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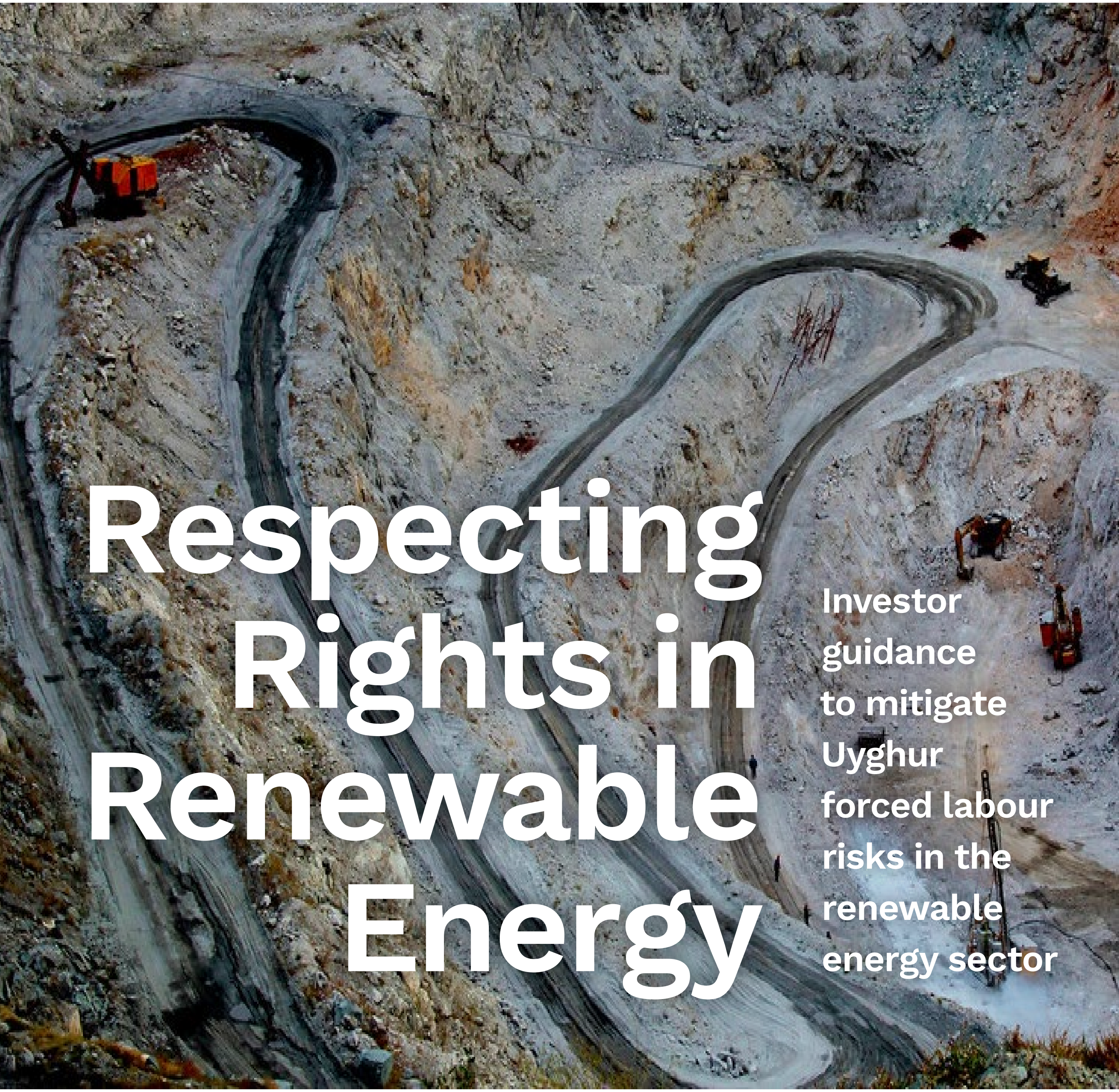
Respecting Rights in Renewable Energy

Investor guidance to mitigate Uyghur forced labour risks in the renewable energy sector



Rare earth mine in the Uyghur Region. (Peter Chou Kee Liu / Flickr)

anti-slavery

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INVESTOR ALLIANCE FOR HUMAN RIGHTS
AN INITIATIVE OF ICCR

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The views expressed in this guidance are those of the authors, and not necessarily of the Modern Slavery and Human Rights Policy and Evidence Centre, the Arts and Humanities Research Council, or any other individual or organisation which contributed to the guidance.

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1. Introduction

The world is facing a climate emergency. Global emissions will have to be drastically reduced to reach net zero by 2050 in line with the 1.5˚C Paris Agreement goal.[1]

Recently, the Intergovernmental Panel on Climate Change (IPCC) declared that the solar and electric vehicle (EV) sectors play a vital role in the urgent transition away from fossil fuels. The International Energy Agency (IEA) identifies EV as a key technology for decarbonising road transport; a sector that accounts for around one sixth of global emissions. The IEA also calculates that solar generation capacity will have to triple by 2030 to reach net-zero emissions by 2050.

The need for a swift transition to green energy has rapidly accelerated the growth of the solar and EV industries over the past decade.

This industrial boom is heavily reliant on the Xinjiang Uyghur Autonomous Region (Uyghur Region), in northwest China, where critical inputs for the solar and EV battery supply chains are either quarried, processed, refined, manufactured and/or exported. An estimated 35% of the world's solar-grade polysilicon—used in almost all solar panels—is produced in the Region, and a growing share of the world's lithium, nickel and graphite—used to manufacture the EV industry's lithium-ion batteries—is processed there. However, this industrial activity is propped up by an entrenched system of state-imposed forced labour.

State-imposed forced labour in the Uyghur Region

The Chinese Government is currently subjecting Uyghurs and other Turkic and Muslim-majority peoples living in the Uyghur Region to an unprecedented system of state-imposed forced labour.[2] Its labour programmes range from detainee labour within internment camps and prisons, to mass involuntary labour transfers across the Region and to different areas of China. These systemic forced labour programmes expose at least 17 global industries to the risk of profiteering from Uyghur forced labour.[3]

State-imposed forced labour is part of the Chinese Government's broader campaign to suppress the rights of marginalised groups through mass surveillance, cultural repression, and arbitrary detention, in which detainees face routine torture and systemic sexual violence. In 2022, the UN Special Rapporteur on Contemporary Forms of Slavery found that "some instances [of Uyghur forced labour] may amount to enslavement as a crime against humanity". The UN High Commissioner for Human Rights concluded that the violations in the Region "may constitute international crimes, in particular crimes against humanity".

In order to facilitate a widespread system of forced labour, the Chinese Government has made it impossible for investigators, auditors and other individuals to conduct due diligence on the ground in the Region. As such, there are no valid means for companies or investors to verify that any workplace in the Uyghur Region is free from forced labour. They are likewise unable to prevent, mitigate or remedy the use of forced labour in these workplaces in line with the principles of human rights due diligence.

Due to the pervasiveness of forced labour in the Region, and the inability to conduct credible due diligence, all products made in the Uyghur Region or by state-transferred Uyghur labourers working in other parts of China should be presumed to be made with forced labour.

Exposure to state-imposed forced labour presents distinct risks for investors. It therefore necessitates unique approaches to due diligence, engagement and divestment processes.

1. Specifically, the Paris Agreement goal is "to limit the temperature increase to 1.5°C above pre-industrial levels".

2. In the majority of this document, we use the term 'Uyghur people' to refer to this group, while noting that the persecution extends beyond it.

3. Specific examples of Uyghur forced labour have been documented by research organisations, including the Center for Strategic and International Studies, the Worker Rights Consortium, the Helena Kennedy Centre for International Justice at Sheffield Hallam University, and the Australian Strategic Policy Institute, and investigative journalists from The Wall Street Journal, the BBC Associated Press, The New York Times, The Globe and Mail, ABC Australia, Radio Free Asia, Reuters, the Outlaw Ocean project and other outlets. These cases affect large numbers of Uyghurs in the Uyghur Region and wider China across a huge range of industries: apparel and textile, solar, automotive, electronics, hair products, seafood, and tomato processing, among others. Uyghur survivor testimonies are also available in evidence provided to the Independent Uyghur Tribunal. Case studies of Uyghur forced labour are included here through the Coalition to End Forced Labour in the Uyghur Region.

These approaches must differ from how investors approach forced labour in most other contexts. However, our research found that many investors lack a fundamental understanding of a) how state-imposed forced labour programmes operate in the Region and b) how this knowledge should inform their approaches.

Critically, the Chinese state and some Chinese businesses have a shared interest in the continuation of Uyghur forced labour. This significantly reduces investors' leverage and thus the credibility of traditional tools like engagement. In such cases, divestment, disengagement and collective engagement are the only responsible approaches to risk management.

This guidance provides investors with a concrete model for effectively identifying and addressing exposure to Uyghur forced labour. It underscores the need to divest from the Region (see Section 4) and diversify supply chains (see Sections 5 and 8).

Moving towards a just transition

The processing and manufacture of solar inputs in the Uyghur Region is highly dependent on government-subsidised coal. The migration of green technology manufacturing to an epicentre of global coal mining puts the solar industry at risk of greenwashing and delaying the urgent move towards net zero.

The just transition framework calls on global actors to identify and mitigate harms against workers, communities and local environments on the road to net zero, ensuring work opportunities are decent (see the International Labour Organization's Frequently Asked Questions on just transition). Incorporating a robust social dimension into decarbonisation efforts will be essential if we are to achieve climate goals while safeguarding economic growth, political stability and popular support for further action.

Investors are key stakeholders in economic stewardship. They have a critical role to play in ensuring that the transition to renewables does not contribute to further human rights violations against the Uyghur people and other marginalised populations. Investors' role in the transition to an equitable, low-carbon society is laid out in key responsible business standards, namely the UN Guiding Principles on Business and Human Rights (UNGPs), the UN Global Compact (UNGC), the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct and other OECD guidelines. These non-binding standards are now being reinforced by emerging legal frameworks in the USA, Europe and Asia. Urgent and comprehensive alignment with these principles is therefore a legal imperative.

Objectives of The Guidance

This guidance provides investors with tools to:

- identify businesses linked to human rights violations against the Uyghur people.
- exclude these businesses from their green energy portfolios.
- prioritise investments that champion sustainability, innovation and supply chain resilience.

Foremostly, this guidance includes a detailed decision tree that operationalises guidance from the UNGPs, the UNGC and the OECD. The decision tree helps investors identify a best practice approach to managing risk in the context of Uyghur forced labour in green technology.

To develop this resource, our researchers interviewed and held workshops with investors from across the globe to learn more about how they tackle Uyghur forced labour in their solar and EV holdings, and the internal and systemic shifts needed to make change possible. Equipped with this insight into investors' successes, challenges and misunderstandings, we have developed targeted guidance tailored to the specific needs of investors seeking to mitigate the risk of Uyghur forced labour in their portfolios.

This guidance focuses on Uyghur forced labour in solar and EV holdings, so will be particularly relevant for investors with direct or indirect ties to the Uyghur Region. Nevertheless, all readers will find useful information on how to leverage investment to contribute to climate and social justice.

To support investors and industries to make the changes necessary to shift the landscape of green energy production, a coordinated and comprehensive response from governments and international institutions will be critical. As such, we have also published a policy brief on Uyghur forced labour in renewables and green technologies.

Structure of the guidance

The first section of this guidance summarises findings from the consultations and workshop with investors. Sections 3 and 4 provide background on the situation in the Uyghur Region and make the case for investor engagement. Section 5 outlines the recommended approach to addressing exposure to Uyghur forced labour in green technology holdings using a practical decision tree. The corresponding guidance spans Sections 6, 7 and 8 and includes practical tools for initiating divestment, conducting due diligence, engaging with companies and leveraging collective action. The final section considers current and emerging alternatives to green technologies tainted by egregious human rights violations.

Methodology

This project aims to help investors better understand and address the risk of exposure to state-imposed forced labour in their green technology holdings, specifically in relation to the Chinese Government's system of forced labour of the Uyghur people.

For the purposes of this project, we chose to focus our research on solar panel and EV battery manufacturing. The former is an industry with well-documented exposure to Uyghur forced labour and the latter an emerging area of concern. While this project focuses on the production of solar panels and EV batteries, the minerals discussed (primarily polysilicon and lithium) are relevant to many other industries and green technologies (including electric battery storage). The tools provided could therefore be adapted to address state-imposed forced labour in many other supply chains.

We embarked on this project with two primary objectives:

- To research and publish guidance on how investors can understand and address the risk of state-imposed forced labour of Uyghurs and other Turkic and Muslim-majority peoples in green technology holdings;
- To build support within the UK Government for approaches to address Uyghur forced labour in green technology supply chains.

The guidance in this report was informed by detailed consultations with investors between March and September 2023. Over this period, the research team conducted one-on-one interviews and held a group workshop with investment professionals to gather information on how they address state-imposed forced labour in their green energy portfolios. In total, the research team interviewed 20 investors operating in the UK, the USA, Australia, Canada and Europe. They were affiliated with a broad range of investors, from pension funds to global fund managers. The investors we engaged with ranged from those directly invested in Chinese green technology companies to those investing further along the supply chain. Generally, these investors were already considered progressive on human rights issues.

