

BRIDGING ESG SILOS: THE INTERSECTION OF CLIMATE CHANGE AND MODERN SLAVERY



WALK  FREE

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Sydney, Australia

Workers install solar panels on the roof of a house in May 2021. Solar panels are crucial in the switch from fossil fuels to renewable energy, but their production poses modern slavery risks. There are allegations that many working in the global supply chain are subjected to forced labour, which is why it is crucial to protect human rights and ensure a just transition and decent work for all. Photo credit: Brendon Thorne/ Bloomberg via Getty Images.

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Walk Free is proud to partner with AllianceBernstein to present this briefing, *Bridging ESG Silos: The intersection of climate change and modern slavery*, to the global investor community. We hope that investors will use the tools we have developed to conduct sharper ESG analysis and foster meaningful corporate engagement in relation to the intricate interplay between climate change and modern slavery risks.

Walk Free recently launched the Global Slavery Index (GSI) which estimates there are 50 million people living in modern slavery globally. It impacts every country, every supply chain and every investor portfolio in the world. The confluence of compounding crises, including the COVID-19 pandemic, conflict and climate change have all increased vulnerability to modern slavery.

Climate change intersects with modern slavery in multiple ways. We have seen the devastation that sudden and slow-onset climate events can have, destroying homes and livelihoods. Its effects push people to migrate and magnify drivers of displacement, such as food insecurity and a lack of access to water and other natural resources. Migration in these contexts can be volatile and expose people to higher risks of modern slavery, underscoring the urgency for transformative action.

Concurrently, those industries most necessary for our urgent transition to clean energy are also reliant on exploitation and forced labour. For example, risks have been identified throughout the solar energy value chain, from evidence of forced and child labour in cobalt artisanal mines in the Democratic Republic of the Congo to the production of polysilicon in the Uyghur region of China.

Investors play a pivotal role in managing the intersection of these environmental and social risks. Knowing that one risk reinforces the other, investors are uniquely positioned to provide oversight and support businesses to be accountable, especially where governments may be falling short, in order to combat the increasing modern slavery risk in our global economy.

Bridging ESG Silos provides robust tools for investors to improve disclosure practices and stewardship regarding climate-related modern slavery risks, fostering a new level of transparency and responsibility.

GRACE FORREST

Founding Director
Walk Free

July 2023 was recorded as the hottest month in history and the effects of this heat have been acutely felt across the world. In Canada, raging wildfires sent plumes of smoke billowing across North America, raising pollution levels and prompting the suspension of outdoor work. An extreme heatwave in China's Sichuan province, a key manufacturing location for the semiconductor and solar panel industries, forced factory shutdowns; and soaring temperatures and catastrophic floods across South and South-East Asia have claimed lives and forced evacuations.

From waterlogged farms and overheated construction sites to poorly ventilated factories, rising temperatures across the globe expose workers to heat stress and other related social risks. The International Labour Organization has estimated that temperature increases caused by climate change will amount to productivity loss equivalent to 80 million full-time jobs by 2023.[1]

In addition, sudden and slow-onset climate events can drive those affected to migrate in precarious conditions in search of new livelihoods, increasing their vulnerability to forced labour and modern slavery. The mass movement of people to different locations can result in a loss of human capital from the places they leave, and cause potential strain on the resources in the places to which they relocate. Even businesses with assets and operations that are relatively resilient to climate change can be impacted by climate migration as they are likely to be situated in areas attractive to climate migrants.

Against the backdrop of growing regulatory requirements and expectations for investors to assess and report on social and environmental risks in investee companies' value chains, it would be prudent for investors to consider the social and labour issues that are likely to cascade from climate change and how these issues can materialise in the supply chains of investee companies. Although social factors are increasingly being considered in investor assessments of climate change and

the energy transition, their inclusion is often done in an ad hoc manner, resulting in climate-related human rights risks being inadequately addressed. Global trends in regulation, litigation and social expectations can result in material risk for investors who do not systematically account for climate-related human rights risks in their portfolios where these risks are relevant. Systematically incorporating social factors into risk assessments of climate change and the energy transition is one way in which investors can seek to mitigate these threats to long-term stability and value creation.

AllianceBernstein (AB) has collaborated with international human rights organisation, Walk Free, to author this paper setting out the systemic links between climate change, human rights, and risks to businesses. The paper offers an analysis of the key dimensions that investors can consider when making investment decisions and managing portfolios, and concludes with two tools to guide investors with incorporating these considerations into their existing strategies in an incremental and practical way.

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EXECUTIVE SUMMARY

The impacts of climate change will adversely affect a wide range of human rights. There are clear links between climate change, the energy transition and increased vulnerability to human trafficking and modern slavery.

Today, active investors generally integrate material environmental, social and governance (ESG) factors into their investment decisions. However, ESG integration often remains siloed, neglecting important connections between issues. These connections are particularly notable between environmental and social factors, such as climate change and modern slavery. Climate-related human rights issues can present financially material risks and opportunities to investors. Assessing material financial risk in the investment decision-making processes requires the consideration of both environmental and social factors. Rethinking existing frameworks to account for the intersection

of material climate change and human rights risks offers an opportunity for deeper analysis and enhanced risk management.

This briefing, authored by AllianceBernstein and Walk Free, seeks to illustrate the links between climate change, the energy transition, human rights and, specifically, modern slavery through a case study approach. Drawing carefully on these real-life examples, it develops two new tools to help investors identify and respond to the material climate-related modern slavery risks they seek to manage on behalf of clients and beneficiaries.



Bagerhat, Bangladesh
A crowd of climate migrants cross the Pasur River by boat to get to work in the Port of Mongla. Many migrants work hard to build a better life for themselves and their families, but they can be at risk of climate-related modern slavery.
Photo credit: Zakir Hossain Chowdhury/Anadolu Agency via Getty Images

INTRODUCTION

Climate change is one of the most pressing human rights issues of our time, threatening the lives and livelihoods of millions of people. It is driving material social risks that investors should consider when assessing capital allocation.

The latest *Global Estimates of Modern Slavery* estimated there were 49.6 million people living in situations of modern slavery on any given day in 2021 [2]. This increase of almost 10 million people since 2016 is driven by compounding crises, such as the COVID-19 pandemic, conflict and, of course, climate change. The World Bank predicts that by 2050, there will be 216 million people forced to migrate within their own countries because of climate change, which can increase their vulnerability to modern slavery [3].

Investors considering the impacts of climate change on their business should now explicitly factor in the related human rights impacts on workers and their communities because these issues can have material risks for investments over multiple time horizons. Climate-related modern slavery risk can be financially material to investee companies because these risks can manifest as legal, reputational and operational damage. Gaining a better understanding of these climate-related human rights risks can empower investors to chart a more sustainable path to long-term value creation and align themselves with the UN Guiding Principles on Business and Human Rights (UNGPs), a set of guidelines for companies to prevent, address and remedy human rights abuses committed in business operations [4].

Both the physical and transition impacts of climate change can impair human rights. Physical risks, including both sudden-onset events such as bushfires or slow-onset events such as sea-level rises, can impinge on the rights to life, housing, work, food, water and sanitation. These events can trigger rapid displacement or ongoing migration, which can, in turn, increase vulnerability to human trafficking and other forms of modern slavery and

labour exploitation. The transition risks in shifting from high-carbon to decarbonised economies and societies can result in loss of employment and livelihoods as fossil fuel production and consumption decline. Forced labour and child labour have already been well-documented in the supply chains of renewable energy industries: from extracting raw materials to manufacturing components and parts for solar, wind and hydrogen projects and in building the projects themselves [5]. Aside from risks, climate change and the energy transition also present significant opportunities to improve social outcomes, particularly technological innovations to help workers and communities adapt to climate events and impacts, the creation of clean energy jobs, and expanding stakeholder engagement on products and projects to strengthen social license to operate.

In recent years, ESG integration has become increasingly common. At the time of this publication, for instance, the Principles for Responsible Investment, the world's leading initiative on responsible investment reporting, had 5,3814 signatories with about US\$121 trillion in Assets Under Management (AUM) [6]. Many investors have begun to recognise the considerable intersection of material ESG factors in making investments and engaging investee companies. However, the adverse effects of climate change on human rights, and the role investors can play in supporting a just transition from an economy driven by fossil fuels to one built on renewable energy, have not been fully explored. Specifically, investor assessments of material climate change risks and opportunities, along with related new climate disclosures, now need to incorporate a social dimension.

03

50 MILLION PEOPLE

were living in modern slavery in 2021

216 MILLION

will be forced to migrate within their own countries by 2050

30+ COUNTRIES

signed the Just Transition Declaration at COP26 in 2021

Alongside the growth of ESG integration, international legal frameworks are increasingly providing guidance to strengthen investment analysis and reporting that reflects climate-related human rights risks. The Paris Agreement is a guiding framework for efforts to address climate change. Negotiated at the 2015 United Nations Climate Change Conference (COP) (COP21), the agreement included commitments from its 194 Parties to reduce their emissions and work together to adapt to the impacts of climate change [7]. The ‘just transition’, which the International Labour Organization (ILO) defines as “*greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities, and leaving no one behind*” [8], is a Paris Agreement objective.

Following the Paris Agreement, more than 30 countries attending the 2021 COP26 signed the Just Transition Declaration, committing to strategies that consider workers, businesses and communities during the energy transition [9]. More recently, the Sharm El-Sheikh Implementation Plan, agreed to at the 2022 COP27, recognised that the urgent action needed to address climate change must also support a just and inclusive transition to net zero that minimises negative social or economic impacts. The plan emphasises that a “*just and equitable transition encompasses pathways that include energy, socio-economic, workforce and other dimensions*” [10]. As a signal of the growing commitment and momentum for this objective, the 2023 COP28 program includes a Just Energy Transition Day, which will focus on strategies to reduce simultaneously carbon emissions in the energy and industrial sectors and stimulate economic growth and job creation [11].

