</sup> What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050, World Bank 2018



policies are implemented. When Taipei introduced municipal waste charging in 2000, illegal dumping increased as some residents tried to avoid fees. Compliance with the law improved after the government removed a large number of public rubbish bins from city streets.

### Annual Projected Waste Generation by Region



Source: Fitch Ratings, World Bank

While emerging markets sovereigns are increasingly using sustainability and SDG-focused bonds to finance a mix of environmental and social goals, those instruments do not in themselves contribute to a just transition unless the social activities target outcomes related to the impact of climate change. Under the current ICMA principles, a just transition label could be applied to a sustainability, social or sustainability-linked bond as long as it met the standards of the framework. With the announcement of the MDB Just Transition High Level Principles, agreed to by eight multilateral development banks<sup>4</sup> in October 2021, we expect additional technical and financial support for developing economies to pursue just transition-focused financing, including incorporating the principles into sovereign bond issuances.

## Widening Adaptation Finance Gap Draws Attention

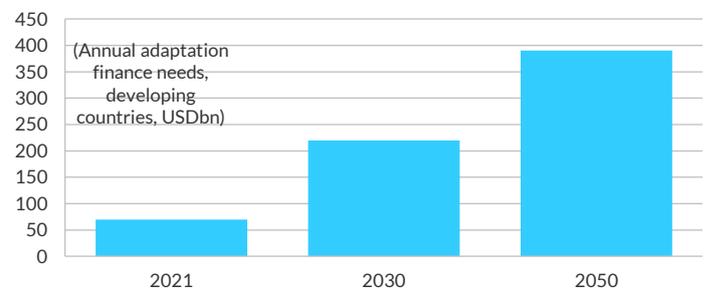
Much of the discussion around climate risk in the context of COP26 has focused on mitigation actions, but the findings of the IPCC's sixth assessment report in August 2021 (The Physical Science Basis) make it clear that, regardless of action taken, some degree of physical climate impacts, such as sea level rise or extreme weather conditions, are now inevitable on the basis of historical warming and lagging effects in the global climate system. Moreover, these are to likely fall disproportionately on emerging markets that are often ill-placed to manage them making adaptation financing a crucial element not just in its own right but also as part of the just transition considerations.

The 2021 UN Environment Programme Adaptation Gap Report highlighted that 72% of countries have adopted national climate adaptation plans, but the financing needed to implement these plans is not growing quickly enough. Annual adaptation costs for developing countries are set to grow sharply, from USD70 billion today to USD140 billion-USD300 billion by 2030 and USD280 billion-USD500 billion by 2050. These sums clearly exceed the USD100 billion annual target for overseas assistance, which has

been consistently missed since its introduction in 2009, with only USD20 billion marked as going to adaptation activities.

Though the COP26 agreement refers to the need to sharply increase the funds available to adaptation in the context of the USD100 billion target, there are historical barriers to financing adaptation that will require policy intervention as well as innovative financing solutions to address. Firstly, while overseas climate finance to developing nations was reported by the OECD as USD80 billion in 2019, Oxfam argues that actual financing was only around a third of this owing to the bulk of lending being in the form of loans, rather than grants. The charity argues that beyond grants, only loans that are provided below market rates should be included, and that many countries incorrectly count development aid as going towards climate projects.

### Climate Adaptation Finance Needs to Mount

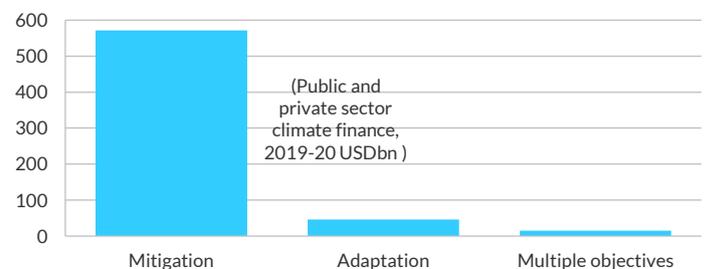


Source: Fitch Ratings, UN Environment Programme

This emphasis on loan-based transfers, rather than grants, presents barriers to adaptation financing because success of mitigation projects is clearer and measurable than adaptation – and mitigation projects can more easily deliver return on investment through tangible assets such as renewable energy or electric vehicles.