All data collected during the consultations and the workshop was anonymised. Comments made during the investor consultations have been included throughout this report to highlight the concerns of professionals in the field.

This guidance was developed to close the knowledge and practice gaps identified by the investors in these consultations. It compiles information and guidance on approaches from a range of sources. Much of the information in the guidance is drawn from the authors' own expertise in the fields of Uyghur forced labour, responsible business conduct to address forced labour, and responsible investment. We also consulted other experts and other research, in particular, through discussions with an advisory committee. This committee included investors, industry experts, and representatives of trade unions and Uyghur advocacy groups. We also sought advice from experts in areas such as the UNGPs and due diligence from practitioners who have undertaken risk assessments of Uyghur forced labour.

This guidance is heavily informed by research undertaken at Sheffield Hallam University (SHU) as part of this project. Using publicly available data, including corporate disclosures and shipping records, SHU researchers mapped how solar supply chains have shifted since the publication of their previous report in 2021 and the passing of the Uyghur Forced Labor Prevention Act (UFLPA) in the USA. Their research revealed that at least three of the world's largest solar manufacturers continue to source inputs likely made with Uyghur forced labour. The guidance also draws on data from SHU's 2022 Driving Force report which exposed the automotive and EV industry's links to the Uyghur Region.

How to use this Guidance

This guidance provides investors with the tools to transform a theoretical understanding into concrete action on forced labour risks in EV and solar supply chains. These practical resources can be found in Sections 5 to 8.

Although the guidance focuses specifically on lithium as the critical mineral within EV batteries, the tools provided can be adapted to explore a fund's exposure to other green technology inputs, if deemed more relevant. This could include other minerals used in the EV manufacturing process, such as graphite or nickel, given the high volumes mined and processed in the Region.

This guidance aims to summarise the challenges, useful information and solutions identified. Throughout, we have highlighted additional resources that provide more detailed information to complement investors' understanding of, and response to, the complex crisis of Uyghur forced labour in green technology holdings.

Who this Guidance is for

The tools provided in this resource are most relevant to public equity holdings and active ownership. Nevertheless, this guidance will also apply to other types of investments, including private equity and commodities. In some cases, we have provided information that may be relevant to passive investments, like exchange-traded funds (ETFs) and bonds (corporate, government and/or sovereign).

As part of this project, our research team has published three supplementary briefings: SHU's updated exposure mapping of solar supply chains; a policy brief for the attention of the UK government; and a summary of the findings of this research project for the broader academic and practitioner community. This guidance incorporates the essential information from these additional resources and can be read as a standalone document. Nevertheless, we encourage readers who want to deepen their understanding of this issue on a micro and macro level to read the accompanying briefings.

Image of lithium

2. Investor Consultations: Findings

Over the course of our consultations, the research team developed an in-depth understanding of how the investment community is addressing the risk of Uyghur forced labour in green technology portfolios and the challenges investors face when seeking to invest responsibly.

To provide readers with a clear picture of the status quo, this section consolidates feedback from our consultations on the challenges and concerns investors face when approaching this issue, as well as successes they have had.

The remainder of the guidance responds to these findings. It seeks to equip investors with vital technical knowledge (Sections 3 to 5) and practical and innovative solutions (Sections 5 to 9) to address the internal and systemic challenges identified in the consultations and presented below.

Investors' current knowledge and approaches

UNDERSTANDING OF SUPPLY CHAIN EXPOSURE

Our consultations found that investors have a comprehensive understanding of how exposure to Uyghur forced labour impacts various tiers of the solar supply chain, but a less granular understanding of the risk in the EV battery supply chain. This discrepancy is likely because research on the automotive industry became publicly available more recently and EV value chains are relatively more complex. In general, investors have focused on bolstering 'green' investments in line with internal and external climate-related commitments. In turn, social issues have been left somewhat disregarded in their analysis of the green technology industry.

To build internal buy-in and support engagement with investee companies, investors noted that more information is needed on specific supply chain exposure.[4]

SILOING OF ENVIRONMENTAL/CLIMATE COMMITMENTS AND SOCIAL IMPACTS

Although investors were theoretically aware of the climate impacts of manufacturing in the Uyghur Region, few had factored in these harms when assessing the risks associated with their investments. This is further underlined by the fact that, throughout the consultations, investors noted that there was often a lack of communication between social and environmental analysts on emerging risks within their portfolios. This siloed approach to environmental, social and governance (ESG) management prevents investors from capturing the full range of harms associated with exposure to the Uyghur Region, including the elevated carbon footprints of products made in the Region.

Some investors noted that if more carbon emissions information was provided on production in the Uyghur Region, then this could influence internal investment decisions. See Section 3.4

SUCCESSFUL ENGAGEMENT

Investors reported that the success of engagement with green technology companies depends on the size and location of the investment firm, as well as the size of their investment with a particular company. Several investors shared that companies at higher tiers of the supply chain (i.e. solar panel installers) have responded positively to engagement, feeding back concerns to suppliers and, in some cases, cutting ties with at-risk suppliers altogether. Concrete measures of this kind were usually taken in response to significant, documented risks or concurrent engagement by multiple investors.

Investors asked for guidance on how to increase the impact of engagement, and examples of successful and potential collective engagement approaches. See Section 7.3

4. Investors can refer to SHU's Over-Exposed report for supply chain mapping of key global solar companies, and SHU's Driving Force batteries' page for supply chain mapping of exposure to Uyghur forced labour in the EV/automobile industry.

BARRIERS TO ENGAGEMENT

The broad consensus, however, from our participants was that engagement with green technology companies on their exposure to the Uyghur Region is a frustrating and often fruitless process. Engagement with companies operating in China has become increasingly difficult since the Chinese Government passed new anti-espionage laws. The latest revision of these laws bans companies from sharing "documents, data, materials, and items related to national security and interests". When attempting to engage with Chinese companies, some investors thus feel compelled to implement specific measures to protect their staff and holdings. Such measures include changing the terminology and personnel they use, for example, not using Chinese or Hong Kong nationals to conduct engagement.

These challenges lead many investors to focus on engaging with non-Chinese companies to trace their supply chains and shift the needle on action. Despite some positive outcomes, participants told us that companies based outside China have a track record of blaming due diligence failures on the opacity of China-based supply chains. They explained that these non-Chinese companies tend to require a high burden of proof to trigger action. Furthermore, investors noted that buyers in the solar supply chain appear willing to accept information provided by suppliers with scant due diligence or verification.

Accordingly, many investors asked for clear guidance on how they should interpret common responses from companies on how they address exposure to the Uyghur Region. See *Section 7.2*

UNDERSTANDING OF THE NEED TO DIVEST

Despite most investors acknowledging that Uyghur-Region-based/Chinese companies frequently refuse to cooperate openly with engagement efforts, the majority are still working on mapping risk and attempting cautious engagement. Only a few of the investment firms we approached had committed to divesting from Uyghur Region-based holdings and engaging with other affected companies to influence supply chain changes outside the Uyghur Region.

Many investors stated that it was critical for them to remain invested in green energy industries. This was the case even if it meant maintaining investments in the Uyghur Region and attempting to use their leverage to improve company conduct, despite the challenges of engagement. Divestment was often referred to as a legitimate "last resort". Yet it was unclear from our consultations what factors would trigger strategic divestment, and on what timeline.

Linked to this, some investors we interviewed had a limited understanding of how the distinctive context of state-imposed forced labour in the Uyghur Region—i.e. the inability to conduct human rights due diligence on the ground and the impossibility of direct remediation—necessitates alternative approaches to risk management. This limited understanding exposed a lack of technical knowledge on the distinction between privately-imposed and state-imposed forced labour, and therefore on the scale, scope and irremediability of the harm. This knowledge gap leaves investors ill-equipped to take critical business decisions in response to Uyghur forced labour, as described in further detail below.

Investors asked for significantly more guidance on when and why divestment would be necessary, and how to apply relevant business and human rights standards—namely the UNGPs and OECD Guidelines—to guide divestment decisions. See *Section 5*

Broader systemic challenges identified in our consultations

WEAK RECOGNITION OF THE RISK BY DATA PROVIDERS

The investors we consulted noted their frustration with ESG data providers' failure to flag companies with exposure to the Uyghur Region. According to investors, this omission is largely due to a methodology that tracks controversy exposure by analysing media reports. This approach fails to incorporate information from other reporting (such as academic reports) and perspectives from affected stakeholders and their representatives.

While this approach has flagged human rights violations in very isolated cases, the vast majority are missed. In 2022, for instance, an ESG report linked Volkswagen to human rights violations in the Uyghur Region. This resulted in some asset managers removing VW stocks from Article 9 ESG fund indexes and some institutional investors divesting from VW in their sustainable investment portfolios. However, other allegedly exposed companies have not been flagged in ESG controversy data. Investors' overreliance on incomplete datasets is therefore stalling similar divestment decisions and raises concerns about their ability to guide responsible investment. While most investors were aware that there are gaps in the information obtained from data providers, and highly frustrated by these limitations, our consultations revealed that their approaches to human rights due diligence and risk management remain overly reliant on these providers' ESG rankings.

Our research determined that, in the short term, investors require tools to conduct independent desk-based due diligence (see Section 6). In the long term, they need recommendations on how to engage with data providers to improve their risk analysis model. This also speaks to the need for more government regulation of ESG data providers.

LACK OF WIDELY AVAILABLE, COST-EFFECTIVE ALTERNATIVES

China's dominance of the global market for processing and manufacturing inputs for solar panels and lithium-ion batteries has reduced the competitiveness of potential alternative sources of these inputs over the course of the past decade. Investors' engagement with investee companies on alternative supply chains has often been met with scepticism from companies that are already invested in existing technologies and business relationships that guarantee low costs and steady profit margins. Investors, especially low-risk investors such as pension funds, stated that they were unlikely to direct funds towards alternative technologies or innovative green energy solutions that they view as less attractive investment opportunities because they might not offer the same level of efficiency, affordability or guaranteed return on investment.

Investment into alternatives was deemed more suitable for start-ups, niche social enterprises or private companies whose access to capital relies on private development finance corporations and venture capitalists. Here, it should be noted that human rights experts have raised concerns about venture capitalist firms' failure to conduct human rights due diligence to gauge their investments' adverse impacts.

Despite a clear need for innovation and supply chain diversification in these industries, investors told us that China's dominance of green technology supply chains has bred fatalism within the investor ecosystem. The research team noted that investor inertia is further fuelled by Chinese companies' inability to enact their own decisions about their labour or business practices due to pressure from the Chinese Government, including through its anti-sanction and anti-espionage laws.

As stewards of capital, investors have an opportunity to shift this landscape. They can do this by encouraging co-operation between industry innovators to redirect their own investment towards more socially and environmentally sustainable supply chains (see Section 9 on Alternatives). This fatalism within the industry must also be addressed by coordinated global action by governments and other stakeholders to support these industries to source alternative inputs that meet high environmental and social standards.

THE REGULATORY ENVIRONMENT

Investors noted that human rights standards are absent from many countries' green energy-related regulations. This absence means that company and government policies indirectly encourage investors and companies to bolster their renewable portfolios regardless of social concerns in the green energy sector.[5] This goes against the principles of a just transition, which call for an integrated approach to social and environmental justice on the road to net zero.

Environmental regulation also regularly fails to capture climate harms associated with manufacturing in the Uyghur Region. This is because it does not often explicitly require emissions calculations to consider the carbon footprint of manufacturing green energy technologies, nor does it require carbon footprints to be assessed in lower tiers of production.

This situation is exacerbated by modern slavery regulations around the world. On the whole, with the notable exception of the Uyghur Forced Labor Prevention Act (UFLPA), these regulations fail to compel companies to remove products tainted with forced labour from their supply chains. They also fail to ensure that corporate actors respect fundamental labour rights, like freedom of association, which create an enabling environment for decent work.

The UFLPA has allowed investors to approach US-based companies about human rights abuses from a business (i.e. legal compliance) standpoint. However, investors have more difficulty approaching this issue with companies operating in jurisdictions without import bans or comparable legislation. For such companies, there is little legal incentive to undertake the labour-intensive work of tracing their supply chains. Without legislation, they must rely on ethical or material incentives, such as reputational risk.

Our research participants were clear that solving these regulatory challenges requires coordinated action from financial, political and environmental actors. Accordingly, Section 8 of this guidance sets out multiple ways investors can collectively engage with other stakeholders to shift the needle on action.

5. This includes both internal quotas for 'sustainable' investments (which fail to consider social impacts) and domestic regulation. Investors cited the EU Taxonomy, in particular, as incentivising investment in the solar industry, without considering social impacts.

3. State-imposed Uyghur forced labour in green technology supply chains

The answers to the questions below provide essential background information on the Uyghur Region and clarify aspects where our consultations exposed common misunderstandings.