The Financial Stability Board, an international body that monitors and makes recommendations about the global financial system, created the Task Force on Climate-Related Financial Disclosures (TCFD) in 2015 to improve and expand reporting of climate-related financial information [12]. The TCFD began as a voluntary set of recommendations but is now part of the regulatory framework in many jurisdictions, including the European Union (EU) [13], Singapore [14], Canada [15], Japan [16] and the United Kingdom [17]. New Zealand is similarly mandating climate-risk disclosures in line with the TCFD by 2025 [18]. More governments are shifting from recommending the TCFD as guidance to enacting laws and policies to embed the recommendations into mandatory legislation and regulation. As this process continues to evolve, it will become increasingly material for companies

to comply with the disclosure requirements or face regulatory scrutiny or fines, or reputational damage [19]. The TCFD, however, does not make recommendations for reporting on human rights.

The UNGPs are the most authoritative global framework for business to consider in assessing and addressing human rights issues in their value chains. They require corporates, including investors, to respect internationally recognised human rights by:

1. Avoiding causing or contributing to adverse human rights impacts through their own activities, and addressing such impacts when they occur, and
2. Seeking to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts [20].

The scope of this responsibility includes the ILO Declaration on Fundamental Principles and Rights at Work, which incorporates the ILO conventions prohibiting two of the most prominent forms of modern slavery, which are forced labour and child labour [21].

New laws for companies to prevent, mitigate or remediate adverse human rights impacts have been introduced globally. These new legal frameworks take different approaches to solving the problem of business failing to respect human rights. The UK and Australia have taken a disclosure-based approach for reporting on modern slavery risk management. European countries and the EU have gone beyond that to legislate that companies must conduct broader human rights due diligence. The US relies on its forced labour import ban laws to prevent goods tainted with forced labour from entering the US market. The list below provides examples of these different legislative approaches, but it is not an exhaustive list.

“[G]reening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities, and leaving no one behind”

International Labour Organization (ILO) definition of ‘Just Transition’

Disclosure approach:

- The UK Modern Slavery Act requires in-scope companies to prepare and publish a modern slavery and human trafficking transparency report every financial year [22].
- Australia’s Modern Slavery Act requires larger companies in Australia to report publicly on how they are preventing and addressing risks related to modern slavery in their operations and supply chains annually [23].
- The EU’s Corporate Sustainability Reporting Directive (CSRD) requires in-scope businesses to report and disclose information on their societal and environmental impact, and external sustainability factors affecting their business. The CSRD triggers the need for businesses to comply with the EU Taxonomy and the EU Sustainability Reporting Standards [24].

Due diligence laws:

- Once adopted, the EU’s Corporate Sustainability Due Diligence Directive will require large EU and non-EU companies to set up mandatory due diligence processes on their own operations and on the activities of their subsidiaries and other entities in their value chains [25].
- France’s Corporate Duty of Vigilance Law requires large companies to carry out human rights and environmental due diligence and publish a vigilance plan annually [26].
- Germany’s Supply Chain Due Diligence Act makes it mandatory for larger businesses in Germany to conduct supply chain risk analysis to better understand environmental and human rights risks and negative impacts on global supply chains [27].
- Norway’s Transparency Act requires in-scope companies, including both Norwegian and foreign companies operating in Norway, to conduct human rights and decent work due diligence in their supply chains and business relationships, and to communicate any findings externally [28].

Import bans:

- The US Tariff Act of 1930 prohibits the import of any product mined, produced or manufactured wholly or in part by forced labour, including forced or indentured child labour into the US [29].
- The US Uyghur Forced Labour Prevention Act requires companies that source material from the Xinjiang region of China to prove their supply chains are not tainted with forced labour if they want to import goods into the US [30].

AllianceBernstein and Walk Free have collaborated to develop a practical briefing to help investors better understand and act on the links between material risks related to climate change, the energy transition and modern slavery. The briefing is organised into two sections:

A. Investor risk exposure examines exposure to modern slavery risks from climate change and the energy transition, sharing relevant case studies.

B. New tools offer guidance to help investors manage and disclose climate-related modern slavery risks. The section includes supplementary climate-reporting recommendations that address modern slavery risks and expectations for investor engagement.

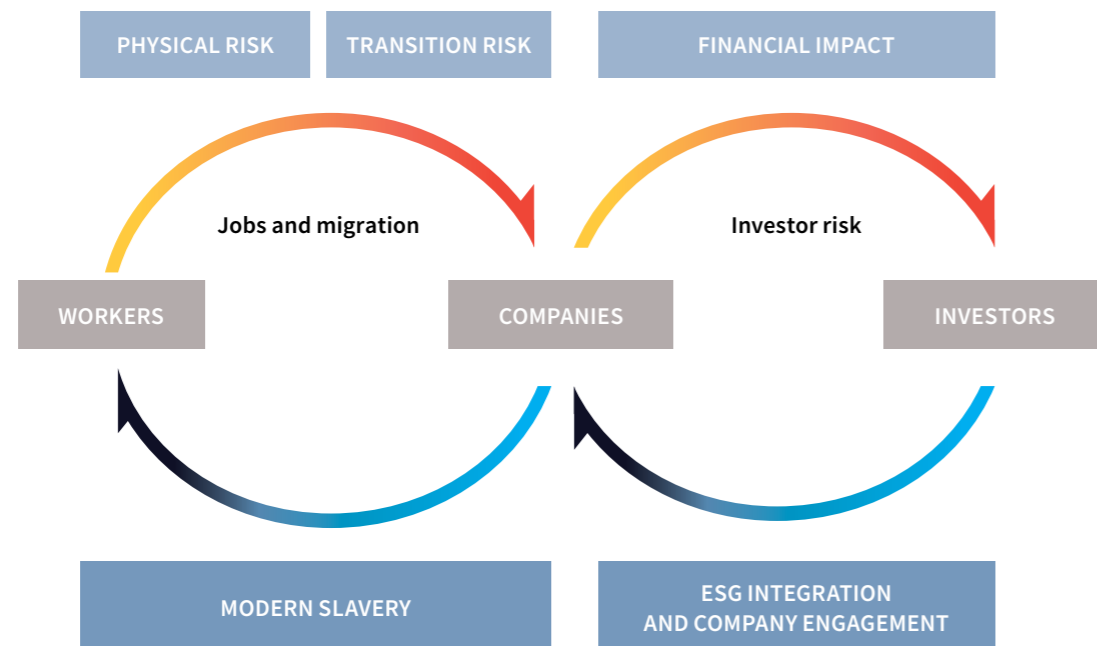
INVESTOR RISK EXPOSURE

Climate-related human rights and modern slavery risks to business and investors

Climate change can have complex, far-reaching harmful effects on a range of human rights. Climate-related events and risks can create impacts and responses that may violate human rights and create modern slavery vulnerabilities. There are two widely recognised categories of climate change risk:

- 1. Physical risks** can be acute or chronic. Acute physical risks relate to the potential impact of typically sudden-onset events such as storms and bushfires. Chronic physical risks are gradual long-term changes, or slow-onset events, including drought, desertification, sea-level increases and ocean acidification.
- 2. Transition risks** are associated with the way that society, governments and businesses respond to a changing climate — mainly through the shift from a greenhouse gas-emitting economy based on fossil fuels to a decarbonised, renewable energy economy in the global energy transition [31].

The climate-related modern slavery risk management cycle



Investors should take a systematic approach to identifying where physical and transition risks might lead to material social risks such as modern slavery, and then assess the relationship of such social risks to their investment activities.

Climate-related risks can manifest as modern slavery risks in several ways:

- Both sudden and slow-onset events may damage or destroy homes and livelihoods. This toll can increase vulnerability to human traffickers and prompt risk-taking in both job hunting and labour migration. New employment in areas affected by severe weather events might have worse working conditions in the wake of these events; people might also choose or be forced to migrate in search of new work that subjects them to labour exploitation.
- Phasing out fossil fuel industries can leave workers and communities stranded, potentially facing similar issues to people impacted by climate disasters — labour migration, human trafficking and labour exploitation.
- Phasing in renewable energy generation and supply creates new extraction and manufacturing activities that currently face a high prevalence of forced labour and child labour. The energy transition can also result in local communities including Indigenous peoples losing their traditional land and livelihoods to project sites. This can increase their vulnerability to exploitation.

Climate events can directly impact basic human rights including the rights to life, health, work, housing, food, water and sanitation. Climate change has been termed a “*stress multiplier*” because it aggravates existing vulnerabilities, particularly for women, children, the rural poor and fossil fuel industry workers [32]. This increased precariousness heightens the need for affected individuals and communities to adopt riskier coping strategies, such as unsafe, disorderly or irregular migration, which makes exploitation through human trafficking and modern slavery more likely.

While migration can help people to deal with the initial dangers and consequences of climate-induced natural disasters, it can also lead to other harmful social outcomes, such as working excessive overtime, receiving less pay than non-migrants and exposure to hazardous working conditions [33].

Companies operating in climate disaster zones and employing affected local workers, or located outside these areas and receiving labour migrants from them, need to recognise the increased precariousness these workers or migrants might be experiencing. The right recruitment policies and procedures and worker grievance mechanisms must be in place to prevent abusing new vulnerabilities.

Climate-related modern slavery risks can manifest as business or investor risk and be financially material in the following ways:

- **Legal risk:** As governments worldwide rapidly shift their human rights and climate policies, regulatory risk has become a significant concern for investors. Governments are committing to achieving net zero emissions and implementing laws to safeguard climate-related impacts caused by companies. Regulatory expectations for companies to measure, monitor and mitigate their climate-related financial risks are growing rapidly globally. At the same time, companies are increasingly required to identify and mitigate human rights risks in their operations and supply chains through legislative measures. Regardless of where a company is headquartered, the global reach of these regulatory trends makes it crucial for companies to respond proactively to the highest regulatory requirements concerning both human rights and environmental due diligence. While these current and prospective laws on supply chains or environmental impact do not specifically address climate-related human rights risks, when taken together with the physical impacts of climate change on communities and the commercial demands of the energy transition, the consideration of such risks is important for investors.