For similar reasons, the bulk of climate finance has historically flowed to fast-growing middle-income economies than the high-need, poorest countries. Analysis by the Institute for Environment and Development of climate finance to the 46 Less Developed Countries found that only USD5.9 billion of funding could be identified between 2014 and 2018, less than 20% of figures provided by developed nations to the OECD.

### Mitigation Financing Massively Outnumbers Adaptation



Source: Fitch Ratings, Nature

Development, European Investment Bank, Inter-American Development Bank, Islamic Development Bank, New Development Bank

<sup>4</sup> African Development Bank Group, Asian Development Bank, Asian Infrastructure Investment Bank, European Bank for Reconstruction and

A global goal on adaptation financing has already been identified as a key part of the agenda for next year's COP27 in Cairo, Egypt. Egypt is also a member of the Adaptation Action Coalition launched by the UK.

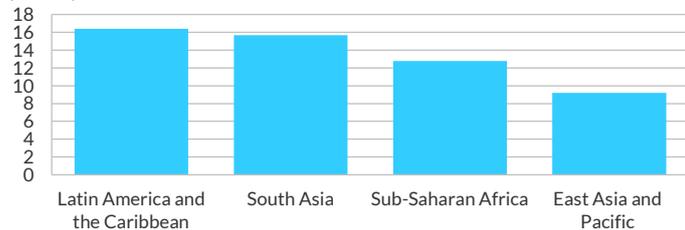
Similarly, the IPCC is set to release the second of its sixth Assessment Report Working Group outputs on Climate Change Adaptation in 2Q22. Fitch expects this to focus on the relative costs and benefits of adaptation measures to climate change.

The focus of COP26 debates around commitments for 'loss and damage' compensation from developed to climate-vulnerable emerging markets is likely to intensify in the course of 2022, with research from the World Bank highlighting that exposure to physical climate risks and extreme weather conditions is likely to negatively affect development in many emerging markets in the coming decades, as these countries grapple with the dual challenges of climate adaptation and damages, and ensuring steady economic development.

The relative underinvestment in adaptation solutions stems from a lack of incentive structures for private sector participation and alignment of public and private benefits. Analysis of the adaptation finance gap by region in absolute terms shows Latin America and south Asia as having the highest shortfalls. However, when expressed as a share of GDP, sub-Saharan Africa has the highest gap between needs and investment in climate adaptation.

### Adaptation Finance Gap by Region

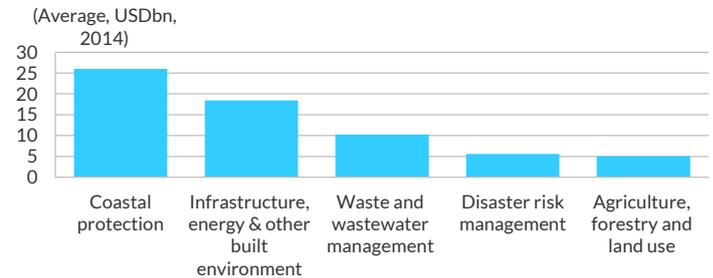
Public & private spending vs. average estimated annual needs (USDbn)



Source: Fitch Ratings, World Bank, Commonwealth Scientific and Industrial Research Organisation, Vivid Economics

These shortfalls also vary significantly on a sectoral basis, with coastal protection having a significant annual financing gap according to World Bank estimates despite significant cost/benefit ratios. The Global Commission on Adaptation Report found that every USD1 invested in adaptation projects in low-to-medium-income countries yielded at least USD4 of benefits, often several times in excess of this.

### Annual Adaptation Financing Gap by Sector



Source: Fitch Ratings, Vivid Economics, World Bank

Similar statistics are likely to be yielded in the IPCC's adaptation report. The challenge remains for low-income countries in how to make these figures actionable and to mobilise private capital towards the public-private benefits of climate change adaptation measures.

One COP26 side event highlighted the need for wider issuance of green bonds with an adaptation focus in sub-Saharan Africa as one means to tap the growing impact investing market. Organisations such as the African Development Bank have emphasised the potential of equity investments or blended finance models to channel investments towards climate adaptation. Africa as a whole represents less than 1% of global green bond issuance and previous Fitch research ([Sustainable Development Shapes ESG Focus in Sub-Saharan Africa](#), April 2021) has highlighted the potential for green, social and sustainable bond issuance in the region, including sovereign green bonds.