3.1 What is happening in the Uyghur Region?

Since 2017, the Chinese Government has taken extreme measures to eradicate the religious traditions, cultural practices and local languages of Uyghurs and other Muslim and Turkic-majority peoples. It has done so under the guise of "fighting terrorism". These measures have included the arbitrary mass detention of an estimated 1 to 1.8 million Uyghurs in internment camps (sometimes termed "re-education" or vocational training centres by the Chinese Government). Detainees in these camps face forced labour, torture, systemic sexual violence and compulsory sterilisation. There are hundreds of thousands of Uyghur people in other forms of arbitrary detention (see reports by Amnesty International, Human Rights Watch, including reporting that an estimated half-million people have been imprisoned since the crackdown began in 2017, Congressional-Executive Commission on China and the Australian Strategic Policy Institute, and ongoing documentation of arbitrary detentions by the Xinjiang Victims Database). This system is maintained through an extensive network of digital and personal surveillance.

Ultimately, this systematic persecution, underpinned by the state security apparatus, radically restricts the enjoyment of the fundamental rights that create an enabling environment for decent work, such as freedom of association, freedom of expression and freedom of assembly. It leaves no space for civic participation nor independent media nor civil society. Far from creating an enabling environment, this system makes it impossible to prevent or remediate forced labour.

Summarised evidence briefs on Uyghur forced labour are available from the Forced Labour Lab at SHU. Other useful evidence on these forced labour programmes can be found in the reports published by the Center for Strategic and International Studies, in peer-reviewed studies by Dr Adrian Zenz, and in the work of the Uyghur Rights Monitor. Evidence on prison labour and the XPCC specifically can also be found in the Citizen Power Initiatives 2019 report on cotton.

Much of the public discourse on Uyghur forced labour has focused on the use of forced labour in internment camps, detention centres, prisons and other places of mass arbitrary detention (the first two points below). However, conservative estimates suggest that at least over a million people from

Systematic forced labour systems are central to, and enabling of, the Chinese Government's control over the Uyghur Region and its citizens, in furtherance of its objectives to assimilate Uyghur people and remove their identity. Thus investors and companies must not assess the forced labour systems, or the situation in any individual workplace, in isolation from the broader set of human rights violations occurring in the Region.

The PRC's state imposed programme of forced labour has been perpetrated through a number of schemes, including:

- **Forced labour of internment camp detainees**
- **Prison labour, including that managed by the Xinjiang Production and Construction Corps (XPCC)**
- **Coerced labour of the rural poor through state-imposed "surplus labour" transfers to factories, mines and farms, both within the Uyghur Region and to different parts of China. Cases of forced labour via state-sponsored transfers have been identified as recently as April 2023.**

marginalised communities in the Uyghur Region—especially the most impoverished—are subject to state-imposed labour transfers outside the prison and arbitrary detention systems (point three above).

Although some Uyghurs subjected to state-labour transfers may wish to work in a factory, the context of total control and coercion is such that all state-sponsored labour transfers should be considered forced labour. This is due to the inability of any Uyghur to refuse such a transfer, as refusal of government requirements is typically met with a harsh response. Further, Uyghurs are not able to leave their post without the approval of the company they were assigned to or the relevant government agency. This inability to choose and/or leave work voluntarily, due to the threat of penalty, aligns with International Labour Organization (ILO) definitions of forced labour, specifically when assessed against the elaborated indicators provided in the ILO Hard to See, Harder to Count guidance.

At least 17 industries have been identified as exposed to, or at risk of using, Uyghur forced labour in their value chains. In addition to solar and EV, they include the cotton and textile, PVC, tomato, electronics, gold, and seafood industries, as well as those of other agricultural products.

Reports of forced labour in the Uyghur Region are well-supported by documentary evidence and first-person testimony (see the Center for Strategic and International Studies, the Worker Rights Consortium, the Helena Kennedy Centre for International Justice at SHU, the BBC, and The New Yorker).

In 2022, the UN Special Rapporteur on contemporary forms of slavery found that some instances of Uyghur forced labour "may amount to enslavement as a crime against humanity".[6] The following month, the UN High Commissioner for Human Rights concluded that the extent of arbitrary and discriminatory detention in the Region, in the more general context of restrictions on fundamental rights, "may constitute international crimes, in particular crimes against humanity". The ILO Committee on the Application of Standards has also "deplored the use of all repressive measures against the Uyghur people, which has a discriminatory effect on their employment opportunities and treatment as a religious and ethnic minority". Legal experts, the US Government and various parliaments (including those of France, the Netherlands, Canada and the UK) have concluded that aspects of the abuses amount to or may amount to genocide.

The pervasiveness of forced labour in the Uyghur Region, paired with the inability to conduct credible due diligence, means all products made in the Uyghur Region and all products made by state-transferred Uyghur labourers working in different parts of China should be presumed to be made with forced labour.

Helpful Resources

- SHU's evidence briefs on 'Forced Labour in the Uyghur Region'
- SHU's FAQ's brief on Uyghur forced labour
- US Department of State's Xinjiang Supply Chain Business Advisory
- US Department of State's 2022 Trafficking in Persons report: China

3.2 What is state-imposed forced labour?

One of investors' key challenges when considering how to respond to the situation in the Uyghur Region was their limited understanding of the difference between forced labour imposed by private actors and state-imposed forced labour. Understanding this difference is essential both for establishing internal buy-in and for formulating an appropriate response.

Forced labour imposed by private agents, including individuals, groups or companies, accounts for the majority of forced labour around the world. It violates ILO Convention 1930, No 29. The ILO, Walk Free and the International Organization for Migration (IOM) estimate that almost 24 million people are in privately-imposed forced labour globally. Privately-imposed forced labour is the form of forced labour that investors (and most other stakeholders) are most familiar with. Examples include the forced labour of migrant workers on farms in the United Kingdom and the USA, and the forced labour of women in spinning mills in India.

6. Enslavement amounts to a crime against humanity when it is "committed as part of a widespread or systematic attack directed against a civilian population", as laid out in Article 7.1 of the Rome Statute.

In such cases, labour rights groups and anti-slavery organisations call on companies and investors to engage meaningfully on the ground with workers, independent and democratic trade unions, and suppliers to change the practices that drive forced labour. They also call on companies to reform purchasing practices and business models that incentivise forced labour. Notably, in forced labour cases, labour rights advocates will rarely press for immediate disengagement (or 'boycotts'). When disengagement proves to be necessary, i.e. when attempts to improve the situation have failed, they urge companies to disengage responsibly, including by fulfilling any remediation responsibilities.

State-imposed forced labour, on the other hand, refers to forced labour imposed by state authorities, regardless of the sector or industry in which it takes place. The ILO, Walk Free and the IOM estimate that almost four million people are in state-imposed forced labour around the world. Notable cases include China, Turkmenistan, the USA, Eritrea, Burundi and North Korea.

State-imposed forced labour is a violation of ILO Convention 1957, No 105. This convention is focused more specifically on state-imposed forced labour than the broader Convention No 29. It specifically prohibits the use of forced labour:

- as a means of political coercion or education or as a punishment for holding or expressing political views or views ideologically opposed to the established political, social or economic system;
- as a method of mobilising and using labour for purposes of economic development;
- as a means of labour discipline;
- as a punishment for having participated in strikes;
- as a means of racial, social, national or religious discrimination

In cases of state-imposed forced labour, labour rights advocates and anti-slavery organisations typically call for full and immediate disengagement from affected industries[7] in regions where state-imposed forced labour takes place, and from suppliers directly complicit in the abuses (see examples below). This is because, in these situations, companies can neither credibly and safely identify forced labour, nor use or increase their leverage to effect change, due to the role of state control and the systemic nature of the forced labour systems. **Full disengagement is therefore necessary to comply with responsible business standards** (see Section 5).

What can we learn from other examples of state-imposed forced labour?

Examples from outside the Uyghur Region that demonstrate the need—and value—of disengagement from state-imposed forced labour include the corporate responses to state-imposed forced labour in Uzbekistan, Turkmenistan and, less recently, Myanmar. Investors may find it useful to consider these examples, as, although not directly comparable, they illustrate why it is common for advocates and other stakeholders to recommend that investors and businesses divest and disengage from the Uyghur Region.

In the case of Uzbekistan, over the course of more than a decade, leading apparel brands committed to not source cotton from the country. Their concerted action played a major role in persuading the government to reform the state-imposed system of forced labour in cotton production. Findings from 2021 by independent civil society monitors found that systemic forced labour had finally ended in Uzbekistan. However, broader reforms to create an enabling environment for labour rights are still necessary to guarantee that people are able to access decent work. Full information on this Uzbekistan case study can be found on the Cotton Campaign website.

In the case of Turkmenistan, companies have similarly committed to not source cotton from the country, because every year the Turkmen government forces tens of thousands of people to pick cotton. In this context, IKEA tried to implement a project with a group of Turkmen farmers and one specific supplier to closely monitor compliance with IKEA's supplier code of conduct. IKEA ended the project in 2015, acknowledging that its "ability to influence the industry outside the scope of this project moving forward is limited". This case study emphasises companies' inability to exert or increase their leverage in the context of state-imposed forced labour.

7. Note, that in the Uyghur Region this demand extends to all industries in the Region, due to the scale and scope of Uyghur forced labour across the entire Region, and the impossibility to credibly conduct investigations in the Uyghur Region, as discussed in length throughout this Guidance.

3.3 How are solar and electric vehicle supply chains exposed to Uyghur forced labour?

The Chinese Government has strategically incentivised green energy industries to move production to the Uyghur Region. Incentives include providing companies with cheap land, subsidised electricity and access to 'surplus' labour programmes (i.e. Uyghur forced labour programmes).

According to IEA estimates, as of 2022, the Uyghur Region accounted for 40% of the world's polysilicon, the essential material in 95% of the world's solar panels. Updated predictions analysing shifts in the market in recent years estimate that the Region's share of polysilicon production has shrunk to 35%. However, non-Uyghur Region polysilicon production still relies on metallurgical-grade silicon sourced from the Region. An estimated 32% of the world's metallurgical-grade silicon is produced in the Region.

The polysilicon supply chain is also concentrated among a small number of suppliers. According to the IEA, in 2022, a single polysilicon plant in the Region accounted for 14% of global production capacity.

The solar module supply chain can be summarised as follows:

- High-grade quartz is mined.
- The quartz is processed into metallurgical-grade silicon.
- This silicon is converted to polysilicon.
- Polysilicon is then processed and manufactured into ingots, wafers, cells and, finally, into modules (aka panels).

Because polysilicon can be blended at the ingoting and wafering stage, and upwards of 95% of the world's ingots and wafers are made in China, experts indicate that huge swathes of the world's solar panels could contain materials made with Uyghur forced labour.

Turning to the EV sector, an increasing share of the inputs for lithium-ion batteries, used in EVs, are being processed and manufactured in the Region. According to Benchmark Mineral Intelligence, as of 2022 China processed 44% of the world's chemical lithium and 70% of lithium-ion battery cells. The percentage of these processes performed in the Uyghur Region is growing. The Region is also becoming a global hub for the processing of many of the other minerals used in EV batteries, including nickel, copper and manganese. In 2022, two leading EV manufacturers were reported to have begun production in the Region.

Robust academic research has confirmed solar and EV component manufacturers operating in the Region are heavily implicated in Uyghur forced labour.

SOLAR PANEL MANUFACTURING	LITHIUM-ION BATTERY MANUFACTURING
• The world's largest metallurgical-grade silicon producer is implicated in the forced labour of Uyghurs. • All four of the Uyghur Region's polysilicon manufacturers are implicated in the forced labour of Uyghurs, through direct participation in forced labour schemes, and/or through their sourcing relationships. • The four largest solar panel suppliers in the world source from at least one of these polysilicon manufacturers. Information taken from Sheffield Hallam University's "In Broad Daylight" report.	• Key actors in lithium processing and distribution, the manufacture of lithium battery anodes and the sale of battery-grade lithium materials are benefiting from the Region's state-sponsored labour transfer programmes. • One of the largest lithium producers in the Uyghur Region has been receiving "assigned" workers since at least 2017. • Sourcing relationships with these suppliers are likely to taint the supply chains of some of the world's largest EV battery producers. Information taken from Sheffield Hallam University and NomoGaia's "Driving Force" report.

This evidence suggests that the green technology industry is at substantial risk of complicity—including through financing—with the ongoing crimes against humanity in the Uyghur Region. See Section 6 for a more detailed explanation of how solar and EV value chains are at risk of exposure to Uyghur forced labour.

It is critical to note that, although EV manufacturing is increasingly embedded in the Uyghur Region, the Region does not yet have a monopoly over the industry. Governments and investors must learn from the mistakes of the solar sector and seize this opportunity to redirect investment into companies with clean supply chains.

3.4 What is the climate impact of producing and processing materials for the solar industry in the Uyghur Region?

The solar industry is energy intensive. Electricity accounts for over 40% of the total cost of polysilicon production and polysilicon processing in the Uyghur Region is heavily reliant on coal. Research by the IEA noted that coal accounts for more than 75% of the annual power supply in the Uyghur Region (and Jiangsu). A separate expert assessment concluded that every polysilicon plant in the Region is powered exclusively by coal.[8] When assessing the competitiveness of the Chinese solar industry, the IEA noted that the Chinese Government heavily subsidises coal tariffs for companies operating in the Region.