- **Reputational risk:** Stakeholders, including civil society, consumers and beneficiaries, are increasingly becoming more informed about climate and human rights risks. Campaigns that urge companies and investors to adopt stronger climate and human rights policies, commit to emission targets and increase transparency in supply chains can gain significant momentum [34]. Customer-facing companies are increasingly obligated to ensure their value chain partners effectively manage and mitigate the risk of climate-related impacts on human rights. Fund managers are faced with similar expectations. One study conducted on about 96,000 global funds using Morningstar data found that sustainable funds experienced net positive fund flows in 2022 of US\$115 billion (around 3 per cent of 2021 year-end Assets Under Management), while traditional funds experienced outflows of US\$565 billion, signalling strong demand for sustainable products and strategies [35]. In addition, shareholder activism, where shareholder advocacy organisations engage with companies on climate action via shareholder motions filed at Annual General Meetings, is increasingly gaining traction. There was about a 36 per cent increase in the number of shareholder activist campaigns in the US in 2022, compared to 2021[36]. Increasing societal expectations mean investors who fail to manage material climate-related human rights risks in their portfolios adequately may face substantial risks themselves.

- **Operational risk:** The physical effects of climate change can lead to large-scale migration of workers and communities, resulting in the loss of labour in places of origin and potential strain on resources in new locations. Climate-induced migration can create instability in a company's supply chains and operations, while also presenting challenges to human rights responsibility. Climate-related migration can lead to supply chain disruptions. As people move from climate-affected regions, production facilities and transportation networks may become understaffed. These disruptions can impact the timely delivery of goods and services, leading to supply chain inefficiencies and potential delays or shortages.

Climate migration can also result in the loss of skilled and experienced workers and companies may face challenges finding suitable replacements, particularly in industries reliant on specific expertise or labour-intensive sectors. This can lead to workforce shortages and, in turn, operational disruptions. Even businesses with assets and operations that are relatively resilient to climate change could be impacted by climate migration as they are likely to be situated in areas attractive to climate migrants. Many climate migrants can intensify resource pressures, which can, in turn, have a negative impact on supply chain stability and overall operations of a business.

In addition, climate-induced migration can be correlated to an increase in incidences of forced labour and modern slavery in supply chains [37]. Companies that rely on global supply chains exposed to this risk may face disruptions

from regulatory or legal action that can cause production delays. Firms may ultimately need to find new suppliers or redesign portions of their supply chains to address instances of forced labour, which can impact operations. There is also the risk of supply chain disruption if a supplier is suddenly unable to deliver because of legal action or a boycott.

These legal, reputational and operational risks can result in direct financial implications for a company. Legal fees, fines, penalties and settlements can have a direct impact on a company's financial resources and lengthy legal disputes can divert management's attention and resources, away from core business activities, potentially impacting profitability and growth. A damaged reputation can lead to reduced sales, loss of market share and decreased customer trust and loyalty, all of which can have negative impacts on a company's bottom line. Finally, operational disruptions can lead to production delays, inventory loss, or increased procurement expenses, all of which can have financial implications for investee companies.

Given the high stakes of these issues, investors should take a systematic approach to identifying where physical and transition risks might lead to material social risks such as modern slavery, and then assess the relationship of such social risks to their investment activities. We have outlined several case studies in the following pages to illustrate the actual or potential links between climate change, modern slavery and business risk.



Tarawa, Kiribati

A fisherman puts out his nets in North Tarawa. In some parts of the world, the fishing industry employs vulnerable workers who are susceptible to human trafficking when their livelihoods are threatened by flooding, sea-level rises and other climate disasters. Forced to find work elsewhere in the aftermath of sudden-onset events, they may find themselves driven into forced labour. Photo credit: Jonas Gratzner/LightRocket via Getty Images

Case Study:

**Sudden-onset event
and modern slavery****Intensifying typhoons in
the Philippines heighten
trafficking vulnerability**

Super Typhoon Haiyan killed 6,300 people and displaced 4.4 million people when it struck the Philippines in November 2013 [38]. The hardest hit region, the Eastern Visayas, was already one of the poorest regions in the country and its people among the most susceptible to human trafficking [39]. Destroying rice fields, coconut plantations and fishing boats, the typhoon devastated the agriculture and fishing industries, which already employed vulnerable workers [40]. Seventy-two per cent of the 44 million coconut trees in the Eastern Visayas were damaged by the typhoon, resulting in material reductions in the annual income of smallholder coconut farmers [41]. The Philippines Bureau of Fisheries and Aquatic Resources estimates that 21 of the country's 72 fishing provinces and more than 145,000 fishermen were impacted by Typhoon Haiyan, with up to 95 per cent of boats and fishing equipment being lost in hard-hit areas [42].

The immense destruction of homes and livelihoods made many local people more susceptible to human trafficking and labour exploitation [43]. Tens of thousands were forced to leave affected areas, many heading to the capital city of Manila. Reports and prosecution of human trafficking surged, as human traffickers preyed on displaced men, women and children [44]. Based on the findings of a Philippine National Statistics Office and ILO survey, 54 per cent of 112 surveyed villages reported children involved in harsh and dangerous labour, with 39 per cent saying that the number of such children rose following the disaster [45].

The Philippines is one of the world's major agricultural producers. Its key agricultural products include rice, coconuts, corn, sugarcane, bananas, pineapples and mangoes [46]. The country hosts factories, manufacturing plants, sales offices and distribution centres of many multinational corporations, including food and beverage companies, pharmaceutical and consumer goods companies, and automobile companies nationwide [47].

Implications for investors

Sudden-onset climate-related events can increase material modern slavery risk in a company's operations and/or supply chains in affected geographies. These events can lead to large-scale migration, resulting in labour shortages in affected areas which can have a negative impact on operations and supply chains. Embedding climate resilience throughout a company's value chain involves accounting for such climate-related human rights risks.

In addition, local people can be increasingly vulnerable to traffickers in the aftermath of sudden-onset events and be driven into forced labour or child labour. These risks can increase if business operations and supply chains are in areas attracting a large number of climate migrants. Sudden-onset events are essentially risk multipliers, making those who are more vulnerable even more likely to be affected by modern slavery and, in turn, heightening the prevalence of forced labour and modern slavery in supply chains.

Investors can incorporate this heightened risk into risk assessments following climate-related natural disasters.

Investor takeaways:

1. Understand how an investee company identifies and monitors whether any labour-intensive parts of its operations and/or supply chains are located in an area susceptible to sudden-onset climate-related events.
2. Identify whether an investee company located in these high-risk geographies accounts for labour considerations, such as the risk of large-scale migration following sudden-onset climate-related events, in their climate resilience strategies.
3. Understand how an investee company identifies and monitors whether any labour-intensive parts of its operations and/or supply chains are located in an area susceptible to generating or receiving a large number of climate migrants.
4. Understand how an investee company located in these high-risk geographies and that operate within industries that have a high demand for low skill and low paid labour conduct human rights due diligence to identify modern slavery risks and work to mitigate them, remedy adverse impacts, track and measure progress, and report any findings.

**Tacloban,
Philippines**

A giant ship lies alongside homes in Anibong, a suburb in Tacloban City, after it was cast adrift during Super Typhoon Haiyan, which struck the Philippines on 8 November 2013. The disaster, one of the most powerful typhoons to ever hit land, left thousands dead and displaced more than four million people. The immense destruction of homes and livelihoods made many people more susceptible to human trafficking and labour exploitation.

Photo credit: Mark Fredesjed R. Cristino/Pacific Press/LightRocket via Getty Images

Kandal Province, Cambodia

Cambodian students walk through the rain at a flooded village in Kandal Province, which surrounds the capital Phnom Penh and extends into the southeast. Such events can result in crop failures, forcing farmers and their families to search for work elsewhere — many end up working in brick kilns as indentured labour to supply materials for the capital's ongoing construction boom. Photo credit: Tang Chhin Sothy/AFP via Getty Images



Case Study: Slow-onset event and modern slavery

Cambodian farmers face debt bondage in brick kilns to supply construction boom

Cambodia's capital, Phnom Penh, is in the middle of a construction boom, having built a wave of office buildings, condominiums, shopping malls, hotels, schools and hospitals in the past decade. Foreign investment has helped to fuel the boom. Significant foreign investors in Cambodia's construction and real estate industry are from China, South Korea and Japan [48]. The industry is projected to grow 9.4 per cent between 2023 and 2026 based on investments in infrastructure, commercial and residential, and strong demand for real estate [49].

Local kilns that supply the enormous quantity of bricks often depend on a coerced workforce of indebted farmers and their families [50]. Recent temperature increases and erratic precipitation have caused crop failures, compelling farmers to spend their savings and take out loans to cope with the loss of sustenance and income. When some farmers struggle to repay debt, kiln owners can step in and offer to buy the outstanding debt. They then require the farmers and their families to work off that debt in brick kilns. Working conditions are dirty, dangerous and demanding, with rural forced labourers excavating clay and feeding the kilns with combustible materials that emit toxic fumes.

Once farmers move to the city to live and work, they typically face a growing challenge in repaying their debts, particularly when heavy unseasonal rain stops production, reduces their piecemeal rate-based earnings and increases their basic living costs [51].

Implications for investors

Slow-onset climate events, including rising temperatures or changing rainfall patterns, can indicate an increased risk of forced labour or debt bondage within an investee company's operations and/or supply chains in affected geographies. Areas with slow-onset climate events often do not receive the same level of support or relief aid as areas prone to rapid-onset climate events. Governments and states are often left to use their own budgets for relief operations linked to slow-onset climate events [52]. With such relief operations often coming in late, communities can be forced into distress migration and situations of forced or debt bonded labour to survive. Research has found that the percentage of trafficked migrant households in slow-onset event areas is much higher than in sudden-onset event areas [53].