## Sustainability Disclosures: From Drawing Board to Reality

Evolving efforts to establish more standardised reporting requirements will take shape next year and their impact on ESG data and reporting will begin to become more tangible. This is a continuation of one of the themes we highlighted for 2021 (ESG Data Deluge), but we expect in 2022 to see the contours of what more standardised disclosures, especially around climate, look like in major jurisdictions.

Investors and regulators have called for a higher degree of standardisation and harmonisation in ESG data and disclosures from corporates and financial institutions. This has also been one of the most often cited sources of frustration and inconsistencies for ESG integration strategies among asset owners and managers and investors.

The objective of more standardised forms of reporting on various facets of sustainability is to allow for greater transparency, less scope for greenwashing from reporting entities due to asymmetric reporting. More standardised reporting can also create a more harmonised set of decision-useful data, which investors, regulators and other stakeholders can use to scrutinise and compare financially material sustainability risks, as well as -mainly in the case of the EU's double materiality principle- adverse sustainability impacts of operations or investments.



## Disclosures Standards and Regulations Move Into Implementation

In 2021, there were various efforts by major regulatory or standard setting bodies to produce new or updated disclosures that will lead to the emergence of a more tangible set of disclosure principles, both mandatory and voluntary over 2022.

### *ISSB – Aiming for a New Global Standard*

A notable moment at COP26 was the announcement of the International Sustainability Standards Board (ISSB) launched by the IFRS Foundation, which will sit alongside the IASB. Its overarching objective will be the formalisation of a base-line of globally acceptable, corporate sustainability disclosure standards as they relate to material impacts on enterprise value, starting with climate disclosures. While the standards will be finalised over 2022, the proposed template released at COP26 indicates that they will follow the Task Force on Climate-related Financial Disclosures (TCFD) framework of reporting on the four pillars of governance, strategy, risk management and targets.

In a clear signal that standard setters are moving towards consolidation, simplification and standardisation, the ISSB will also absorb two major voluntary standard setting bodies in 2022, the Value Reporting Foundation (former SASB and International Integrated Reporting Council) and Climate Disclosures Standards Board. Following executive and board-level appointments and consultations on proposed standards, the ISSB will release finalised standards to the market in late 2022 or 2023.

While these will be voluntary, [we have previously noted](#) that the credibility and wide adoption of the IFRS accounting standards give an advantage to the IFRS's new sustainability standards to be adopted widely and rapidly by companies and jurisdictions, despite questions about jurisdictions like the EU enforcing a much more stringent set of mandatory disclosure requirements.

### *SEC – Bringing Climate Risk Disclosures to the Fore*

In the US, the Securities and Exchange Commission (SEC) is expected to announce its plan to update its climate-related disclosures by end of 2021 or early 2022.

A sample letter the SEC released in September 2021 regarding climate change disclosures signalled to markets that it will be considering financially material impacts of climate change risk in various perspectives. This will include material effects of transition and physical risks to a company's operations and revenue, exposure to climate litigation risks, impact of changes in legislation and regulations related to climate and climate-related disclosures and the company's activities in relation to carbon offsets.

While the SEC has required climate-related disclosures since 2010 this represents an effort to significantly strengthen their relevance and expand the scope of credit risk assessments.

### *SFRD, CSDR – Move European Disclosures to a Broad Base of the Market*

In the EU, Sustainable Finance Disclosure Regulation (SFDR) requirements will ramp up materially in 1 January 2023 (delayed from July 2022), when the Level 2 Regulatory Technical Standards take effect. Not only will investment funds, qualifying under all SFDR Articles, need to make additional disclosures in their pre-

contractual documentation, they will also need to provide an annual report documenting their success in achieving their SFDR-disclosed goals. Fitch anticipates significant interest from a range of market constituencies on the latter, in particular the share of sustainability-related investments held by funds.

Work will also intensify on the CSRD in 2022 with first disclosure standards draft due to be released by the European Financial Reporting Advisory Group that has been mandated to compile new EU sustainability standards. Based on current timelines, the Commission will adopt the CSRD in late 2022 with companies making their first CSRD-compliant report in 2024 using data from their 2023 financial years. Given that the threshold for reporting under the CSRD has been lowered to include all listed companies and many unlisted company, we expect the universe of entities reporting under the CSRD to reach nearly 50,000, marking a significant escalation in the availability of comparable sustainability data across the EU.