The Uyghur Region's reliance on the world's most polluting energy source significantly increases the carbon footprint of green technology inputs made in the Region. While solar panel manufacturing is always going to generate some CO_2 emissions, and carbon payback timeframes for solar panels are considered low, it is possible to lower its carbon footprint. The IEA has estimated that roughly 30 countries offer competitive industrial electricity prices for new polysilicon and wafer production, while also offering low manufacturing emissions intensities. Furthermore, The Breakthrough Institute calculated that a polysilicon-based panel (installed in California) made with coal as the sole energy source would have 5.4 times the CO_2 payback time (up to 8.7 years) compared to one made using a generic, cleaner European energy mix.

The production of lithium-ion batteries is also an energy-intensive and environmentally damaging process. While the climate impacts of the migration of lithium mining and processing to the Uyghur Region have not yet been robustly researched, the environmental damage caused by mining is evident. Indigenous and local communities affected by mining operations in other parts of the world are already advocating for governments to regulate critical mineral extraction more stringently. Shifting these operations to the Uyghur Region will undermine efforts for greater transparency and human rights protections within the industry, given the lack of environmental and social regulation in the Region. Broader research on the EV industry's environmental impact found that a switch to renewable energy within the manufacturing process could reduce the sector's CO2 emissions by 65%.

For all the reasons outlined above, densely concentrating the solar and EV battery supply chains in the Uyghur Region not only jeopardises the rights of workers and communities there, but also hampers the renewable energy industry's efforts to reach net zero by 2030. Whether assessing risks within portfolios or looking for opportunities to invest in a greener future, investors should consider the significant climate harms associated with manufacturing in the Uyghur Region and seek out alternatives with lower CO2 lifetime evaluations.

Helpful Resources

- The IEA's Special Report on Solar PV Global Supply Chains
- The Breakthrough Institute's Sins of a Solar Empire report

8. Over Exposed's assessment was conducted by an industry expert, based on knowledge of the industry, the role of coal in the Region, as stated, and satellite imagery.

4. The investor case for addressing Uyghur forced labour in solar and EV battery supply chains

"The issue of Uyghur forced labour in the green technology industry is causing friction between the ESG and investment world."

4.1 Making the Case

The business case:

The presence of Uyghur forced labour in solar and EV supply chains exposes companies to reputational, operational and legal risks. Such risks have a direct impact on the financial health and performance of the business. Companies and investors are also at high risk of financial losses if they fail to comply with anti-forced labour regulations. US trade measures, for example, have led to solar panel imports being held at the border by Customs authorities. Such measures are bolstering global calls for supply chain diversification.

More generally, over-dependence on a single country or region, regardless of its location, for the majority of a supply chain presents a particularly salient operational risk in the energy sector. This risk was underscored by Russia's invasion of Ukraine and the subsequent global supply chain crisis. Ongoing disruption has proven to investors that geographically concentrated supply chains threaten business resilience.

It is incumbent on investors to protect their portfolios by investing in companies that are facilitating a just transition to a green economy by building equitable and resilient supply chains. Investors must use their leverage to encourage both current and future investee companies to act in accordance with the principles of a just transition.

The climate case:

The solar industry's reliance on coal power undermines the sustainability credentials of green technology companies operating in the Uyghur Region. Solar panels containing polysilicon from the Uyghur Region have longer carbon payback times than those made in alternative manufacturing hubs with lower manufacturing emissions intensities. This puts companies sourcing from the Region at risk of failing to meet climate quality standards, such as those set by the EU Green Taxonomy.

Regulators in multiple countries are adopting measures and policies to reduce emissions and curb related climate harms. These measures include disclosure requirements and import tariffs (see the Annex on existing or upcoming regulation). This emerging framework of regulations should encourage investors to monitor the carbon footprints of investee companies and channel investment into businesses developing more sustainable processing and manufacturing processes. The IEA has noted that diversifying solar industry supply chains could reduce solar PV manufacturing emissions. Investors therefore have an opportunity to take a leading role in the decarbonisation of the green technology industry.

What is the Uyghur Forced Labor Prevention Act?

The UFLPA establishes a "rebuttable presumption" that bans the import into the USA of goods mined, produced or manufactured wholly or in part in the Uyghur Region or sourced from companies on the UFLPA Entity List.

This means that US Customs authorities work under the presumption that all goods produced in the Uyghur Region, or containing components or materials from the Uyghur Region, or from specific named companies on the accompanying Entity List are made with forced labour. This presumption encompasses raw and processed materials, such as metallurgical-grade silicon, used in solar panels. Products suspected of falling foul of the Act are examined, and then subject to detention unless sufficient evidence is provided to prove they were not produced using forced labour or until the importer re-exports the products.

The legal case:

Uyghur forced labour in supply chains is no longer solely an "ethical" issue. With the passage of the UFLPA in the United States, anticipated due diligence legislation and a market ban on goods produced using forced labour in the EU, other pending modern slavery and human rights due diligence regulations in the works worldwide, and litigation against companies alleged to profit from Uyghur forced labour in France and Germany, it is a legal one too. In the United States, the proposed Uyghur Genocide Accountability and Sanctions Act would require companies listed or seeking to be listed on US stock exchanges to report to the U.S. Securities and Exchange Commission. This should capture the C-suite's attention.

In the attached Annex we have compiled a summary of other relevant legislation on human rights, due diligence and green investments in key jurisdictions.

4.2 'Breaking down the E and S silos in ESG'

The consultation process revealed that many investment firms take a siloed approach to ESG management. They therefore fail to capture the full range of risks associated with exposure to the Uyghur Region. This section outlines the importance of integrating social and climate criteria when assessing green technology holdings.

> *"Personally, I struggle with how the move to low-carbon investments often fails to consider costs to human rights. No one company can be perfect on E, S and G—but the co-existence of the polar opposites on this issue is really challenging"*

Current ESG business standards

Recent updates to, and expert commentary on, international responsible business standards have highlighted the need for environmental and climate impact assessments to be considered in tandem with human rights concerns.

In 2023, an update to the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct recognised that companies have a responsibility to operate in alignment with the principles of a just energy transition. It calls on companies to avoid and address the negative social and environmental impacts of their transition from fossil fuels to renewable energy sources. Similarly, the UN Working Group on Business and Human Rights' commentary on the applicability of the UNGPs to climate change highlights the obligations of both states and businesses with respect to the impacts of climate change on human rights. It emphasises that, according to the UNGPs, the risk to rightsholders, and not the risk to the business, must remain central when developing climate-related policies, processes and decisions.

As allocators of capital and stewards of economic activity, investors have a critical role to play in ensuring climate finance supports the realisation of human rights. This responsibility is embedded in ESG frameworks and investor coalition agreements, which set out what companies must do to enable a just transition. The Principles for Responsible Investment, for instance, commit over 2,200 investors worldwide to integrate ESG factors into all levels of their decision making.

Current approaches to ESG risk management

Research indicates that these commitments are not translating into practice. The Grantham Institute, for instance, found that "most investor strategies on climate change have yet to incorporate a robust social dimension". This is a trend we observed repeatedly during our interviews with social investment stewards. In particular, we noted that a lack of communication between social and environmental analysts has led to a siloed approach to ESG risk management.

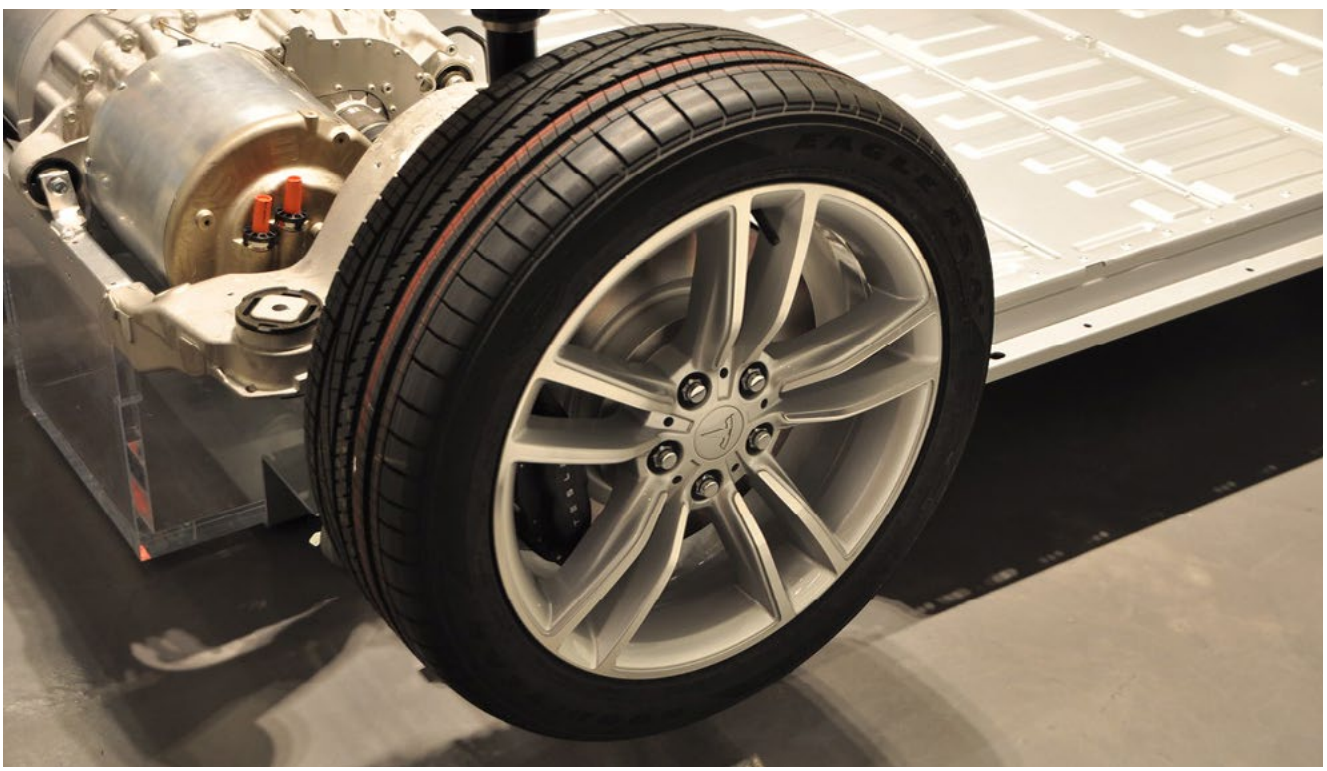
This problem is exacerbated by data providers, certification schemes and industry-driven assessments regularly ranking companies high on ESG, despite known ties to forced labour or other social risks (see Section 2). For example, a report last year uncovered that 12 companies reported to be linked to Uyghur forced labour appeared in Article 9 funds. Under the EU Sustainable Finance Disclosure Regulation (2022), these funds have specific sustainability goals based on strict criteria. Separately, after comparing how the same set of automotive companies ranked on their Corporate Human Rights Benchmark and the Climate and Energy Benchmark, the World Benchmarking Alliance concluded that the companies perform differently on the two benchmarks and consider climate and human rights issues in silos.

Without an integrated approach to climate, environmental and social harms, investors are in danger of increasing their exposure to financial and sustainability risks and of missing opportunities for a greener, more equitable future. Investors should incorporate the principles of a just transition into their investment strategies.

- **Investment criteria and allocation:** Investors can develop robust and specific criteria for investments in green energy that incorporate human rights considerations. These criteria should apply to all investment asset classes (listed equities, private equity, bonds, including government and sovereign bonds, and property). They should clearly communicate these criteria to prospective investee companies and, in the case of asset owners to their asset managers, to ensure that their portfolios are aligned with the principles of a just transition.
- **Sustainable investment for long-term value creation:** Investments should focus on opportunities for synergy between people, planet and business value. Doing so can, in the long term, lead to stable and sustained returns on investment, foster more transformative climate strategies and safeguard the rights of workers, communities and other rightsholders.

Helpful Resources

- Checklist for an investor human rights policy that respects human rights at the institutional level
- Checklist for investor human rights governance structures
- LSE and the Grantham Institute: A guide for investor action on climate change and the just transition
- Climate 100+: A need for robust just transition planning



Electric Vehicle (Martin Gillet, Flickr)

5. Identifying effective approaches to state-imposed forced labour in green technology

Participants in our consultations observed that there is a lack of clear guidance on how investors should respond to exposure to Uyghur forced labour in their green technology portfolios.

While investors understand that the crisis in the Uyghur Region requires an expedited response, many are still hesitant when the notion of divestment is broached. They view it as a "last resort" reserved for specific cases—largely in response to legal risks and data providers' findings—rather than a necessary consideration in all cases of state-imposed forced labour. This approach fails to recognise the egregious nature of the abuses in the Uyghur Region and individual investors' inability to change the situation.

In response to these challenges, the research team developed an investment decision tree that operationalises recommendations from the UNGPs, the OECD and the UNGC to help readers understand best practice for investors in the context of Uyghur forced labour. Crucially, this decision tree directly provides guidance on when engagement is a viable solution and when divestment is necessary.