Industries with low-tier suppliers located in geographies affected by slow-onset climate events and with lower regulation can be more susceptible to prevalence of modern slavery in the form of debt bondage. These low-tier suppliers support listed company activities such as construction and real estate companies. For example, debt-bonded labour is similarly prevalent in India's agriculture sector, such as in sugar cane farming. Farmers who face increasing crop failure because of climate change become trapped in the cycle of debt bondage as they enter into informal agreements for cash advances in return for working in sugar cane fields [54]. As the world's largest producer of sugar, the increase in prevalence of debt bondage in the industry can have far-reaching implications.

Investor takeaways:

1. Understand how an investee company identifies and monitors whether any labour-intensive parts of its operations and/or supply chains are located in an area susceptible to slow-onset climate change.
2. Understand how an investee company located in these high-risk geographies and that operates within an industry that has a high demand for low skill and low paid labour implements human rights due diligence with specific consideration for migrant workers.
3. Understand how an investee company located in these high-risk geographies with lower regulation and within an industry that has a high demand for low skill and low paid labour accounts for the increased risk of debt bondage in its supplier code of conduct; for example, does it have an 'employer pays' or 'zero recruitment fees' policy?
4. Understand how such an investee company maintains visibility and transparency and conducts due diligence on the employment practices of its suppliers and subcontractors.
5. Understand how such an investee company addresses violations of its supplier code of conduct, and how it works with its suppliers to improve their management systems and remediate affected workers.

Case Study:

Combined sudden and slow-onset event and modern slavery**Climate-induced forced migration in Bangladesh's Sundarbans Delta**

The Sundarbans, the world's largest mangrove forest, sit on a mega delta created by the confluence of the Ganges, Brahmaputra and Meghna rivers in Bangladesh and the eastern India state of Bengal. The region faces frequent, ferocious cyclones and tidal surges, as well as ongoing, catastrophic floods and sea-level increases. Locals in the Sundarbans suffer widespread displacement from their homes and lost jobs because of extreme events, and many people living there can no longer work for much of the year. Agriculture and fishing are the main sources of livelihood, but droughts and floods ruin crops and fields, damage houses and pollute water, and trigger water and vector-borne disease outbreaks.

The Sundarbans is a well-known hotspot for climate migrants to become victims of human trafficking and modern slavery [55]. Most households in the Bangladesh delta have seen at least one family member migrate. Migrant workers, primarily men, usually relocate to the urban slums of Dhaka or Kolkata. Dhaka, for instance, is now home to 10 million climate migrants, and an estimated 2,000 people still move there every day [56].

Many migrants find work in the garment and textile industry [57]. Bangladesh is the world's second largest manufacturer after China; the garment and textile industry accounts for 80 per cent of its exports. Global apparel brands produce a significant share of products in Bangladeshi factories. In 2022, a study was conducted by the Global Fund to End Modern Slavery on exploitative labour practices in the informal-apparel sector in the garment-production hubs of Narayanganj and Keraniganj in the Dhaka area. It found that more than 86 per cent of workers met the ILO's criteria for forced labour [58].

Global apparel brands have been linked to allegations of forced labour taking place at workplaces that are incorporated into their supply chains through unauthorised subcontracting arrangements [59]. A recent study conducted by the University of Aberdeen and Transform Trade found that, based on a survey of 1,000 Bangladeshi factories and suppliers producing apparel for global fashion brands and retailers, one in five factories reported that they do not pay the Bangladeshi legal minimum wage [60].

Implications for investors

The combined effects of sudden and slow-onset climate events can increase the number of migrant workers in the operations and/or supply chains of investee companies. Migrant workers, particularly in labour-intensive sectors with low skill and low paid positions, may be vulnerable to exploitative recruitment and employment practices. The risk of exploitation is amplified when there are intricate subcontracting chains and various outsourcing or recruitment arrangements are involved, especially for part-time, project-specific or seasonal workers [61].

Investors can incorporate these considerations into their risk assessments of firms located in destination areas for climate migrants and companies that operate in industries relying on low-skilled labour with high demand for workers. Investors should investigate these issues beyond the first tier of their supply chains.

Investor takeaways:

1. Understand how an investee company identifies and monitors whether any labour-intensive parts of its operations and/or supply chains are located in an area susceptible to receiving a large number of climate migrants.
2. Understand how an investee company located in these high-risk geographies and that operates within an industry that has a high demand for low skill and low paid labour implements human rights due diligence with specific consideration for migrant workers.
3. Understand how such an investee company accounts for the increased risk of modern slavery in its supply chain in its supplier code of conduct.
4. Understand how such an investee company maintains visibility and transparency and conducts due diligence of the employment practices of its suppliers and subcontractors.
5. Understand how such an investee company addresses violations of its supplier code of conduct, and how it works with its suppliers to improve their management systems and remediate affected workers.

**Ghoramara, India**

A villager points at the part of the river which submerged her family's farmland ten years ago on Ghoramara Island in the Sundarbans, some 100km south of Kolkata in the Bay of Bengal. This region faces frequent extreme climate events, such as cyclones, tidal surges and floods, as well as slow-onset sea-level rises caused by climate change. Such events displace people from their homes, leading to increased climate-induced migration. Photo credit: DESHA-KALYAN CHOWDHURY/AFP via Getty Images

Energy transition-related modern slavery risks to business and investors

Until recently, the assessment of business risks in the energy transition has focused mainly on the policy and legal risks arising from climate change adaptation requirements.

These risks include failure to meet carbon-emissions targets and climate-related litigation. Additionally, technology and operational risks related to carbon capture and the introduction of renewable energy into assets and operations have been prominent. However, the energy transition represents a system-wide human rights challenge that could result in serious human rights violations such as modern slavery. These violations should be considered material financial risks as they may lead to both reputational damage and civil and criminal actions against a company.

We can view the risks in terms of two sides of the energy transition — phasing out and phasing in:

1. **The phasing out** of fossil fuel industries can leave workers vulnerable to poor working conditions in stranded assets. Workers may also be stranded by unemployment, with limited skills development and job opportunities in the green economy.
2. **The phasing in** of renewable energy can also create modern slavery cases at multiple stages:
 - a. Extracting and processing raw materials needed to produce renewable energy inputs and infrastructure, including cobalt for batteries and polysilicon for solar panels, have a track record of using forced labour and child labour.
 - b. Acquiring land for hydro, solar and wind power can result in people being forcibly evicted and losing their land, homes, livelihoods and communities. This can leave them more vulnerable to human trafficking and forced labour, as is the case with labour migration following climate events.
 - c. The location of many renewable energy projects are often far from population centres, so workers on construction and operations sites could face the typical modern slavery risks of similar remotely located industries such as agriculture, forestry and extractives.

A stranded workforce is a major concern in the context of the energy transition, particularly in regions where workers rely heavily on jobs in the fossil fuel industry. In some cases, workers in the industry may not have the skills or qualifications required to transition to jobs in the renewable energy sector, leaving them at risk of being stranded without new work and potentially fuelling migration to cities and other regions in search of employment. In addition, while there may be a level of natural rebalancing between fossil fuel and renewable energy employment, job losses and creation will not necessarily occur in the same geographic locations.

The World Bank's report on managing the labour transition out of coal estimates that there are about 4.7 million coal mining jobs globally in an industry that generates significant indirect jobs across multiple economic sectors [62]. The report concludes that closing coal mines will have significant implications for labour markets that reach well beyond mine workers. Pass-through effects on workforces along the coal value chain, and on local economies that rely on mine worker earnings, could impact employment rates and community well-being. In some communities, the report finds, mine closures can create a persistent, destabilising demand shock as workers struggle to transition to new jobs.

Transition-related modern slavery risks for businesses and investors could be similar to the climate-related risks to business and investor discussed above, but they could also manifest in new and different financially material ways:

- **Legal risk:** Companies may face legal consequences such as fines, penalties, lawsuits or import bans for involvement in modern slavery either directly or indirectly through their renewable energy supply chains. These legal risks could lead to operational disruptions, with firms possibly forced to halt production, end supplier relationships or invest in remediation efforts. These disturbances can also increase costs and delays while reducing competitiveness.
- **Reputational risk:**
 - The shift in demand and spending toward low-carbon technologies can reduce jobs in the fossil fuel industry and other carbon-intensive sectors. Companies seen as contributing to lost jobs or economic activity in affected regions may lose their social license to operate, particularly if they are seen to be failing to take adequate steps to address the issue of a stranded workforce.
 - Companies linked to forced labour and modern slavery in their renewable energy supply chains can suffer reputational damage, leading to negative publicity, consumer boycotts and loss of brand value. Allegations can intensify scrutiny and pressure on companies to address the issue. Firms may lose valuable business opportunities, as clients, partners and investors shy away from associating with organisations involved in unethical practices. This can result in reduced financing access, lost contracts, or exclusion from public-procurement processes.
 - **Operational risk:** Companies relying on global supply chains that are exposed to modern slavery risks linked to transition minerals may face disruptions from regulatory or legal action, leading to operational disruptions. Firms may ultimately need to find new suppliers or redesign parts of their supply chains to address instances of forced labour or child labour, which can impact operations. Disruption may also happen if a supplier is suddenly unable to deliver due to legal action or import bans. These issues can result in a shortage of renewable power, which could create further operational risks for companies relying on renewables.

These energy transition-related legal, reputational and operational risks can result in direct financial implications for a company. A company's failure to uphold fundamental labour rights by complying with labour laws and international standards, including the prohibition of forced labour and child labour, can be financially material.

A growing number of countries and regions are considering regulations preventing goods produced with forced labour from entering their markets. Firms with higher risks of forced labour in their renewables supply chains may find themselves shut out from these markets, potentially hurting sales and revenues. In addition, the transition minerals needed for renewable energy inputs often come from a limited number of deposit or extraction locations. The Democratic Republic of Congo (DRC) and China, for instance, currently produce most of the world's cobalt and rare earth elements, respectively [63]. Highly concentrated mineral sources like these increase the potential financial risks from trade restrictions due to human rights and modern slavery issues in the renewables supply chain.