## Select List of ESG-Related Disclosures

| Jurisdiction | Regulation  | Disclosure topic  | Company type  | Frame work | Disclosure type   | Effective date   |
|--------------|---|---|---|------------|-------------------|------------------|
| EU           | Sustainable Finance Disclosure Regulation (SFDR)  | Adverse impact - entity level and financial product level       | Asset managers  |            | Mandatory         | June 2021        |
|              |   | Environmental or social characteristics – product level         |   |            |                   |                  |
|              | Corporate Sustainability Reporting Directorate (CSRD)   | E: climate change; water; resource use; pollution; biodiversity | All listed companies  |            | Mandatory         | January 2023     |
|              |   | S: equal work opportunities; working conditions; human rights   | All large companies (revenue > EUR40m, >250 employees, assets > EUR20m) |            |                   |                  |
|              | G: sustainability strategy; corporate culture and ethics; political lobbying; internal control and risk | Banks and insurance companies                                   |   |            |                   |                  |
| US           | Nasdaq Board Diversity Rule   | Diversity   | Nasdaq-listed companies incl foreign companies                          |            | Comply or Explain | January 2022     |
|              | SEC Climate Disclosure  | E: Climate  | All listed and SEC-regulated companies                                  |            | TBC               | TBC              |
|              |   | S: Diversity  |   |            |                   |                  |
| Global       | ISSB  | E: Climate  |   |            | Voluntary         | TBC, likely 2023 |

Source: Fitch Ratings

## Taxonomy Convergence Lags Disclosures

Green, sustainability and climate taxonomies are also proliferating in different markets, creating another potential source of inconsistencies. What is considered green or sustainable in one jurisdiction may not be so in another.

In an effort to introduce broader-based standards in taxonomies, which will increasingly form the backbone of what is investable under a sustainability, green, social banner, regional plans have picked up pace and there will be more clarity on taxonomies to begin shaping investor allocations.

Asia-Pacific will see a great deal of activity, with initiatives on various regional or country-specific taxonomies taking shape over late 2021 and 2022. However, the issue of divergence between markets will become more pertinent as more taxonomies are rolled out. The main consequence of this is higher compliance costs for cross-country investing and operations but such initiatives as the China-EU Common Ground Taxonomy, announced as part of COP26, as well as the ASEAN Taxonomy, which will create the minimum baseline for the region, will create some commonalities.

The ASEAN Taxonomy for Sustainable Finance, among other things, advocates cross-ASEAN cooperation to further enhance the region's taxonomy with the awareness that the financial sector plays an important role in directing funds towards the environmental agenda. This first version of the ASEAN taxonomy has all the fundamental aspects of a credible sustainable finance taxonomy that is geared to fulfil the demands of ASEAN members.

## More Transparency Highlights Litigation, Reputational and Transition Risks

The objectives of harmonised and mandatory disclosures are to enable investors and other stakeholders to make better informed decisions and to enable action on climate change mitigation and other sustainability objectives. However, there are other implications relevant especially for the credit risk profile of entities that can arise as a result of more standardised disclosures from more entities.

Firstly, there will be increased scrutiny on providing clear guidance on how net zero pledges are to be met. In the run-up to COP26, a plethora of companies, financial institutions and asset owners and managers made pledges on carbon neutrality or net zero emissions by mid-century. Among financial institutions, 450 signatories to Glasgow Financial Alliance for Net Zero committed to annual reporting of financed emissions, the main indicator for lenders, albeit with a lack of agreement on a common standard.

With a rising number of disclosures and relevant and, importantly, comparable data becoming available, we anticipate much higher scrutiny on how net zero pledges either by corporates or banks and financial institutions will be met, the associated risks to operations from transition and climate risk governance. Transparent emissions-reduction strategies and targets may help indicate the level of preparedness for regulatory change, which can affect credit risk profiles for those entities that are less prepared.

In a [recent review](#) of net zero pledges of EMEA issuers, Fitch noted that, while over three-quarters of Fitch-rated corporates in



developed Europe have announced plans to reduce GHG emissions, it varies widely across sectors. This is almost twice as high as the share of those located in [emerging EMEA markets](#).