5.1 Divestment

Divestment is the necessary response to Uyghur forced labour in many of the scenarios outlined in the decision tree. To properly understand the decision tree, it is important to be clear on why this is the case. This is explained below, through the application of the UNGPs, and OECD and other standards.

The key considerations and factors that guide the need for divestment:

- **Investors and companies have known—or should have known—of the harm since at least 2021** (2019/2020 at the latest for violations in the apparel and agriculture supply chains, and 2022 at the latest for the automobile sector).
- The **severity** of the harm is inarguable across the three dimensions of scale, scope and irremediability. The harm constitutes **gross, foreseeable and known human rights violations**.
- There are **no valid means for companies to**:
    - **verify that any workplace in the Uyghur Region is free from forced labour**
    - **conduct audits or certification processes**
    - **credibly or safely engage with stakeholders**
    - prevent the use of forced labour in these workplaces **in line with human rights due diligence requirements.**
- **It is not feasible for companies or investors to use or increase their leverage to improve conditions in the Uyghur Region**, in a context of overt state control and state-created risks to Uyghurs, investigators, auditors and other individuals.
- **Direct remediation for affected individuals is almost impossible.** See below.
- **Credible representatives of the affected stakeholders are united in their demands for divestment from the Region.** These representatives include survivors of the internment camps and individuals with family and friends in Uyghur Region camps or who are otherwise missing.
- **Credible representatives of the affected stakeholders refute narratives expounding potential unintended consequences of disengagement or divestment.** They assert that ongoing engagement and investment enables and validates the status quo. This is expanded upon further below.

There is consensus among the human rights and civil society community that disengagement or divestment from the Uyghur Region is the only way for corporate actors to comply with the UNGPs. Both the US and UK Governments, and several multi-stakeholder organisations (including the Fair Labor Association and the Ethical Trading Initiative) have recognised the challenges of conducting human rights due diligence and upholding other responsible business principles in the Region.

Below we provide further detail on how these considerations should be applied using the UNGPs and OECD Guidelines.

Applying the UNGPs and OECD Guidelines

UNGP 19 recommends that enterprises consider ending business relationships where they lack the leverage to prevent or mitigate adverse impacts and are unable to increase their leverage, "taking into account credible assessments of potential adverse human rights impacts of doing so". UNGP 19 makes it clear that "the more severe the abuse, the more quickly the enterprise will need to see change"—even in cases where the business relationship is crucial to the enterprise. Severity is judged on the basis of the scale, scope and irremediable character of negative impacts. Given the extreme scale and egregious harm of Uyghur forced labour—which likely amounts to a crime against humanity—Uyghur forced labour must be understood to be of extreme severity.

New guidance from the UN Office of the High Commissioner for Human Rights, published in 2023, unpacks this further, stating:

> *"Although the UNGPs stipulate that businesses should seek to exercise leverage where they are contributing or linked to such harms, it may be the case that business enterprises have little if any leverage with governments involved in carrying out egregious violations. Where sufficient leverage is lacking, those enterprises who are at risk of being involved in gross human rights abuses will need to rapidly come to a decision about whether and how to exit, and the necessary mitigation measures that will need to be in place"*

UN Office of the High Commissioner for Human Rights

The OECD has recognised that the same principle applies to investments, indicating that divestment from a company may be an appropriate response "where mitigation is unfeasible or **because the severity of the adverse impact warrants it**" (author's own emphasis).

Affected stakeholders' views on the potential consequences of disengagement/divestment

Both the UNGPs and the OECD note the need for investors and companies to consider the potential adverse impacts of disengagement/divestment before deciding on this course of action. In the case of Uyghur forced labour, companies and business associations have often cited, for example, the alleged impact on the livelihoods of Uyghurs and job losses.

Such statements evidence a profound lack of understanding of the severity of the abuses in the Uyghur Region, and fail to recognise that:

- The widespread Uyghur forced labour systems are an integral part of a broader Chinese Government strategy of persecution;
- The Chinese Government's policies have cultivated an acute climate of fear that prevents Uyghur workers from freely choosing their employment or refusing employment in government schemes.
- Where forced labour is a widespread or systematic violation committed in furtherance of a state policy, it constitutes a crime against humanity under international law.

The OHCHR guidance also makes it clear that affected stakeholders' views should play a fundamental role in decisions to exit, stating:

> *"To the extent possible, the decision to exit responsibly should draw on internal and/or independent external human rights expertise, and involve meaningful consultation with potentially affected groups and other relevant stakeholders.'* This includes, *'all workers (not just any expatriate staff in the country)."*

The affected communities and their representatives—survivors of the persecution, family and friends of detained Uyghur, and the Uyghur diaspora—and expert organisations are united in their demand for full divestment from the Uyghur Region.

Investors and companies should therefore not attempt to justify delaying decisions on divestment/disengagement from the Uyghur Region, or the timeline to divest/disengage, based on the need to assess potential adverse impacts of doing so, when the affected stakeholder and expert community consensus is that the only responsible business decision is to exit the Region.

Divestment following failed engagement

Our decision tree also demonstrates that disengagement from companies sourcing from the Region is necessary, if companies have failed to address their exposure to Uyghur forced labour following sustained engagement. This aligns with the OHCHR's recommendation that divestment from a company may be an appropriate response after continuous **failed attempts at mitigating a harm.** Our approach also emphasises the need for expedited and, in certain cases, immediate divestment if companies fail to take concrete steps to end their involvement in these egregious abuses for as long as the persecution in the Region continues.

Channelling investment into alternatives

During the consultation process, numerous investors noted that divestment from solar and EV assets is complicated because green technology is essential to mitigating the climate crisis. This is compounded by a perceived absence—at the time of publication—of cost-effective alternatives.

However, the crisis of Uyghur forced labour should breed urgency and innovation. Rather than accepting the status quo, investors should be exploring ways to channel investments into companies that are looking for new ways to further the green energy transition. They should be engaging with governments to advocate for policy support to scale-up the development of alternative supply chains. Investors must look towards long-term value creation with equitable and sustainable energy solutions, even if doing so might bring less stable financial returns in the short term.

In the US, there are indications that the passage of the UFLPA is driving supply chain diversification, increased investment in clean alternatives and technological innovation.

Remediation and Uyghur forced labour

Under the UNGPs and OECD guidelines, the need for remediation must also be duly considered, even where disengagement or divestment has been identified as the necessary course of action. In other words, disengagement does not exempt companies from their responsibility to remedy any harm they caused or to which they contributed.

Remediation usually involves providing financial and non-financial compensation and support to the survivors of forced labour. Sadly, this poses significant challenges in the case of impacted Uyghurs, given the complexities of identifying, and accessing, survivors, among other reasons. In this context, some business actors have made donations to affected communities as a form of indirect remediation, such as to support Uyghur refugee communities in Turkey, Kazakhstan or elsewhere.

Given their significant leverage, investors should seize opportunities to encourage, support or incentivise contributions to remediation by their investee companies to the Uyghur refugee community, as a form of remediation. When doing so, direct engagement by companies with the community and their credible representatives is paramount. In some cases, investors can facilitate direct consultations with their investee companies, where the investor may have established connections with the relevant community and/or representatives. Critically, however, indirect remediation to refugee communities should not be understood as a replacement for divestment where it is necessary.

Helpful Resources

- Principles for Responsible Investment (PRI) Guidance on divestment approaches
- OECD Guidance on responsible business in challenging contexts

Applying the concepts of cause, contribution or linkage to Uyghur forced labour

The UNGPs outline three concepts—cause, contribution and linkage—to define a company's involvement in a negative impact and its responsibility to provide remedy.

The author of the UNGPs, Professor John Ruggie, explains that there is a continuum between contribution and linkage, and that a variety of factors can determine where on that continuum a particular instance may sit [including] the extent to which a business enabled, encouraged, or motivated human rights harm by another; the extent to which it could or should have known about such harm; and the quality of any mitigating steps it has taken to address it.

This concept of a movement from linkage to contribution has been applied in recent academic research examining Uyghur forced labour and in OECD National Contact Point cases. They highlight that **companies can move along the "continuum" from "linkage" to "contributing to", or even "causing", harm when they fail to take action in response to a predictable/foreseeable harm, in particular when such a harm is severe**.

In terms of investment activities, if a private equity investor holds a controlling interest in a company or has a high level of influence at the company (e.g. has a seat on the board), this private equity investor can be construed to have caused or ***contributed*** to the harms resulting from the company's activities or relationships. PRI has also highlighted that an investor can be deemed to have contributed to human rights harms through its investments when "the investor holds high ownership stakes and could or should have known about [the] harm, but preventive actions were insufficient".

The continuum between cause, contribution and direct linkage has also been acknowledged by the OHCHR in its advice to the banking sector:

> *In practice, there is a continuum between 'contributing to' and having a 'direct link' to an adverse human rights impact: a bank's involvement with an impact may shift over time, depending on its own actions and omissions. For example, if a bank identifies or is made aware of an ongoing human rights issue that is directly linked to its operations, products or services through a client relationship, yet over time fails to take reasonable steps to seek to prevent or mitigate the impact [...] it could eventually be seen to be facilitating the continuance of the situation and thus be in a situation of 'contributing.'*

Overall, the above analysis highlights the clear risk that, beyond **linkage** alone:

- companies not directly employing Uyghur forced labour in their operations, but still involved in Uyghur forced labour - for example, companies sourcing inputs made with Uyghur forced labour—could nonetheless be understood to be **contributing** to the harm; and
- investors in companies involved in Uyghur forced labour, including through sourcing relationships, could be understood to be **contributing** to the harm.

This includes when these companies and/or investors fail to take meaningful action in response to known and foreseeable risks of Uyghur forced labour. There is a strong argument that persisting in alleged attempts to exercise leverage constitutes such a failure to take meaningful action where there is no reasonable or foreseeable prospect of change.

Helpful Resources

- Office of the United Nations High Commissioner for Human Rights (OHCHR) report: Taking stock of investor implementation of the UN Guiding Principles on Business and Human Rights
- OECD resource: Responsible business conduct for institutional investors
- OHCHR framework: Guiding principles on business and human rights

5.2 State-imposed forced labour response decision tree

When considering whether divestment is the correct approach, it is important to differentiate between companies that are:

SCENARIO A: OPERATING IN THE UYGHUR REGION

Whether implicated in the transfer of "surplus" Uyghur labour across the Region or in the forced labour of detainees in internment camps, these companies are integral to, and complicit in, the Chinese government's forced labour programmes. They have no capacity to exit or change their practices and, in turn, investors have no leverage to affect change. In this case, the only adequate response is **immediate divestment**.

As outlined above, there is no reasonable justification for delaying divestment to assess its potential adverse impacts when survivors of the persecution and their credible representatives have publicly endorsed demands for full divestment from the Uyghur Region since at least 2020.

SCENARIO B: OPERATING IN MAINLAND CHINA, BUT RECEIVING STATE-IMPOSED LABOUR TRANSFERS FROM THE UYGHUR REGION

In this situation, implicated companies may be able to end their participation in state labour transfers from the Region. However, publicly available evidence of companies ending their involvement in such schemes is scarce. It is therefore recommended that investors exert and build their leverage to **engage** with these companies, to call for the **immediate** termination of participation in state labour transfer schemes. As this scenario involves a company directly utilising Uyghur forced labour, action must be taken within an **expedited timeframe (suggested no more than two months for compliance), given the severity of the impact**. If a company fails to acknowledge the issue or to take steps within the designated timeframe, then urgent divestment processes should begin.

SCENARIO C: DIRECTLY OR INDIRECTLY SOURCING INPUTS PRODUCED WITH UYGHUR FORCED LABOUR

In this scenario, investors should **engage** with companies to change their sourcing relationships. Their strategy, however, will depend on their suppliers' connection to Uyghur forced labour. If an investee company's suppliers are:

1. Operating in mainland China, but receiving labour transfers from the Region, investors should require companies to call on their suppliers to immediately terminate their participation in state labour programmes and find alternative suppliers if met with non-compliance, as in scenario B above, and/or
2. Operating in the Uyghur Region, investors should require companies to terminate their contracts with these suppliers within a set time period (see below).

If companies fail to comply with these requirements within the designated timeframe, investors should consider escalation. As part of these efforts, **investors should attempt to increase their leverage with companies through investor collaboration and collective action**. This process should culminate in divestment where engagement fails. As outlined above, Uyghur forced labour must be understood as a severe and foreseeable/known harm, against which companies and investors should have already taken meaningful action.

Accordingly, **companies should be subject to timebound requirements on a scale of months, not years, to shift sourcing/end linkages. Investors should similarly establish deadlines of months, not years, to conclude divestment decisions**, if engagement and attempts to increase their leverage have failed to drive change. As outlined above, the UNGPs make it clear that the more severe the abuse, the more quickly the enterprise will need to see change—even in cases where the business relationship is crucial to the enterprise.

The above scenarios and analysis are presented in the decision tree on the following page.