Several case studies that follow illustrate actual or potential links between the energy transition, modern slavery and business or investor risk.

Energy transition-related legal, reputational and operational risks can result in direct financial implications for a company. A company's failure to uphold fundamental labour rights by complying with labour laws and international standards, including the prohibition of forced labour and child labour, can be financially material

92%
OF GLOBAL GDP

Has made Net Zero
Commitments

35k
CHILDREN

Working in the cobalt
mining industry in the DRC

4.7
MILLION

Jobs globally in the coal
mining industry

Case Study:

**Fossil fuel industry
and modern slavery****Potential community
consequences from the
phase down of coal in India**

Coal is critical to India's energy security, particularly as the country experiences rapid population growth and increasing energy demand. According to the International Energy Agency, India is expected to account for the largest share of growth in global energy demand over the next two decades, with coal-based generation currently making up around 69 per cent of the country's total power generation [64]. To meet its coal phase down plans, India will need to initiate projects to boost its renewable energy capacity. Its short-term 2030 goals intend to lead India to an eventual carbon emission reduction and coal phase down over the next 40 years [65].

In the eastern Indian state of Jharkhand, which holds the largest known coal reserves in India, coal is an important employer. The industry provides more than 300,000 direct jobs, with nearly one million people working in its supply chains and service sectors [66]. Jharkhand depends on its coal industry for jobs, pensions, state and local government revenues, social spending, industrial fuel, household fuel, mixed-use infrastructure and sometimes for free electricity and water.

Without effective planning for a just transition, the decline of the coal industry in Jharkhand could have significant consequences. Most renewable capacity is planned for western, southern and northern Indian states which are better for wind and solar power generation [67]. The decline of the coal industry could result in job losses, falling government revenues and the destruction of livelihoods in local municipalities and in the broader region. The unplanned closure of coal mines could lead to villages and towns surrounding mine sites being abandoned. It could also increase vulnerability to modern slavery and human trafficking risks in local communities as workers are pushed to seek new employment and livelihoods [68].

Implications for investors

Businesses that neglect to incorporate the just transition into their strategic decision-making may face substantial risks. Failure to address the social aspects of the transition may result in adverse human rights and wider social impacts, leading to potential risks to business such as damage to reputation and compromised decarbonisation plans.

A company's relationship with its stakeholders is vital to understanding and assessing the long-term outlook of its operating model, reputation, social license to operate and therefore profitability. Companies viewed as contributing to job loss or economic activity in affected regions may lose their social license to operate, particularly if they are seen to be failing to address the issue of a stranded workforce adequately. Social media and global connectivity have strengthened the reach of civil society movements related to climate change and the rights of workers and communities. This has magnified the reputational risks for companies perceived as failing to act in accordance with accepted standards. Without a social license to operate, firms will face challenges in attracting and retaining the talent required to fill new, specialised and technology-centric roles, and in attracting investors that value portfolio companies with empowered employees [69].

The demand for green talent and skills is increasing rapidly, surpassing available supply [70]. This demand extends beyond traditional industries, such as energy, and encompasses diverse sectors such as finance, fashion and technology [71]. This scarcity poses risks to the climate transition but also presents an opportunity for businesses to gain competitive advantage through retraining and reskilling workers as a form of workforce planning, mitigating expected skills shortages.

Investor takeaways:

1. Understand how an investee company has identified potential risks and opportunities to internal and external stakeholders with regards to its decarbonisation plans.
2. Understand how an investee company has engaged and collaborated with its employees, suppliers, customers and community to assess and address the impact of its decarbonisation plans.
3. Identify whether an investee company has assessed how failure to successfully implement a just transition strategy could negatively impact its business; and, if so, whether it has embedded just transition consideration into its corporate strategy.

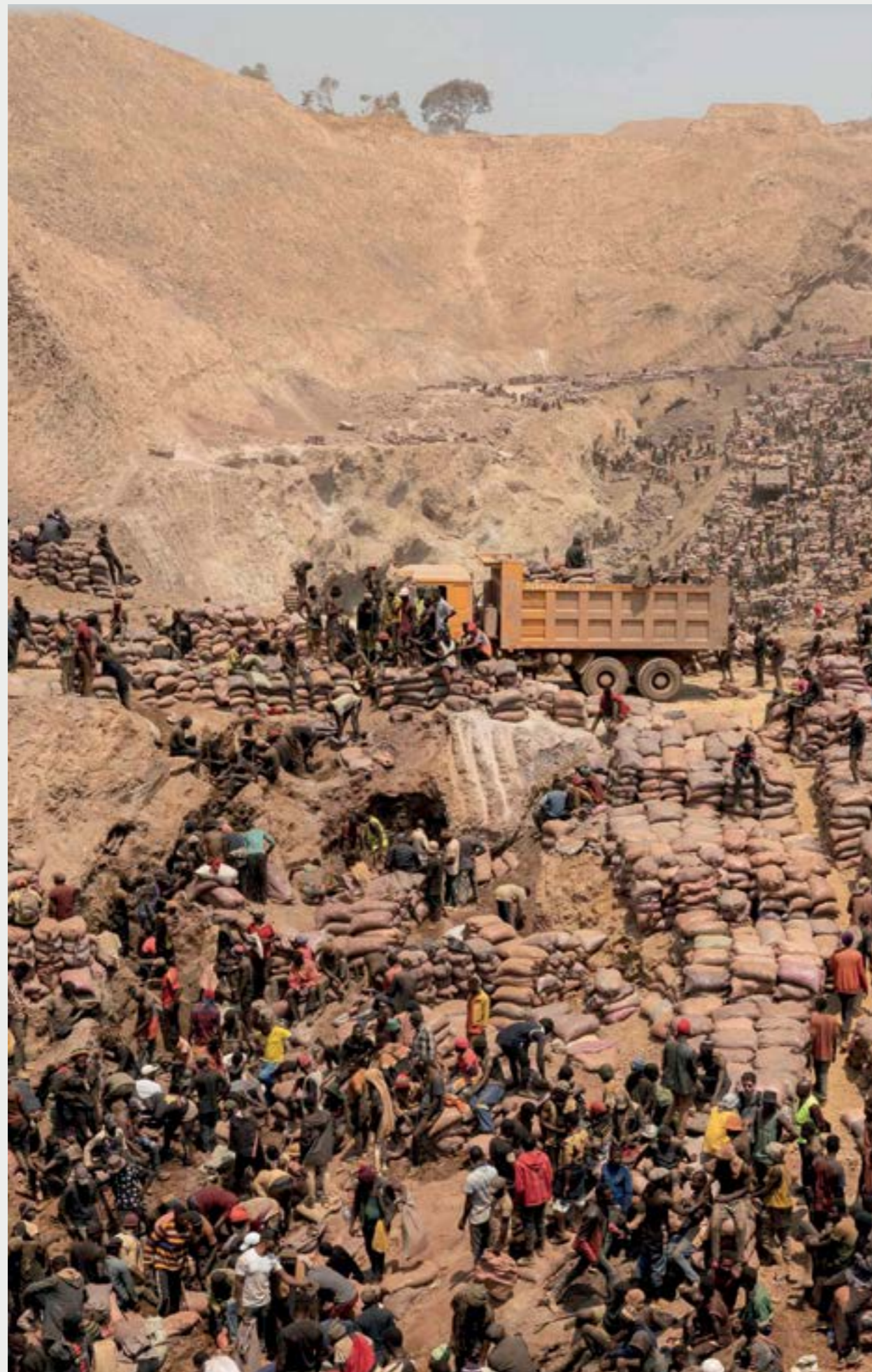
**Dhanbad,
India**

People burn raw coal at an open-cast coal mine in Jharia, on the outskirts of Dhanbad in India's Jharkhand state, on 6 July 2023. Jharkhand holds the largest known coal reserves in the country and directly employs 300,000 people, but there are thousands more working in the industry's supply chain and service sectors. The planned switch to renewable energy will need to be carefully handled to ensure a just transition.
Photo credit: Money Sharma/SFP via Getty Images



**Kolwezi,
Democratic Republic
of Congo (DRC)**

Miners at the Shabara artisanal mine, which employs some 20,000 people in shifts of 5,000 at a time, on the hunt for cobalt, a critical component in rechargeable batteries that power mobile phones and electric vehicles. The DRC produces more than 70 percent of the global supply of cobalt, mainly through its industrial mines, but it also has hundreds of thousands of informal diggers who toil in hazardous conditions. Photo credit: JUNIOR KANNAH/AFP via Getty Images.



Case Study:
**Renewable energy industry
and modern slavery**

**Cobalt extraction for
lithium-ion batteries in
electric vehicles and
other uses**

Cobalt is a key mineral component in lithium-ion batteries used in electric vehicles (EVs) and other electronic devices such as laptops and mobile phones, jet engines and renewable-energy storage. According to the Cobalt Institute, the cobalt market grew by 22 per cent in 2021 and is expected to continue expanding by 13 per cent every year for the next five years [72]. In 2021, EVs became the largest end-use for cobalt and might account for half of cobalt use by 2026.

A significant portion of the world's land-based cobalt reserves are found in the DRC [73]. Seventy per cent of cobalt from the DRC is pulled from large-scale mines (LSM) but up to 30 per cent also comes from artisanal and small-scale mining (ASM), which employs up to 250,000 workers [74].

Serious human rights allegations have been tied to cobalt mining in both ASM and LSM operations [75]. The prevalence of child labour in ASM is well-known and estimates show at least 35,000 children working in the industry [76]. Labour practices and conditions for ASM workers are poor and hazardous, with health and safety standards usually ignored. Mines frequently operate illegally, with tunnels often exceeding the legal depth limit and miners exposed to toxic dust, which leads to hard-metal lung disease. LSM risks include the exposure of miners and communities to high levels of toxic metals, poor health and safety practices on mine sites, forced evictions around sites and abuses linked to security personnel.