Another trend that we expect to intensify from 2022, especially as disclosures are mandatory and governed by national regulatory bodies, is a rise in climate-related litigation or regulatory investigations.

Litigation is a key transmission mechanism of ESG issues into credit risks and the rising prevalence of climate-related litigation can therefore increasingly become a credit-relevant consideration for reporting entities in jurisdictions with mandatory disclosures.

In 2021, high-profile cases, such as a ruling against Royal Dutch Shell plc's (AA-/Stable) in the Netherlands (*Milieudefensie v. Shell*) calling for it to speed up its emissions reductions, are seen as precedent-setting around the use of litigation to promote climate objectives.

Data by law firm Freshfields Bruckhaus Deringer show that there have been 1,400 cases of climate litigation since the mid-1980s, 80% of which were filed in the US, followed by Australia, with the largest number brought in 2016-2019. Litigation targeting US companies are mostly concentrated around energy and natural resources.

However, there are indications that this is an under-appreciated risk. A survey by the ECB in July 2021 of large eurozone banks found 92% of them did not consider climate litigation risk as part of typical assessment of financially material risks.

In addition to litigation risk against entities as more information comes to light regarding their efforts, or lack thereof, to mitigate emissions or other environmental or social impacts, with more regulation of climate and sustainability disclosures there is also more scope for litigation if entities' reporting is found to be misleading, incomplete or misrepresentative.

One of the main concerns among companies under the SEC's purview for instance is where the updated climate disclosures will be placed. If climate change disclosures must be filled under the 10-K form as other materially relevant information, then those disclosures would be subject to US Securities and Exchange Act and therefore potential open to litigation.

Stricter regulations on climate or sustainability disclosures also raises the spectre for more regulatory investigations and possible fines if entities breach their disclosure requirements. Reputational risks, arising from the scrutiny that regulatory investigations or litigation bring, are also important considerations, whether a corporate launching a labelled bond or an asset manager marketing a product.

## ESG Risks Matter to Supply-Chain Management

Supply chains have been a pressing issue throughout the Covid-19 pandemic and will remain pertinent in 2022. Resilient, responsible value chains will become a structural feature of supply chains as they relate to ESG considerations and how investors, policy makers and regulators scrutinise supply chains. Physical climate and

transition risks are potential threats, as are social issues around employment and labour practices.

Sectors from global retailers, such as food and beverage, apparel and textiles, electronics, automobiles, agriculture, and natural resources and industrials are at higher risk.

Heightening regulatory pressure to consider environmental and social risks as well as shifting consumer preferences for sustainable products have underscored the importance of sustainable, resilient, ethical and transparent supply chains.

Failure to ensure proper oversight and management of supply-chain risks can result in significant financial and reputational losses, as regulatory scrutiny rises.

### Scope 3 Emissions in Focus as Reporting Demands Rise

Net zero pledges from corporates are driving greater attention on energy management including electricity, water consumption, carbon emissions along supply chains. In response to shifting public sentiment and investors' ESG mandates, using carbon offsets is a key component for corporate's supply chain when looking to reduce emissions outside of Scope 1 emissions and on operations and procurement, or Scope 2 and Scope 3 emissions. In a 2020 study of environmental risks and issues associated with supply chains, non-profit reporting organization CDP found that supply-chain emissions (associated with Scope 3 emissions) are on average 11.4 times higher than direct emissions from operations.

With Scope 3 emissions highly complex to measure and mitigate, reliance on carbon offsets has been significant for global corporates particularly from consumer goods, electronics, manufacturing and logistics. A lack of integrity and overreliance on low-cost mitigation projects could undermine emission reduction targets. [Fitch expects regulatory pressure on emissions](#) to tighten and require higher quality offset projects for emission reduction within supply chains over time, especially since the agreement at COP26 on Article 6 sets up a new process to strengthen the carbon credits market. While this will bring much-needed transparency and accountability, it can mean greater compliance costs to corporates to monitor and verify the quality of offset projects.

The EU's proposed Carbon Border Adjustment Mechanism (CBAM) will require importers to purchase carbon certificates for goods based on the EU's carbon pricing rules. Sectors with higher risk of carbon leakage and emissions are covered under the scheme, including cement, iron and steel, aluminium, fertilisers and electricity. This mechanism is likely to face opposition from major importers, notably China and the US. Major exporters of raw materials and industrials products from Russia, Turkey and Ukraine would face higher costs if this carbon charge were to come into force.