! *Where investors have passive holdings through exchange-traded funds or ETFs, we acknowledge that they are not able to divest from a particular company in alignment with the decision tree. In this case, investors should explore ways to engage with index providers, on which ETFs are based, to apply specific criteria to exclude companies that have operations in the Uyghur Region. See Section 8 for further discussion on this.*

Scenario A

Investee company **operates in the Region**

Immediate decision: Divest

Investors have no leverageor prospect of increasing leverage and, in accordance with the UNGPs and OECD Guidelines, should commence:

URGENT DIVESTMENT

Scenario B

Investee company operates in mainland China but **participates in state labour transfer programmes** from the Region.

ENGAGE

ACTION: seek to exert and increase leverage with company.

ASK: company's urgent termination of participation in state-imposed labour transfer programmes.

Expedited timeframe of no more than ***two months*** *for supply chain shift*

If a company has **no credible plan** to terminate participation in state labourtransfer programmes and rapid attempts to exert and increase leverage fail:

URGENT DIVESTMENT

If a company terminates its participation in state labour transfer programmes *within the agreed timeframe:*

MONITOR & ENGAGE

Scenario C

Investee company sources from

a) companies operating in the Region and/or

b) participating in state labour programmes outside the Region.

ENGAGE

ACTION: Exert and increase leverage with company.

ASK:

A) shift sourcing fromthe Region.

B) ensure suppliers operating outside the Region terminate participation in state labour programmes.

Expedited timeframe of no more than ***six months*** *for supply chain shift*

If the compnay has no credible plan to

a) shift sourcing from the Region.

b) ensure suppliers terminate participation in state labour programmes

URGENT DIVESTMENT

If a company commits to:

a) terminating sourcing from the Region

b) ensuring all suppliers outside of the Region terminate participation in state labour programmes

within an agreed timeframe:

MONITOR & ENGAGE

Tackling Bifurcation

The UFLPA prohibits the import into the USA of goods mined, produced or manufactured wholly or in part in the Uyghur Region. This legislation has driven companies with US operations to map their supply chains and develop supply lines that are free from Uyghur forced labour.

In the solar industry, the dominant approach, however, is to circumvent these regulatory challenges by bifurcating supply chains. Companies create one or more purportedly forced-labour-free supply chains, while continuing production via tainted supply chains. Research has found that some of the world's largest solar module manufacturers appear to have created designated product lines that they claim to be free from inputs produced using Uyghur forced labour. They suggest that these supply chains are dedicated to the US market or designed with UFLPA compliance in mind. Meanwhile, these same companies continue to use inputs made with Uyghur forced labour in products for other markets.

Bifurcation must not be considered an "alternative" or a solution to the crisis of Uyghur forced labour in green energy technologies. Bifurcation is solely a compliance solution to the UFLPA. It does not satisfy responsibilities under international standards. Any ongoing financial relationship with a company directly perpetrating Uyghur forced labour, regardless of whether the specific product sourced from that company is free from Uyghur forced labour, profits a company complicit in the persecution of the Uyghur people and perpetuates the status quo in the Region.

Companies that knowingly source from suppliers that have set up bifurcated supply chains, or that have bifurcated their own supply chains, and the investors that invest in these companies, may not only be directly linked to the harm but, in fact, contributing to it. Bifurcation exposes investors and companies to potential regulatory risk, given the evolution of legislation in the EU and elsewhere.

The Coalition to End Forced Labour in the Uyghur Region calls on companies to uphold a single global standard, ending bifurcation and ensuring that all products are made free from forced labour. Asset owners and managers should invest in companies that have clearly demonstrated that they have exited the Uyghur Region entirely and established supply chains that will allow them to sustain that exit. Further, investors should use their leverage with all stakeholders, including companies and governments, to shift the focus away from bifurcation as a solution and towards the creation of genuine alternatives.

Workers manually crush silicon in Jingang Circular Economy Industrial Park, Ili Prefecture, Xinjiang. Source: Kokodala News via Weixin.

6. Conducting Due Diligence

When it comes to due diligence, our consultations revealed that many investors lack the technical tools and/or knowledge to identify a company's exposure to the Uyghur Region. As a result, many asset managers rely disproportionately on data providers' evaluations of human rights data sets, which are rudimentary and unreliable.

As outlined in the decision tree, investors must conduct their own due diligence to ascertain whether a company is operating in or sourcing from the Uyghur Region or is otherwise implicated in Uyghur forced labour. These due diligence efforts should be informed by desk-based research. Potential data sources include reliable academic, non-profit and media reports, as well as direct engagement with companies and impacted stakeholders through dialogue with Uyghur human rights groups and other relevant civil society organisations. This research must inform decision making throughout the investment lifecycle, from initial investment through to stewardship, and, where relevant, divestment.

Once investors have ascertained a company's relationship to the Region, they can refer to the decision tree for the appropriate next steps. Using this approach will streamline investment decisions and help investors act within an expedited timeframe.

6.1 Understanding the supply chain

How solar and electric vehicle supply chains are exposed to Uyghur forced labour

For investors to map their fund's exposure to Uyghur forced labour, they should first understand which tiers of the solar and EV supply chains are at highest risk. This technical knowledge will streamline their due diligence procedures.

EV SUPPLY CHAIN

Process

- Upstream: Raw materials, including nickel, cobalt, lithium, graphite and manganese are mined from the earth.
- Midstream: Processors and refiners purify the raw materials and use them to make cathode and anode batterymaterials. Lithium is present in the anode and the cathode. Other common anode materials include carbon-based materials like graphite, silicon or a combination of the two.
- Downstream: Battery manufacturers assemble the battery cells into modules and then pack and sell them to automakers, who place the finished batteries in EVs. Some automakers have formed partnerships with manufacturers to produce their own batteries for the vehicles they sell.

Risk

- Although a significant proportion of critical minerals are mined elsewhere (e.g. Chile, the DRC and Australia) and exported to China for processing, critical minerals are increasingly being extracted from the Uyghur Region. Lithium mining is experiencing a particularly steep increase.
- The processing and manufacturing ofthe key materials for EVs isincreasingly concentrated in China.China is now estimated to process44% of the world's chemical lithium,and produces 78% of cathodes, 91% ofanodes, and 70% of lithium-ionbattery cells. A growing share of theseprocesses is shifting into the UyghurRegion.

SOLAR SUPPLY CHAIN

Process

- Quartz rock that meets specific purity and physical property specifications (also known as quartzite) is mined from the earth;
- Quartz is chemically reacted with carbon sources to produce metallurgical grade silicon (MGS) in electric arc furnaces;
- MGS is converted to polysilicon through a series of chemical reactions and purifications;
- Polysilicon is placed in high purity quartz crucibles and melted, and long cylindrical single crystal silicon ingots are "pulled" from the melt;
- Ingots are squared and then sliced into very thin wafers with diamond wire saws;
- Individual solar cells are produced from wafers via a complex series of automated chemical and physical processes; and
- Individual cells are assembled into solar modules.

Risk

- Quartz mining and MGS and polysilicon production are the tiers of the solar supply chain most at risk of exposure to Uyghur forced labour.
- Approximately 35% of the world's polysilicon and 32% of the world's MGS is produced in the Uyghur Region.
- The production of MGS, polysilicon and ingots requires large amounts of energy, incentivising companies to locate their factories in regions with an abundance of low-cost electricity, like the Uyghur Region.

6.2 How to conduct desk-based due diligence of solar and EV supply chains

Investors must ask companies to map and publicly disclose their EV and solar supply chains, including sub-suppliers down to the raw materials. However, as discussed in Section 2, supply chains in China can be opaque by design. This is in part due to the Chinese government's regulatory environment, which encourages corporate secrecy and makes on-the-ground investigations or audits impossible (see Section 7.2). These conditions mean that information provided or published by companies may be false or misleading.

For this reason, investors should not rely solely on companies' self-disclosure. They should instead use desk-based research to learn more about the sourcing contracts and practices of their suppliers. In some cases, particularly where investors are collectively engaging with a company, pooling resources and research efforts can advance investors' understanding of a company's exposure to human rights harms.[9]

Key steps of desk-based due diligence include:

- Prioritise mapping the materials or inputs known to be at highest risk of forced labour. For solar, this includes polysilicon and metallurgical-grade silicon. For electric vehicles, this includes lithium, lithium-ion batteries, copper and graphite, as well as ultra-low-carbon steel and aluminium. Several public datasets track which companies have been exposed in the media for using Uyghur forced labour, including in the solar and EV sectors, or for sourcing from those that do. See resources below.
- Map the goods the Chinese Government has prioritised for expansion in the Uyghur Region. This includes critical minerals, electronic components, batteries and storage, among many others. This mapping should also identify risks affecting inputs for emerging alternatives. For

9. Any such initiative may be subject to internal and legal restrictions. Certain specific forms of collective action could trigger competition or regulatory requirements, for example, collective action to obtain or consolidate control of the acquisition offer of a company. Nevertheless, regulators have expressed their clear intent that these rules should not inhibit shareholder cooperation to support ESG efforts nor act as a barrier to collective shareholder action. (See: PRI's and Linklaters' UK Guidance on Acting In Concert and Collaborative Shareholder Engagement)

example, graphene, a potential alternative to lithium-ion battery chemistries in EVs, is reportedly processed in the Uyghur Region.

- Read corporate annual reports to identify a company's top suppliers, but be aware that any lists may not account for the company's full supply chain. Scrutiny is required to determine if the company is disclosing the makers of all of its inputs or only a fraction.

- Invest in expertise and resources to learn the local language names of companies (including parent companies and subsidiaries). Research whether a company has any connection to the Uyghur Region in Chinese languages, including through sourcing relationships and subsidiaries. Often companies delete this information from their websites, but further online research can turn up hidden connections.

- Research corporate annual reports for suppliers all the way to the raw materials if possible.

- Search the internet in English and the company's local language for corporate press releases or media announcements about supply contracts. In green technology, these contracts are often shared in major announcements and/or via investor calls.

- Search the internet for all suppliers and sub-suppliers' relationships to state-sponsored labour programmes. See relevant search terms listed in SHU's briefing on Desk-Based Research Strategies to Identify Uyghur Region Exposure.

Customer due diligence: Governments and state-owned enterprises

When addressing the risks of state-imposed forced labour, asset managers should consider whether implicated states or state-owned enterprises are asset managers' own clients. "Know Your Customer" or "KYC" are core concepts in the financial industry for countering money laundering and other fraud risks. Customer due diligence is an essential part of doing business. It allows you to ensure that the clients you work with or the customers that you sell your products and services do not and will not violate international human rights laws. In the same vein, asset managers should be conducting their own customer due diligence / KYC as part of their human rights responsibilities. Asset managers who have or are considering a government or sovereign fund client must conduct due diligence to ensure that they do not take on clients that are connected with human rights violations or violations that may amount to crimes against humanity. This would pose serious business risks to the asset manager.

Helpful Resources

- SHU's 'Over Exposed' report contains an assessment model decision tree to help businesses and investors assess the risk that a solar company is exposed to Uyghur forced labour.

- SHU's briefing: Desk-based Research Strategies to Identify Exposure to the Uyghur Region

- Sayari webinar: Enhancing Xinjiang Forced Labour Risk Assessments

- OHCHR guidance on conducting due diligence in challenging contexts

Due Diligence on Climate Impacts

Investors committed to breaking the silo between environmental and social risk analysis should map the climate impacts of their assets alongside their exposure to forced labour. The OECD's recent publication, Managing Climate Risks and Impacts Through Due Diligence for Responsible Business Conduct: A Tool for Institutional Investors, provides multiple recommendations for how investors can integrate climate assessments into their portfolio screenings and other investment decision-making processes.

Due diligence measures involve:

1. IDENTIFYING AND ASSESSING CLIMATE RISKS, IMPACTS AND OPPORTUNITIES AT ASSET, ASSET-CLASS AND SECTORAL LEVEL

- Assess scope 1, 2 and material scope 3 emissions associated with individual assets in portfolios based on GHG protocol accounting methodologies.

2. IDENTIFYING AND ASSESSING CLIMATE RISKS, IMPACTS AND OPPORTUNITIES AT PORTFOLIO LEVEL

- Estimate the carbon and other greenhouse gas (GHG) emissions footprints of portfolios across asset classes and investment types, using real or estimated data for all GHGs, in line with TCFD recommendations.
- Identify and assess future projected climate impacts and risks on short, medium and long-term time horizons.
- Use forward-looking approaches such as climate scenario analysis and climate stress tests.
- Address possible trade-offs and integrate with other social and environmental goals for a just transition, such as biodiversity, nature-related impacts and wellbeing.

3. PRIORITISING THE MOST SIGNIFICANT RISKS AND IMPACTS FOR FURTHER ACTION BASED ON THEIR SEVERITY AND LIKELIHOOD, UTILISING BENCHMARKS AND SCREENING TOOLS

- Prioritise assets and sectors associated with the most significant adverse climate impacts, such as high GHG emissions or reduction of carbon sinks (e.g. oil and gas, utilities, transport, materials, forestry and fisheries, chemicals, construction, textile and leather).
- Prioritise further due diligence for assets and sectors associated with those climate impacts most likely to result in harm to people or the planet (e.g. large-scale infrastructure, real estate developments, energy and agricultural assets).