Implications for investors

Companies involved in modern slavery either directly or indirectly through their renewable energy supply chains may face legal consequences, including fines, penalties or lawsuits. In 2019, a US class-action lawsuit was filed against five major technology companies, alleging they knowingly benefited from the use of child labour in their cobalt supply chains [77]. Beyond litigation risks, increased regulatory scrutiny can bring more stringent supply chain reporting requirements, audits and inspections. Failure to comply may result in financial penalties, loss of operating permits or other legal actions.

Firms linked to child labour in their renewable energy supply chains can suffer severe reputational harm, leading to negative publicity, consumer boycotts and loss of brand value. In 2016, an Amnesty International report implicated major technology and automotive companies in sourcing cobalt linked to child labour in the DRC [78]. These types of allegations can intensify scrutiny and pressure on companies to address the issue.

Businesses associated with child labour in their supply chains may also lose valuable business opportunities because clients, partners and investors may be unwilling to engage with organisations involved in unethical practices. This reluctance can also reduce access to financing, result in lost contracts, or lead to a firm being excluded from public procurement processes.

Investor takeaways:

1. Identify whether an investee company has a responsible sourcing policy or equivalent for cobalt that is aligned with relevant aspects of the OECD's Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict Affected and High-Risk Areas, and how this policy is implemented [79].
2. Understand how an investee company assesses what proportion of DRC-origin cobalt in its supply chain has a connection to ASM.
3. Identify whether an investee company has a supplier code of conduct that reflects relevant international standards such as the ILO's Declaration on Fundamental Principles and Rights at Work, which covers child labour, and how compliance of suppliers is assessed.

Case Studies: Renewable energy industry and modern slavery

Allegations of forced labour in solar energy supply chains

Global solar photovoltaic (PV) capacity is projected to almost triple from 2022 to 2027, surpassing coal as the largest source of global power by 2050 [80]. Since 2017, 91 per cent of new polysilicon production capacity worldwide has been developed in China, with around 40 to 45 per cent of the polysilicon used in solar panels now coming from the Xinjiang region [81].

In recent years, media and non-governmental organisations have published allegations of forced labour within the global solar supply chain — some of them linked to Xinjiang. Reports allege that about 2.6 million ethnic minorities — the Uyghur people, in particular — are subjected to ‘surplus labour’ programs and face significant coercion, re-education programs and internment [82]. The reports also allege that many workers in these programs are unable to refuse such work or ultimately unable to leave these jobs.

On 21 June 2022, the Uyghur Forced Labor Prevention Act (UFLPA) came into effect in the US, creating a rebuttable presumption that all goods manufactured wholly or in part in Xinjiang are produced with forced labour, and therefore banned from entering the US unless the importer can present clear and convincing evidence to the contrary [83]. In addition to prohibiting imports manufactured in Xinjiang, the UFLPA’s rebuttable presumption also extends to a list of entities identified as companies that participate in ‘poverty alleviation’ and ‘pairing assistance’ programs in the region, or as entities that work with the regional government to recruit, transport or receive alleged forced labour from Xinjiang. In its Enforcement Strategy, the US indicated that the high-priority sectors for enforcement will include silica-based products including polysilicon [84].

Implications for investors

Companies using forced labour in their renewable-energy supply chains may face legal action, including import bans, fines, lawsuits and regulatory penalties, which can harm their operational and financial performance. In November 2022, Reuters reported that more than 1,000 shipments of solar components had been blocked at US ports under enforcement of the UFLPA [85]. In August 2022, ROTH Capital Partners reported that as many as 3 gigawatts (GW) of solar panels have been held up since the UFLPA was enacted; it estimated as many as 12 GW would be prevented from entering the US market by the close of 2022 [86].

Companies facing legal action or import bans may also suffer reputational damage, making it harder to attract investment and hold on to market share. The US is prioritising the addition of more companies to its sanctions list this year for using forced labour in Xinjiang [87]. The EU has similarly proposed draft rules barring products made with forced labour from its market. The proposal covers all products, specifically those made in the EU for domestic consumption and export as well as imported goods, without targeting specific companies or industries [88].

The US has also set a priority of working to persuade like-minded countries in Europe, as well as Japan, Australia, India and others, to pursue US-like forced labour import bans [89]. While import bans targeting specific regions may be perceived by some to be politically motivated, they do create regulatory risk that can impact investee companies [90].

Investor takeaways:

1. Understand how an investee company identifies and manages risks associated with legal and policy developments related to solar energy supply chains.
2. Understand an investee company’s exposure to risks of potential disruptions in the supply chain arising from the use of polysilicon from the Xinjiang region, and how the company manages such risks.
3. Understand how an investee company monitors and mitigates material negative environmental and social externalities that translate to business risks associated with its polysilicon supply chain.

Poor working conditions for local labourers on Mexican wind power project

Since 2015, Electricite de France (EDF), the biggest transnational French energy company and a leading global electricity producer, has sought to build the Gunaa Sicaru wind farm on the land of an indigenous Zapotec community in Oaxaca, Mexico [91]. Multiple lawsuits have been filed against EDF for failing to consult the community effectively about the project. Gunaa Sicaru would have been EDF’s fourth wind farm in the area, and the community was assured by the firm that the project would bring new jobs and investment. Instead, the project has divided the community [92].

A complaint to the UN Special Procedures consisting of independent human rights experts appointed and mandated by the UN Human Rights Council raised



**Oaxaca,
Mexico**

A wind farm in La Ventosa, Oaxaca State, Mexico in 2017. Jobs created by wind farm projects can be temporary, low-paying and male-dominated. Photo credit: Patricia Castellanos/AFP via Getty Images

several labour dimensions [93]. In response, the UN Special Procedures report warned that jobs created by wind farm projects are often temporary, low-paying and may not last beyond the initial construction phase, despite renewable energy developers typically insisting that local renewable projects will bolster local job creation. Moreover, when the jobs created are not secure enough or long-term, local workers may be prevented from registering for social security and other labour benefits. Hiring local women is exceedingly rare and often gender-stigmatizing — cleaning jobs, for example. After construction is completed, there is a risk that most high-quality job opportunities will be reserved for foreign workers, including through in-company transfers [94].

In June 2022, Mexico’s state power utility, Comisión Federal de Electricidad, cancelled the power-supply contract for the wind project as a result of multiple complaints related to stakeholder rights. Gunaa Sicaru was worth €310 million [95].

Implications for investors

Renewable energy projects are essential for addressing climate change and transitioning to a sustainable energy future, but many related jobs are short-term, insecure and poorly paid. Companies should pay more attention to this aspect of their social license.

Moreover, renewable energy projects can negatively impact local communities, particularly if ‘at risk’ communities are left out of decisions that affect their future. The development of large-scale renewable energy projects often requires significant tracts of land, which Indigenous peoples as well as local communities may rely on for their traditional or current livelihoods. Specifically, companies that fail to obtain free, prior and informed consent (FPIC) before starting renewable energy projects on Indigenous land may face legal challenges or regulatory penalties, because they may be violating national laws or international human rights standards. FPIC is a specific

right granted to Indigenous peoples recognised in the UN Declaration on the Rights of Indigenous Peoples, which aligns with their universal right to self-determination. Failure to obtain FPIC can result in fines, project delays or even suspended or cancelled projects.

Failure to obtain proper consent for land use and deliver on promises to create local jobs can lead to protests, blockades or other forms of opposition from affected communities. For businesses, this could mean operational disruptions, delays or higher costs — as well as a hostile environment for project development and strained relationships with local stakeholders. A firm that loses its social license to operate could struggle to secure future projects or partnerships, access financing, or continue or expand operations in affected regions. These risks and impacts can hurt their brand, investor relations — and, ultimately, financial performance.

Investor takeaways:

1. Identify whether an investee company has a community engagement policy that commits to FPIC for both Indigenous peoples and other project-affected communities and that provides for ongoing meaningful consultation across the full lifecycle of the project and understand how this is implemented.
2. Understand how an investee company identifies specific rights and rightsholders that it may be adversely affected by renewable energy projects, and whether this process is systematically incorporated into all project-related decision-making such as when commencing a new project or entering a new country or region.
3. Identify whether an investee company has established and implemented effective grievance mechanisms in which project-affected rightsholders can voice their concerns, and whether commitment to responding to concerns is demonstrated.

TOOLS FOR INVESTORS TO ASSESS CLIMATE-RELATED MODERN SLAVERY RISKS

A. Existing approaches to managing climate risk

This briefing has utilised case studies to showcase and analyse the pathways linking climate change and the energy transition to modern slavery. This has shown the close connections between these forms of environmental and social risk, and highlighted the need to start assessing these risks jointly. This briefing then connected these intersectional environmental and social risks to traditional business or investor risks, illustrating that they can have a financially material impact on investee companies and investment portfolios, representing not just a risk to people but also a risk to business.