### Supply Chains' Environmental Impacts Are Complex and Varied

Ecological impacts in supply chains relate to biodiversity and waste issues arising from the sourcing of raw materials and components that contribute to significant resource consumption, waste generation, environment damage or biodiversity loss.

Investors have started to raise the awareness of [addressing deforestation and animal welfare in their supply chains](#). Producers



of beef, palm oil and soy have been the target of large investors groups who have publicly expressed their concerns and engaged issuers across the forest-risk community value chain.

More than 140 countries pledged to stop and reverse deforestation by 2030 at COP26 with a pledge of USD19.2 billion in public and private funds. Suppliers with exposure on deforestation-related sectors will face rising regulatory scrutiny to manage environmental impact and potential financing challenges. In the aftermath of COP26, the European Commission presented a legislative proposal for mandatory due diligence rules, including strict traceability, for importers of forest-risk commodities in the EU including soy, beef, palm oil, wood, cocoa and coffee, as well as derived products, such as leather, chocolate and furniture.

### Extreme Weather and Physical Risks Raise Costs

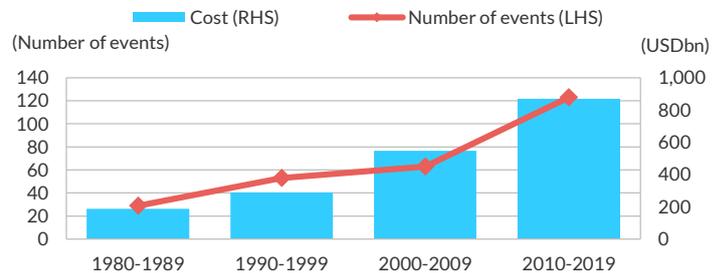
Companies are also focusing on developing resilient supply chains against increasing frequency of extreme weather. Supply chains are being exposed to broader range of physical risks with evolving disruptions and losses over the next few decades.

A research from McKinsey identified that the impact of natural disasters will become two to four times more likely to disrupt suppliers' operations, particularly in major sourcing regions, such as South Korea, Japan, Taiwan or the western Pacific.<sup>5</sup> The CDP study estimated that among its reporting organisations environmental costs can increase by USD120 billion by 2026 via exposure to physical and transition risks.

Once there is a severe supply disruption, the production problems can cascade downstream. The financial losses can be multiplied for unprepared downstream sectors. Fitch highlighted [the impact of Taiwan's extended drought on global supply chains](#), pointing to the materialised financial stress on Taiwan's high-valued semiconductor and manufacturing sectors caused by water scarcity. Several downstream sectors have been financially affected by the global chip shortage contributed by Taiwan's draught, including autos, consumer electronics, and manufacturing.

We expect suppliers to adapt to increasing frequency of extreme weather in the next few years by developing resilient infrastructure and plants, improving insurance and inventory management. These measures could mean additional costs and investments for suppliers and corporates. Some industries will also conduct risks assessments and redesign operations, and broaden or diversify existing supplier base with enhanced resilient strategies.

### US Climate Disasters and Financial Costs



Source: Fitch Ratings, National Centers for Environmental Information.

### Employment and Labour Issues High on Supply-Chain Social Risks

In addition to environmental dependencies and impacts, managing social risks on supply chains has started to see more traction from investors and consumers. The focus on labour practices and modern slavery issues in global supply chains indicates the growing demand for ethical sourcing, responsible corporate behaviour and sustainable products.

Sectors that rely highly on lower-cost labour or labour-intensive goods are at higher risk. This includes food and services, global retailers, construction and operations, manufacturing and natural resources. Fitch has already pointed a [higher labour risk exposure](#) of companies with complex supply chains involving numerous components from multiple suppliers in different regions, particularly in emerging Asia and sub-Saharan Africa.

Labour risks are often connected with compliance and reputation issues, particularly for global corporates with local operations in emerging markets. Investors are increasingly asking corporates to impose codes of conduct that stipulate minimally acceptable labour practices and working conditions in suppliers' factories with periodic audits and reviews. Public sentiment, financial institutions and governments are demanding higher transparency and product traceability to disclose relevant labour risks and potential unethical behaviors on its global supply chains.