See the OECD's Managing Climate Risks and Impacts Through Due Diligence for Responsible Business Conduct for further guidance.

7. Engagement with Companies

When it comes to due diligence, our consultations revealed that many investors lack the technical tools and/or knowledge to identify a company's exposure to the Uyghur Region. As a result, many asset managers rely disproportionately on data providers' evaluations of human rights data sets, which are rudimentary and unreliable.

This section proposes multiple ways investors can facilitate productive engagement with companies and, in the case of asset owners, with their asset managers. It includes suggested questions to facilitate dialogue, responses to misinformation from companies and next steps following successful or unsuccessful engagement.

As outlined in the decision tree, this form of engagement is not credible if a company has already been identified as operating in the Uyghur Region.

7.1 Key human rights questions for engagement with portfolio companies

To engage directly with investee companies, investors can refer to the engagement guidance questions provided by the Investor Alliance and SHU's 'Ethical Procurement' briefing paper. These questions could also be shared with investee companies for use with their suppliers, especially those based in China.

We recommend that investors/their investee companies also ask questions on the carbon impact of production in the Uyghur Region, considering scope 1, 2 and 3 emissions, and whether relevant companies have publicly disclosed data on their environmental and climate impacts.

Although investors raised the challenges and potential security concerns around engaging directly with Chinese companies during consultations, some investors had engaged directly with China-based companies on Uyghur forced labour, while taking certain precautions, such as amending terminology, to address such concerns (see Section 7.3).

However, China-based companies are unlikely to—deliberately—disclose information that would expose their involvement in Uyghur forced labour. Desk-based due diligence is therefore necessary to identify companies' exposure to Uyghur forced labour. The guidance below summarises ways to identify language that could indicate involvement in forced labour programmes.

7.2 How to respond to companies giving 'red herring' responses

The investment professionals we consulted for this project noted that their engagement efforts would benefit from clear guidance on how to understand and respond to common statements from companies on their exposure to the Uyghur Region.

Investors find it difficult to evaluate how companies approach Uyghur forced labour during engagement processes. This is partly because many responses that would typically indicate responsible business conduct in the context of privately-imposed forced labour (e.g. on-the-ground engagement with suppliers and remediation) do not apply to the Uyghur Region.

"We struggle to evaluate company responses which demonstrate their knowledge and execution of responsible conduct in this context"

To address this issue, this section provides investors with accurate responses to some of the frequent responses given by companies. As well as shaping future engagement, this information should help investors distinguish between companies that are actively seeking to implement responsible practices and those that are shirking accountability. If companies double down on inaccurate responses, or continue to evade the questions asked, investors should deduce that the company is not adequately managing risk and should consider escalation or divestment [see following section].

"WE HAVE NO CONNECTION TO THE UYGHUR REGION/ GOVERNMENT-LABOUR TRANSFERS."

During dialogue with China-based companies/suppliers, investors/investee companies should be concerned by references to "training" pay schemes or schemes in which the recruitment, contracting and payment of workers is not done by the company or involves a third party. In addition, any suggestion that the company exerts control over its worker could be identified by references to:

- segregated housing
- special security apparatuses applied to particular communities
- ideological training
- restrictions on prayer and dress
- segregation of Muslim workers
- a lack of culturally appropriate holiday considerations
- controls on non-work time.

"WE'VE CONDUCTED AN AUDIT OF OUR FACILITIES AND FOUND NO EVIDENCE OF FORCED LABOUR."

Auditing is not sufficient to ensure that products coming from the Uyghur Region are free from forced labour because auditors are not allowed free and unfettered access to facilities in the Region, much less to workers. Affected workers are at risk of arbitrary detention if they talk to auditors (or other outsiders) about their working conditions or contradict the employer / government position (as evidenced by, for example, the Wall Street Journal). This repressive environment prevents auditors from obtaining accurate information on labour standards in the Region.

In response to a recent investigation on Uyghur forced labour, the global company Sedex, which provides a widely used audit methodology, stated that it "may be difficult and risky for auditors themselves to explicitly recognise state-imposed forced labour" that "may have been covered up".

Auditors and investigators are also at risk of detention and intimidation if they attempt to investigate Uyghur forced labour. **For these reasons, a number of auditors publicly announced in 2020 that they are no longer conducting audits in the Uyghur Region.** Since then, intimidation has continued, and under current Chinese government policies, basic due diligence is being treated as "espionage" anywhere in China. In 2022 and 2023, auditors and consultants operating in all parts of China have been targeted (see reporting by the WSJ and the Sourcing Journal).

Any auditor that purports to be able to conduct a social audit in the Uyghur Region or who suggests that a state-sponsored labour transfer within the Uyghur Region is simply part of a standard government assistance programme is revealing that they lack adequate knowledge of the situation in the Uyghur Region to provide reliable services.

If a company deems that it cannot conduct any form of legitimate due diligence, based on the need to protect its own staff or auditors, an ongoing business relationship may no longer be tenable.

"UYGHUR FORCED LABOUR IS A POLITICAL ISSUE—PART OF THE GEOPOLITICAL TENSIONS BETWEEN THE USA AND CHINA. WE SHOULD NOT BE PRESSURED BY THE USA."

Uyghur forced labour is a human rights issue, which carries extremely high financial, legislative and ethical risks. Irrespective of how the issue gets politicised by political factions in the US and China, forced labour is a violation of international human rights and fundamental labour rights conventions. The Chinese government's forced labour programmes must be viewed as a method of systematic state oppression of the Uyghur people. They are part of broader efforts by the Chinese government to repress and eliminate Uyghur culture, as recognised by UN experts (see Section 3.1 What is happening in the Uyghur Region?). On this basis, the global Uyghur community, many of whom have friends and family members among the detainees or who are otherwise missing, call for full disengagement from the Region by all corporate actors.

Depending on who they are talking to, investors may also want to focus on the legislative risks (for example, seizure of imports at US borders) posed by Uyghur forced labour, when faced with this argument.

"MOVING SUPPLY CHAINS TAKES TIME."

Solar companies put on notice for exposure to Uyghur forced labour by the "In Broad Daylight" report released in 2020 have had three years to exit the Uyghur Region. While many solar companies claimed that the timeframe proposed by advocates was unrealistic, the industry's response to the UFLPA proved that expedited supply chain diversification is indeed possible. SHU's Over-Exposed report found that many companies have bifurcated their supply chains and a few have even managed to stop sourcing from the Uyghur Region entirely (NB: many of these companies have failed to provide verified evidence of this). It is critical to note that, while bifurcation does demonstrate the impact of the UFLPA and the speed with which companies can respond, it does not necessarily demonstrate substantive progress (see also Section 5 on the problem of bifurcation).

It is important to remember that international green technology supply chains have only been so deeply entrenched in the Uyghur Region for around a decade. Through sustained efforts to exit the Region and diversify supply chains, financial and political actors can ensure these are not intractable connections.

"OUR COMPANY/SUPPLIER HAS BEEN VERIFIED BY AN INDUSTRY-LED INITIATIVE"

Recent industry-led initiatives promote protocols, codes of conduct and assurance/certification schemes for the responsible and sustainable production of green technology. However, thus far these schemes have avoided acknowledging the crisis in the Uyghur Region. Notable examples include:

- The USA's Supply Chain Traceability Protocol, which fails to mention Uyghur forced labour, let alone codify any action to mitigate the sector's exposure, despite the industry body's purported opposition to Uyghur forced labour. The lack of specificity on Uyghur forced labour in the protocol means it cannot effectively shape good practice in the industry. In fact, following the passage of the UFLPA, the Solar Energy Industries Association (SEIA) CEO released a statement criticising the legislation for "hindering" the solar industry with "unnecessary supply bottlenecks and trade restrictions", disregarding the importance of building sustainable supply chains and reinforcing the silo between human rights and climate impacts.
- Solar Power Europe and Solar Energy UK's joint Solar Steward Initiative Standard, which is designed to "enhance end-to-end transparency, sustainability, and ESG performance across the solar supply chain", but similarly fails to address the industry's exposure to Uyghur forced labour. The Initiative focuses on audits and traceability but does not explain how its approach will tackle the crisis of Uyghur forced labour in the solar industry. Given the specific challenges of tackling Uyghur forced labour—due to the impossibility of conducting due diligence on the ground—this lack of clarity is concerning and calls into question whether the initiative is robust enough to address Uyghur forced labour.
- There has been scant response from leading EV industry bodies on the industry's exposure to Uyghur forced labour. This silence indicates an industry-wide reluctance to take accountability for the sector's role in human rights abuses and failure to codify action on Uyghur forced labour.

None of these initiatives are able to conduct audits in the Uyghur Region, ensure full supply chain traceability or credibly certify compliance with human rights standards while operating in the Uyghur Region, where due diligence is treated as 'espionage'. Further, they do not promote or take credible steps to identify Uyghur forced labour outside the Region.

Investors should approach these emerging industry standards with a degree of caution. They should conduct their own due diligence on each bodies' position, and consult with experts—in particular Uyghur rights' representatives—on their alignment with the industry's proposed standards. They should likewise be wary of allowing certifications to influence investment decisions.

7.3 Practical tips for improving engagement with green technology companies

Listed below are suggestions from investors we spoke to on how to conduct effective engagement with companies on human rights violations in the Uyghur Region based on their own experiences.

When engaging with Chinese companies:

- Approach conversations from a business rather than a political, ethical or moral standpoint, focusing on material financial risks and client/customer interests.
- Consider having an investor staff member based outside of China lead engagement efforts to avoid regulatory and other challenges, even if you have local staff in China.
- Ask companies to bring staff members to discussions who understand and lead on supply chain and sourcing audit issues.

When engaging with non-Chinese companies:

- Approach companies with documented facts on both the forced labour risk and the financial cost of continued business with the Uyghur Region, including legal, reputational, financial, and auditing/due diligence risks.
- Depoliticise the issue: engagement on sourcing from the Uyghur Region should address both the financial and reputational risks that could impact customer/client demand. Encourage direct supplier relationships to improve monitoring and increase leverage, as well as vertical integration along the supply chain.
- Emphasise that there are also environmental concerns relevant to the Uyghur Region, such as the use of coal, as described above.
- Consider inviting a survivor of the abuses in the Uyghur Region (or a legitimate representative organisation) to speak at a dialogue session to motivate the leadership team to act.

7.4 Monitoring and escalating engagement

Monitoring

As outlined in the decision tree, investors should urge companies to meet time-bound commitments to shift their sourcing out of the Uyghur Region. In this guidance, we call for immediate or expedited timeframes, which vary depending on the nature of the company's involvement in Uyghur forced labour.

Once appropriate requirements have been set out, investors must closely monitor a company's operations to ensure these requirements are being met. They should:

- Increase their engagement frequency and how often companies are asked to provide progress updates;
- If there are non-conformance concerns, immediately discuss with the company how it plans to address them, without compromising the agreed timeline;
- Initiate a discussion on what remedial actions the company will take, noting that direct remediation is impossible in the case of Uyghur forced labour. Investors can connect companies with Uyghur human rights groups and civil society to further the discussion on remediation. See Section 5.

Escalation

If companies do not meet investors' requirements within the agreed timeframe, or fail to respond adequately to sustained engagement, investors should consider escalation, including increasing their leverage and divesting. Escalation can take the form of public statements (individually or collectively with other investors and rightsholders), filing shareholder resolutions, voting to convey a lack of confidence in the board or in management's actions and, crucially, divestment. As outlined by the OHCHR, all threats of divestment should be credible.

Shareholder resolutions

If companies do not respond to investor outreach for engagement or if dialogue has proven to be ineffective, investors can escalate the engagement by filing a shareholder proposal to be discussed and voted on at the company's annual general meeting (AGM) (where this option is available under securities regulations). Since 2021, a number of shareholder proposals have been filed on Uyghur human rights and forced labour risks. Some of these proposals have been withdrawn following the agreement of concrete next steps to address these risks, while others have gone to a vote.

To illustrate, over a third of Apple's investors voted in favour of a 2022 shareholder proposal on forced labour filed by Eko (formerly SumOfUs). It asked the board to report on the extent to which Apple's policies and procedures effectively protect workers in its supply chain from forced labour. It also required Apple to identify suppliers and sub-suppliers that are at significant risk of forced labour violations. This move followed media reports alleging that at least nine companies in Apple's supply chain participate in Uyghur forced labour programmes, despite Apple's own code of conduct listing forced labour as a violation of its core policies.

8. Collaboration and Collective Leverage

Addressing and ending state-imposed forced labour in green technology industries requires sustained action and collaboration between diverse stakeholders to implement collective and complementary strategies. In addition to their individual engagement efforts, as critical financial and market actors, investors must bring their voice and leverage to joint initiatives. They must work to increase their leverage and devise different types of leverage. They must support collaborative efforts to eradicate forced labour and to develop an enabling environment for people to be able to enjoy decent work. In this environment there must be freedom of association, assembly, and expression, and responsible business conduct.