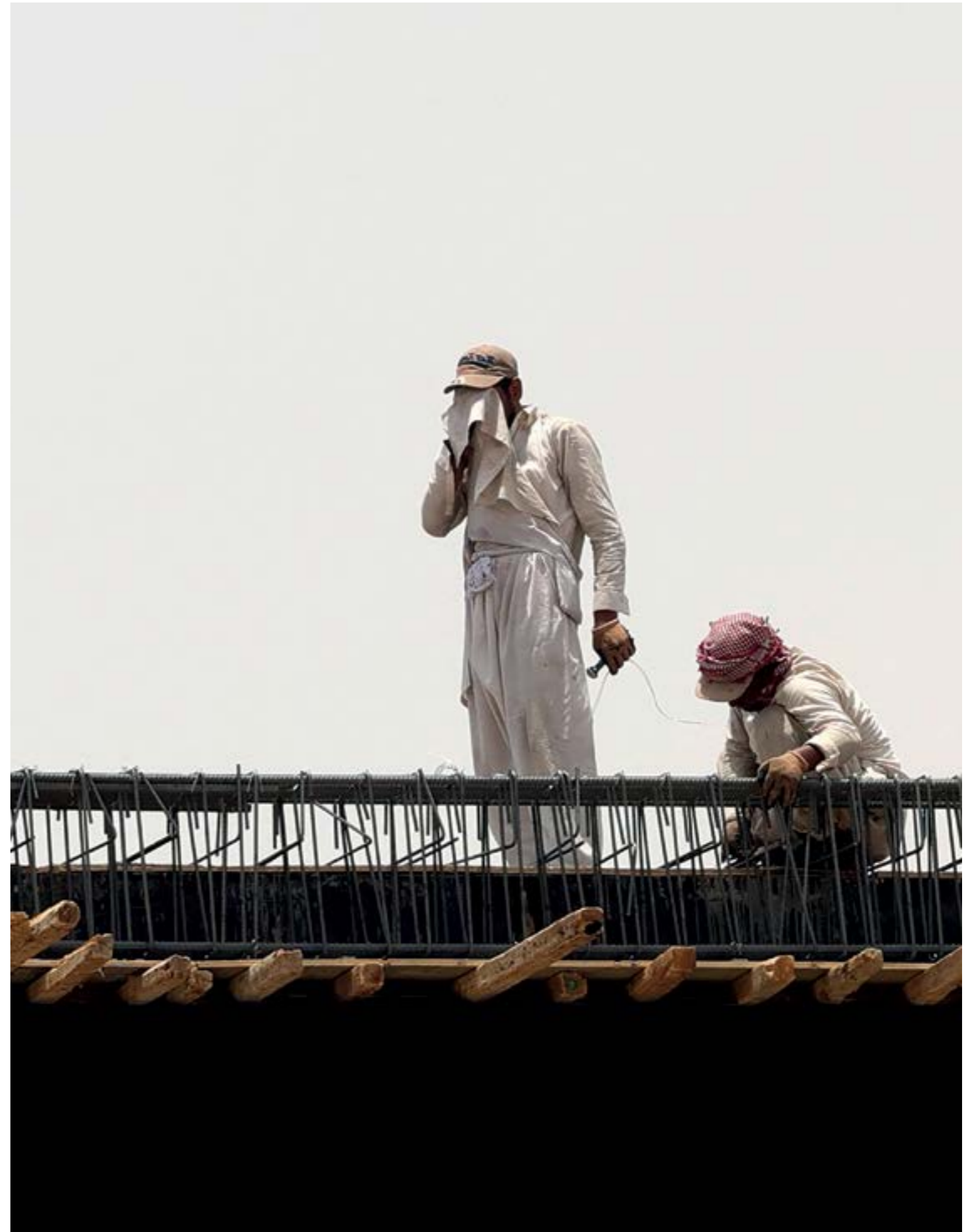
Despite this potential or actual causal chain between climate change, the energy transition, modern slavery and investors, existing frameworks and tools for managing climate risk do not currently comprehensively require firms to assess and disclose climate-related social factors. Instead, they generally focus on climate reporting or integrating the just transition.

Climate risk reporting frameworks include the International Sustainability Standards Board's inaugural standards – IFRS S2 [96], the Task Force on Climate-Related Financial Disclosures (TCFD), Global Reporting Initiative [97], Carbon Disclosure Project [98] and World Benchmarking Alliance's Just Transition Assessment [99]. Available tools include the Grantham Research Institute on Climate Change and the Environment's *Climate change and the just transition: A guide for investor action* (Grantham guide) [100] and ILO's *Just Transition Finance Tool for banking and investing activities* (ILO tool) [101]. The Grantham guide suggests five areas for investor action: investment strategy, corporate engagement, capital allocation, policy advocacy and partnerships, and learning and review. The ILO tool adopts four steps to embed the just transition in investing activities: foundations, governance, implementation and engagement.

We have identified several reporting or management gaps not yet addressed by the Grantham guide and ILO tool and designed two new tools to supplement them. These new tools are intended to assist investors assess and address material climate-related modern slavery risk more fully, strengthening their overall ESG risk management approach.

Riyadh, Saudi Arabia

Foreign labourers work at a construction site amid scorching heat in the Saudi capital. In this part of the world, the high summer temperatures are unbearable even in the shade. Across the globe, rising temperatures are putting more and more workers at risk of harm via heat stress. For employers with their eyes on the bottom line, heat stress usually means lower labour productivity. Photo credit: FAYEZ NURELDINE/AFP via Getty Images



B. Tool 1: Supplementary recommendations to assess climate reporting and management

We have drafted a set of recommendations for companies seeking to disclose how they identify, assess and manage material climate-related modern slavery risks. These recommendations were developed to supplement the TCFD framework in particular, and they are intended to guide companies to expand current reporting to include the risks identified where they may be financially material.

Company disclosures should focus on making progress toward these recommendations, and disclosure should consider the relevance and financial materiality of the recommendations in the context of each company. We recognise companies may not meet all of these recommendations immediately. Nonetheless, investors can use this tool as a means of starting to engage with companies on these issues where relevant. In time, these extra disclosures might also provide the basis for investors updating investment strategies and conducting policy advocacy with combined environmental and social considerations.

Governance Disclose the organisation's governance around climate-related modern slavery risks and opportunities	
Describe the Board's oversight of climate-related modern slavery risks	The Board's oversight should consider taking the following actions: <ul style="list-style-type: none"> • Board approval of modern slavery or human rights policy in alignment with the UN Guiding Principles on Business and Human Rights, ILO Fundamental Principles and Rights at Work, International Bill of Human Rights and OECD Guidelines for Multinational Enterprises • Board training on climate change, the energy transition and modern slavery • Board committee with specific risk management/legal compliance function for modern slavery • Board review of/recommendations for enterprise risk management and due diligence systems • Board review of/recommendations for all climate-related modern slavery metrics and targets
Describe senior management's role in assessing climate-related modern slavery risks	Senior management should consider: <ul style="list-style-type: none"> • Management implementation of modern slavery or human rights policy through policies and procedures • Management/staff training on climate change, the energy transition and modern slavery • Management implementation of enterprise-risk-management and due-diligence systems • Management setting and delivering the climate-related modern slavery metrics and targets • Management establishing a modern slavery working group and assigning lead staff risk management roles
Strategy Disclose the actual and potential impacts of climate-related modern slavery risks and opportunities on the organisation's businesses, strategy and financial planning, where such information is material	
Describe the climate-related modern slavery risks the organisation has identified over the short, medium and long-term	The organisation's strategy should be revised following risk assessment and identification of risk management. This revision should include describing the high-risk climate-related modern slavery issues, such as operations or supply chains in geographies subject to likely physical risk and forced migration
Describe the impact of the climate-related modern slavery risks on the organisation's businesses, strategy and financial planning	The strategy should incorporate risks to business that might be caused by the risks to people from climate change and energy transition: Acute and chronic risks <ul style="list-style-type: none"> • Reduced revenue from decreased production capacity (e.g., heat stress resulting in lower labour productivity; displacement and migration causing supply chain disruptions) • Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism) • Increased compliance costs • Increased operating costs/disruption to operations (e.g., implementing more frequent breaks/shifting work hours to cooler parts of the day to protect employees from heat stress) • Reduced revenue from lower output Policy and Legal <ul style="list-style-type: none"> • Increased operating costs (e.g., increased reporting and compliance cost as a result of mandatory human rights due diligence reporting obligations, increased regulation of existing products such as enhanced conflict minerals regulations globally) • Increased costs and/or reduced demand for products resulting from regulatory fines and judgments • Reduced revenue as a result of trade restrictions from growing forced labour import bans globally • Operational disruptions from legal proceedings/sanctions • Reduced demand for goods linked to human rights issues Technology <ul style="list-style-type: none"> • Costs of retraining and reskilling workforce as a result of transitions to lower-emissions technology • Costs of workforce restructuring (including severance costs, recruitment expenses and training costs for new hires) • Capital investments in workers with specialised skills Market <ul style="list-style-type: none"> • Revenue loss from reduced market access stemming from stronger forced labour import bans/conflict minerals regulations • Increased operating costs from supply chain disruptions • Unexpected shifts in costs of critical minerals as a result of enhanced corporate social regulations • Reduced demand for goods and services due to consumer demand for better labour standards • Increased operating costs as a result of upskilling/retraining workforce Reputation <ul style="list-style-type: none"> • Reduced revenue from decreased demand for goods/services due to shifts in consumer preferences/stigmatization of sector • Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions) • Reduced revenue from negative impacts on workforce management and planning (e.g., employee attraction and retention) • Reduction in capital availability
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C-or-lower scenario	This should include how the organisation is seeking to understand social risks including modern slavery and other salient human rights of climate change and the energy transition under different climate scenarios

Tool 1: Supplementary recommendations to assess climate reporting and management (cont.)