British online retailer Boohoo (not rated) faced allegations on harsh working conditions, lower-than-minimum wages, and health and safety violations from suppliers' factories in 2020. The company later pledged to improve internal governance and oversight of its supply chain on labour management by cutting the previous supplier network and linking executives' bonuses to ESG targets. However, this has led to substantial financial costs from legal, compliance and reputation.

Increasing regulatory scrutiny will improve requirements on data disclosure and third-party verification for better transparency and accountability of supply-chain sourcing. Corporates may face rising pressure from investors and financial institutions through due diligence on social risks to meet the expectations.

Digital transformation initiatives and higher technological integration, such as automation and blockchain, can be used to better control and monitor sourcing information, and comply with

<sup>5</sup> McKinsey Sustainability, [Could climate become the weak link in your supply chain?](#) August 6, 2020.



regulation demands. This could increase corporates' operational efficiency of due diligence on social issues and therefore reduce the risk exposure on forced labour or unethical sourcing.

### Consumer Shifts Towards Sustainability Drive Changes

Shifting consumer preferences for sustainable goods also impacts global supply chains. Social responsibility of corporates is growing to become a priority for consumers, and products from that front are witnessing rising demand. Environmental concerns on biodiversity and deforestation increases consumers' demand for sustainable products on animal welfare, use of antibiotics and sustainable proteins. Investors' response and government influence also demonstrate the importance of environmental consideration into social trends in business's operations and supply chains. Fitch's [ESG in Credit series on Biodiversity](#) pointed out that shifting consumer preferences for eco-friendly products could continue to grow, including sustainable packaging, building materials and products. This trend will continue to develop as technology improves and investment expands. More downstream issuers will look to source sustainable materials and products in response to customer preference.

### Geopolitical Pressures on Supply Chains Persist

Persistent global trade tension was prompting corporates to rethink the need for diverse sourcing options before the pandemic. Global supply chains have gone through tremendous disruption, particularly at the beginning of Covid-19 for companies with direct exposure to outbreaks. [In a report examining the future of trade and supply chains](#), Fitch noted that trade disputes and protectionism will continue to present risks on supply chains in the post-pandemic years an assessment. Volatile political environment and weaker macroeconomic conditions will test corporates' ability to diversify and execute alternative sourcing options and generate profitability.

The continuous trade tension between China and the US has heightened pressure on global business, and risks for relying on single suppliers. Global manufacturers are expected reconsider the critical functions and resilience of supply chains by managing alternative resourcing strategies. We expect corporates to assess broader implications of supply-chain resilience as a core component of governance and management strategy as investors and stakeholders seek more transparency and accountability in value chains.

## Appendix

### Related Research

ESG in Credit – Labour-Related Issues (November 2021)

ESG Credit Quarterly – 3Q21 (October 2021)

Focus Turns to Voluntary Carbon Market Integrity, Costs (October 2021)

Corporate GHG Targets, Net-Zero Pledges Vary by Sector in Europe (October 2021)

Twice as Many DM Europe Corporates Have Emission Targets as in EMs (October 2021)

EU Green Bond Standard Faces Obstacles to Become the Global ‘Gold Standard’ (September 2021)

EU’s Fit-for-55 to Spur Energy Transition in Multiple Sectors (August 2021)

New Regulations to Accelerate Green ABS Development in China (July 2021)

Aircraft Lessors with New Technology Fleets to See ESG-Driven Demand (July 2021)

Efforts to Reduce Plastic Waste Could Drive Long-Term Shifts in Business Models (April 2021)

Sustainable Development Shapes ESG Focus in Sub-Saharan Africa (April 2021)

ESG in Credit – GHG and Air Quality Issues (April 2021)

ESG in Credit – Exposure to Environmental Impact Issues (April 2021)

ESG in Credit – Biodiversity and Waste Issues (April 2021)

Green Securitisation: Developments and Challenges (April 2021)

Modern Slavery and Labour Risk in Global Supply Chains (February 2021)

Coronavirus Amplifies Some Key Corporate Secular Trends (November 2020)

Growing Protection Gap for Physical Climate Risks (November 2020)

Constraints to Growth in Water-Stressed Regions (October 2020)

Financial Sector Confronts Deforestation as a Key ESG Risk (September 2020)

Water Risk in the Agricultural Supply Chain (June 2020)

ESG Bites into Banks’ Lending to Corporates (January 2020)

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