Risk management		
Disclose how the organisation identifies, assesses and manages climate-related modern slavery risks		
Organisational processes	Risks to people	Recommendations for action and disclosure
Describe the organisation's processes for identifying and assessing climate-related modern slavery risks	<p>General</p> <p>Loss of housing, livelihoods and work, and impacted access to food, water and sanitation</p> <p>Forced displacement and forced migration</p> <p>Increased vulnerability to human trafficking in disaster zone or destination location</p> <p>Increased risk of forced labour in disaster zone or destination location</p> <p>Forced labour/child labour in renewables supply chain</p> <p>Case studies</p> <p><i>Philippines typhoon</i> Sudden-onset climate events can cause an increase in child labour</p> <p><i>Cambodian brick kilns</i> Slow-onset climate events can cause an increase in bonded labour</p> <p><i>Bangladesh apparel</i> Climate displacement and forced migration can increase forced labour</p>	<p>The identification processes should consider various matters:</p> <p>Risk mapping – geography:</p> <ul style="list-style-type: none"> What percentage of the company's operations and supply/value chains are in countries or regions that are highly susceptible to sudden or slow-onset climate events? How many people does the company employ in these countries or regions? Does the company employ migrant workers from these countries or regions? In the company's view, what are the greatest climate-related modern slavery risks associated with operating and procurement in these regions? <p>Risk mapping – industry/sector:</p> <ul style="list-style-type: none"> Is the company part of an emissions and labour-intensive sector? How has the company identified potential risks to its internal and external stakeholders when it comes to its climate strategy/decarbonisation plans? <p>Risk mapping – products/services:</p> <ul style="list-style-type: none"> Has the company identified which of its suppliers carry the highest climate-related modern slavery risks? How does the company assess potential climate-related modern slavery risks across its supply/value chains and operations? Has the company identified: <ul style="list-style-type: none"> Which products and services carry the greatest climate-related modern slavery risks? The key modern slavery risks associated with these products/services? (e.g., cobalt from the DRC is associated with allegations of child labour, and polysilicon from China is associated with allegations of forced labour) <p>Risk mapping – legal/regulatory:</p> <ul style="list-style-type: none"> Has the company identified and assessed regulatory risks for its own operations and supply/value chains? (e.g., labour laws, mandatory human rights due diligence, risk of import bans, risk of litigation)
Describe the organisation's processes for managing climate-related modern slavery risks	<p><i>India coal</i> Net zero strategies need to account for jobs lost both in coal sector and jobs that support the sector</p> <p><i>China solar</i> Forced labour in renewables supply chain can slow the energy transition</p> <p><i>DRC cobalt</i> Child labour in renewables supply chain can slow the energy transition</p> <p><i>Mexico wind</i> Renewable energy projects need to create decent work opportunities</p>	<p>The management processes should consider a range of issues:</p> <p>Policies and procedures:</p> <ul style="list-style-type: none"> What policies does the company have in place to mitigate climate-related modern slavery considerations? (e.g., zero recruitment fee, migrant worker policy, worker health and safety policies due to changing work conditions, ban from sourcing from high-risk areas, worker retraining, promotion of collective bargaining and freedom of association) What policies does the company have in place to ensure a just transition for its employees who will be most impacted by its climate strategy/decarbonisation plans? (e.g., reskilling/training existing employees to move toward less carbon-intensive business practices) What policies does the company have in place to ensure that current or future renewable energy projects are being carried out with defined human rights standards and in compliance with regulations? What policies does the company have in place to ensure that people employed in its direct operations and supply/value chains are paid a living wage? <p>Risk monitoring:</p> <ul style="list-style-type: none"> How does the company monitor the extent to which its operations and supply/value chains are susceptible to climate events/changing climate-related work conditions? How frequently does the company review this information? How does the company monitor the human rights performance of its supply/value chain (e.g., self-assessments, audits, third-party data input)? How frequently does the company review this information? Does the company regularly perform site visits/audits? Are these site visits scheduled or unscheduled? Are these audits independent? Do audits include off-site worker interviews, broader worker consultation and assessment of worker debt/contract terms? How does the company monitor the extent to which its employees will be impacted by its climate strategy/decarbonisation plans? How does the company monitor the extent to which communities and regions that depend on its emissions-intensive business lines, or in areas heavily impacted by physical climate risks, will be impacted by its climate strategy/decarbonisation plans? How does the company monitor exposure of its business operations and supply/value chains to regulatory and litigation risks in relation to labour and human rights laws? Does the company have a grievance mechanism and remediation framework? How is it designed to receive and fix climate-related modern slavery complaints?
Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management		<p>The integration of processes should consider the following:</p> <ul style="list-style-type: none"> Are climate-related modern slavery risks integrated into the company's enterprise-risk-management system? Are climate-related modern slavery risks integrated into the company's net zero strategy? <p>Due diligence: has the company started to put in place a comprehensive due-diligence system in line with the UNGPs:</p> <ol style="list-style-type: none"> Identifying and assessing actual or potential adverse human rights impacts Integrating findings from impact assessments across relevant company processes Tracking the effectiveness of measures and processes Communicating on how impacts are being addressed?

Tool 1: Supplementary recommendations to assess climate reporting and management (cont.)**Metrics and targets**

Disclose the metrics and targets used to assess and manage relevant climate-related modern slavery risks and opportunities where such information is material

Disclose the metrics used by the organisation to assess climate-related modern slavery risks in line with its strategy and risk management process

Key metrics to assess climate-related modern slavery risks might include:

- Percentage of operations and supply chains in high-risk climate event geographies/ fossil fuel industry
- Number of migrant workers employed from climate event geographies
- Percentage of operations and supply chains in fossil fuel industry
- Number of workers employed in fossil fuel industry
- Percentage of renewables projects requiring community resettlement
- Number of community members employed in renewables projects
- Percentage of products with high modern slavery risk
- Relevant human rights disclosure, due diligence, import ban or related law
- Relevant policies and procedures
- Percentage of migrant workers from climate event geographies that have paid recruitment fee or have employment-related debt; have lawful employment contract and received training on labour rights and working conditions
- Percentage of workers in fossil fuel industry that have been redeployed or received skills training for new employment
- Percentage of community members that have received livelihoods training for resettlement
- Number of audits/visits conducted
- Number of compliance reports/statements submitted/published
- Number of complaints received, or cases found, and type of remedy and if it was satisfactory

Describe the targets used by the organisation to manage climate-related modern slavery risks and performance against targets

Key targets to manage climate change-related modern risks might include:

- 100 per cent operations and supply chain risk assessment
- Zero recruitment fees or employment-related debt
- Zero high-risk supplier products
- 100 per cent contracts and/or training
- 100 per cent reports/statements submitted/published
- Zero complaints or cases, or 100 per cent satisfactory remedy if made or found

C. Tool 2: Investor stewardship guidance

This set of recommendations is designed to provide general assistance to investors looking to incorporate material climate-related modern slavery risks into their corporate engagements. To ensure meaningful assessment and dialogue, the relevant recommendations should be extracted and adapted to the current circumstances of the specific investee company under review. Stewardship should focus on continued progress toward these recommendations and should consider the relevance and financial materiality of these recommendations in the context of each specific investee company.

Governance

1. Companies should have public policies and/or commitments addressing the management and mitigation of material climate-related modern slavery risks across their operations and supply chain.
2. The Board should have ultimate responsibility and oversight of these policies, and sufficient resources should be dedicated to ensuring compliance throughout the company.
3. Companies should establish regular reporting and communication channels to inform investors and stakeholders about what steps the Board and senior management are taking through policies and procedures to align the business with the goal of reducing material climate-related modern slavery risks.

Risk identification and management

4. Material climate-related modern slavery risks vary by geography and sector, and companies should be able to articulate that they understand the challenge of identifying these risks and their nuances in accordance with their business operations.
5. Companies should also be able to explain the frameworks, techniques and processes that they use to identify these risks, ranging from the loss of livelihoods, forced displacement, forced migration, forced labour, child labour, human trafficking, debt bondage, changing work conditions and a stranded workforce.

6. Companies should disclose how risk identification is conducted, whether through desktop research or on the ground audits.
7. Companies should develop and maintain a risk register to track identified risks, implement mitigation measures, and regularly review and update their risk assessments.
8. Companies should adopt a proactive approach to managing material climate-related modern slavery risks, such as by conducting scenario analysis and stress testing to assess potential risks under various climate and socio-economic conditions.

Strategy

9. Companies should articulate realistic solutions to mitigate and prevent material climate-related modern slavery risks across its operations and supply chains. This may include integrating material climate-related modern slavery risks into the company's net zero strategies or the company's enterprise risk management system. Leading companies tailor their plans based on sector specific risks, addressing the socio-economic challenges that increase climate-related modern slavery risks, rather than relying on a one-size fits all model.

Targets

10. Companies should set clear, measurable and time-bound targets to reduce material climate-related modern slavery risks in their operations and supply chains.
11. Companies should be able to articulate to what extent a company's actions have reduced material climate-related modern slavery risks, and how the Board and senior management are measuring the progress being made. They should describe what procedures are in place to ensure follow-up actions are implemented and monitored. For many companies, reducing material climate-related modern slavery risks will be a continuous process. The best companies will be able to evaluate progress at each step and make changes to continually improve their performance against each of its identified criteria.

CONCLUSION

As the case studies illustrate, to respond successfully to the risks to people and business inherent in climate change and the energy transition, investors can consider the impact of a company's climate strategies on all stakeholders.

For long-term investors, how well companies navigate the impacts of climate events and the shift to a low-carbon economy is a critical factor in a company's long-term profitability and can have a direct impact on investment outcomes. Stakeholders are increasingly demanding greater accountability from companies and investors, and posing questions about various social issues linked to business performance.

Investors have traditionally conducted environmental and social risk assessments in silos, which has resulted in climate-related human rights risks and impacts being inadequately accounted

for. This gap can be addressed to enhance risk assessments. Investors can do so by integrating climate-related human rights risks into their overall risk assessments.

By effectively managing financially material climate-related human rights risks, investors can identify material value drivers and fulfil their fiduciary duties. Those that fail to engage with climate-related human rights impacts in investment portfolios may be exposed to risks arising from global trends in regulation, litigation and evolving social expectations.



Attepeu, Laos

Residents move to safer ground after a hydroelectric dam collapsed in 2018, causing flash floods that engulfed seven local villages and swept away thousands of homes. More than 6,600 people were stranded. But it doesn't just take a disaster to displace people: they can be forcibly evicted when land is acquired for renewable energy schemes, such as hydro. This, in turn, can leave them more vulnerable to human trafficking. Photo credit: Jes Aznar/Getty Images

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Cover image:

*K'elafo, Ethiopia,
January 2023.*

Ethiopia, along with Somalia and Kenya, has sustained its worst drought in the last four decades due to failed rainy seasons. The UN estimates that drought has led to 12 million Ethiopians experiencing acute food insecurity. Coupled with an ongoing conflict in the north, in Tigray, risks of exploitation have risen. Photo credit: Eduardo Soteras/AFP via Getty Images.