8.1 Collective investor engagement

An investor group can represent the shared expectations and concerns of a significant group of owners of companies in the solar and EV sectors. Engaging companies collectively through such a group is an effective way to increase leverage.

- Collective investor efforts should intentionally bring together the expertise of both the environmental and social investor stewardship teams to address intersectional risks associated with the transition to a green economy.
- Investors can join ongoing collective investor engagement efforts specifically focused on Uyghur forced labour, such as those coordinated by the Investor Alliance for Human Rights across multiple sectors, including the solar and automotive EV sectors.
- Other collective engagement initiatives addressing human rights risks in the green technology sector include:
  - PRI's Advance Initiative
  - Climate Action 100+
  - Investor Environmental Health Network

Collective investor efforts allow participating investors to pool, share and optimise their internal expertise, research and due diligence findings, helping to ensure they are informed and strategic when engaging with solar and EV companies. With shared resources and strength in numbers, investors are also able to engage with a wider set of companies than they would otherwise have been able to using only their own resources. Collective leverage also increases investors' access to people with specialised expertise, such as a deep understanding of solar or EV supply chains, robust human rights and environmental impact analysis, local language skills or a presence in a particular country.

The Bangladesh Investor Initiative provides a case study of the impact of collective investor engagement. This coalition of 250 institutional investors, representing over $4.5 trillion in assets under management, successfully coordinated a strong corporate response to the Rana Plaza disaster, including participation in the Accord on Fire and Building Safety in Bangladesh.

8.2 Collaborative action with other stakeholders

A core expectation of the UNGPs is for investors to engage impacted stakeholders as part of their ongoing human rights and environmental due diligence. In this case, investors must ensure action on Uyghur forced labour is informed by the lived experiences of those directly affected and by experts and researchers working with the impacted community. Rooting investor engagement in the lived experiences of affected stakeholders increases the strength and legitimacy of issues raised during dialogue.

PARTNERING WITH CIVIL SOCIETY ALLIES

Civil society organisations are at the forefront of tackling human rights issues. The Coalition to End Forced Labour in the Uyghur Region, for example, consists of civil society organisations, Uyghur human rights groups and trade unions, and has been endorsed by over 50 investors. By engaging with the Coalition and/or its members, investors can deepen their understanding of the crisis and gain direct access to impacted communities and other sources that will inform their investment and engagement strategies. This includes updated information on UFLPA enforcement efforts, ESG engagement with the automotive sector, advocacy on global standards and regulatory moves to eradicate Uyghur forced labour and other forms of state-imposed forced labour from supply chains.

COLLABORATION WITH HUMAN RIGHTS BENCHMARK PROVIDERS, RESEARCHERS AND ACADEMICS

Investors want their investment activities and decision making to be supported by credible published data and research. Having research and comparative data relevant to the issue and/or the portfolio company enables meaningful engagement and impactful outcomes. Input from researchers and academics has played a critical role in exposing companies' links to Uyghur forced labour and driving policy change.

ENGAGEMENT WITH ESG DATA PROVIDERS

ESG data has become an increasingly important way for investors to make responsible investment decisions. They use it to select their portfolio holdings and to assess how well companies perform on ESG risks. However, as discussed above, ESG ratings criteria and similar frameworks are far from uniform and fail to align with human rights standards.

As data providers' clients, investors must individually and collectively apply leverage to require data providers to revise their approaches. Data providers should be urged to incorporate comprehensive and robust indicators and methodologies based on international human rights and environmental laws, standards and frameworks, including those already developed and used by human rights and environmental benchmark providers (see previous bullet point). Investors should also require ESG data providers to report on human rights controversies affecting companies. This reporting must include controversies identified in credible academic and human rights research and reports, not just those identified in high-profile media. Any findings must be factored into their data analysis and scoring.

ENGAGEMENT WITH STANDARDS BODIES

Various stakeholders, including companies and national governments, are working to establish ISO standards for lithium extraction. Investors should call for these standards to include social as well as environmental provisions, specifically accounting for forced labour risks.

ENGAGEMENT WITH INDUSTRY BODIES

Particularly in the case of state-imposed forced labour, where rights abuses implicate whole industries or sectors, an industry-wide response is required. Moreover, when dealing with China's economic market power, companies acting alone, in the absence of a collective industry response, become easy targets for retaliation.

Investors can collectively engage with solar and EV industry bodies to inform them of the investment community's concerns, call for improvements and clarify their expectations as owners of companies within the industry. Alternatively, investors could explore the possibility of *joining* an industry body to gain insights into current developments and directly address corporations and other associate members on their expectations as investors.

Equally, investors should encourage industry bodies to engage directly and credibly with representatives of the affected Uyghur community. They should encourage industry bodies to work towards mature industrial relations in these sectors, by engaging with global trade union federations. Although freedom of association and collective bargaining are currently impossible in the Uyghur Region, any discussions on potential alternatives, or sourcing from elsewhere in China, should be rooted in respect for fundamental labour rights through such engagement with trade unions.

ENGAGEMENT WITH STOCK MARKET STAKEHOLDERS

Investors should consider how to engage with or participate in engagement with stock exchanges to incorporate fundamental human rights standards, such as compliance with the core ILO conventions, as a listing requirement. Likewise for stock market index trackers and their index criteria.

The Sustainable Stock Exchanges or SSE initiative provides a global platform for exploring how exchanges can enhance performance on ESG issues and encourage sustainable investment. It encourages collaboration with investors, companies (issuers), regulators, policy makers and relevant international organisations. Investors and other financial actors—such as investment banks and underwriters—can collectively engage with the SSE to advocate for mandatory listing requirements that would exclude companies complicit in abuses in the Uyghur Region from being listed and gaining access to public monies. Similarly, investors, together with other relevant financial actors, should engage with stock market indexes, such as S&P, Russell etc., to establish ESG-based criteria for inclusion in indexes.

ENGAGEMENT WITH POLICY MAKERS

Supporting public policy that tackles systemic risks to human rights, as in the case of state-imposed forced labour, is a critical form of leverage.

In 2023, for example, 88 global institutional investors representing over US$2.44 trillion in assets expressed their support for the European Commission's legislative proposal on prohibiting products made with forced labour from entering the EU. Investors have also engaged directly with Members of the European Parliament on this proposal, including to ensure that any legislation covers systematic state-sponsored forced labour.

Investors can also advocate with governments on:

- The integration of social impacts into environmental and taxonomy regulations. For example, the Interfaith Center on Corporate Responsibility (a coalition of over 300 institutional investors) made a submission to the US Securities & Exchange Commission relating to Enhanced Climate Related Disclosures to advocate for the inclusion of disclosures related to workers' rights and other human rights considerations.
- The creation of decent and quality jobs in accordance with nationally defined development priorities, as required by the Paris Agreement's just transition imperative.
- The need for government support to incentivise the scaling up of ethical and sustainable alternative sources of inputs for green technology supply chains.

On this last point, market shifts in critical mineral supply chains are accelerating as countries continue to set net zero goals and look to reduce energy security risks by diversifying imports and reducing reliance on a single country/market for their energy supply. Many governments have published, or are consulting on, strategies relating to critical minerals. The development of these strategies presents a clear opportunity to engage with governments to call for internationally coordinated public policies that support solar and lithium-ion battery supply chain diversification, rooted in respect for labour rights, human rights and environmental standards. See the next section on alternatives.

See our policy brief for recommendations for governments.

9. Alternatives

"It would be helpful if there was information on alternatives or different approaches to tackling this challenge, because sometimes the issue is so difficult that people look the other way. Anything that can point towards an alternative is useful."

During the consultations, several investors shared that they do not feel they can invest in alternatives to Uyghur-Region solar and lithium-ion battery manufacturing or processing operations, until such alternatives offer a reliable return on investment. However, others expressed that investors need to better understand how supply chains can shift and are shifting. They would then be better equipped to promote diversification and challenge the wholesale acceptance of exposure to forced labour.

Understanding the potential for ethical and sustainable alternatives that uphold the standards of decent work will support investors' internal engagement and break down the fatalistic belief that Uyghur Region investments—reliant on egregious human rights abuses—are the sole choice for the future of the planet. It will also support external engagement with companies on their sourcing decisions, particularly when it comes to companies at later stages of the supply chain, such as automobile manufacturers and solar module installers.

9.1 New frontiers for green tech investment

The Uyghur Region's dominance of solar supply chain manufacturing has undercut pricing, preventing competitive alternative technologies and industrial hubs from emerging. However, a growing awareness of the industry's implication in human rights violations among corporations and governments could drive solar market diversification. The success of diversification efforts rests on significant and coordinated investment from both governments and financial institutions.

Diversified investment is also crucial to the future of the EV industry. The Uyghur Region does not currently dominate the mining or processing of lithium, nickel or other inputs required for EV production. However, the industry is changing rapidly, due to deliberate action by the Chinese government to consolidate such production in the Region. Investors have an opportunity to prevent the mistakes of the past (and the solar industry). They can forge a new path to a just transition by investing in EV companies committed to supply chains that put providing decent work and upholding environmental standards at their core.

According to the IEA, the development of less energy-intensive technologies and an uptick in renewable energy use within manufacturing in the solar industry could also offer prime opportunities for "the sector to further decrease its carbon footprint".

ALTERNATIVE INVESTMENT STRATEGIES:

While the majority of investment capital is held in public markets, the climate crisis and the urgent need for green energy solutions should motivate investors to invest in companies looking at new ways to advance the green energy transition. This could entail directing investment capital into start-ups through venture capital and/or private equity related to new green energy technologies. It could include energy infrastructure and real estate investments, as well as commodities. Although such alternative investments might initially deliver less stable financial returns, investors should focus on sustained long-term returns. To this end, they could invest in funds targeting the development of alternative solutions. Investors should continually reassess such alternatives to ensure they continue to support sustainable, equitable and resilient future energy solutions. Examples of alternatives are provided below.

ALTERNATIVE TECHNOLOGIES

Though the Uyghur Region remains the dominant supplier for polysilicon and metallurgical-grade silicon, some solar module technologies do not rely on polysilicon at all. Companies that use cadmium telluride thin-film PV technology (which also, coincidentally have lower life-cycle carbon emissions) are not exposed to the Uyghur Region.

EMERGING TECHNOLOGIES

Research has also looked at innovative technologies that could shift the solar market. These technologies include perovskites, fluidised bed reactors and upgraded metallurgical-grade silicon, epitaxial wafer production, a process that eliminates some stages of module production, and the potential for metallurgical-grade silicon and polysilicon producers that currently serve the semiconductor chip industry to expand to the solar sector. Views differ on the potential of these alternatives.[10] The commercial viability of perovskites, for example, remains to be proven; however, analysts have claimed that, with greater research and development support, the UK's leading role in perovskite solar cell technology has potential to grow this technology as an alternative.

In the EV sector, several emerging alternative technologies are challenging the dominance of lithium-ion batteries, including sodium-ion batteries and solid-state batteries. Investors and companies should investigate whether such alternatives will also be reliant on the Uyghur Region, and how they perform on broader labour, human rights and environmental standards, carbon emissions, price, efficacy and safety.

ALTERNATIVE GEOGRAPHIES

New large-scale solar production projects in northwest and southeast USA, Norway, and Malaysia (Borneo) are co-sited with clean electricity. Projects in Malaysia and India by South Korean and Indian companies, respectively, plan to expand polysilicon production.[11] Investing in mining, processing and manufacturing projects globally helps to diversify supply chains. Furthermore, in the solar industry, diversification could offer opportunities to reduce the carbon emissions of manufacturing. The IEA has estimated that roughly 30 countries offer competitive industrial electricity prices for new polysilicon and wafer production, while also offering low manufacturing emissions intensities. (NB: some of these countries use nuclear power in their energy mix).[12]

On the EV side, many companies based outside China are developing their own advanced lithium-ion battery technology to challenge specific Chinese companies' monopolies over the industry. While battery makers across the globe are catching up with the Chinese manufacturers in terms of technology, experts predict they will not be able to compete on price in the near future.

ALTERNATIVE CULTURE

An exponential rise in demand for lithium-ion batteries is anticipated to pose a huge risk of harm for the communities where their component minerals lithium and nickel are extracted (often for export to the Uyghur Region). Increasing demand is also expected to generate huge amounts of waste. Although EVs will undoubtedly play a role in reducing global fossil fuel emissions, human rights and environmental organisations have stated that efforts should focus on shifting away from individual cars, scaling up sustainable travel and improving planning for public transport. Investors can support this transition through political advocacy and alternative investment strategies.

It is beyond the scope of this guidance to analyse the potential alternatives presented above or to endorse any specific alternative company, technology or sourcing location for materials. Nonetheless, investors can and should engage with industry and market experts in both industries to understand the growing market of potential alternative manufacturing and technology options and to consider such alternative investment opportunities. Investors should press investee companies to do the same, i.e. explore manufacturing and technology alternatives that eliminate their reliance on Uyghur forced labour.

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10. Researchers acknowledge that there are currently challenges with these options – fluidized bed reactors produce lower quality silicon and investment costs are higher, and quality challenges remain with upgraded metallurgical-grade silicon.

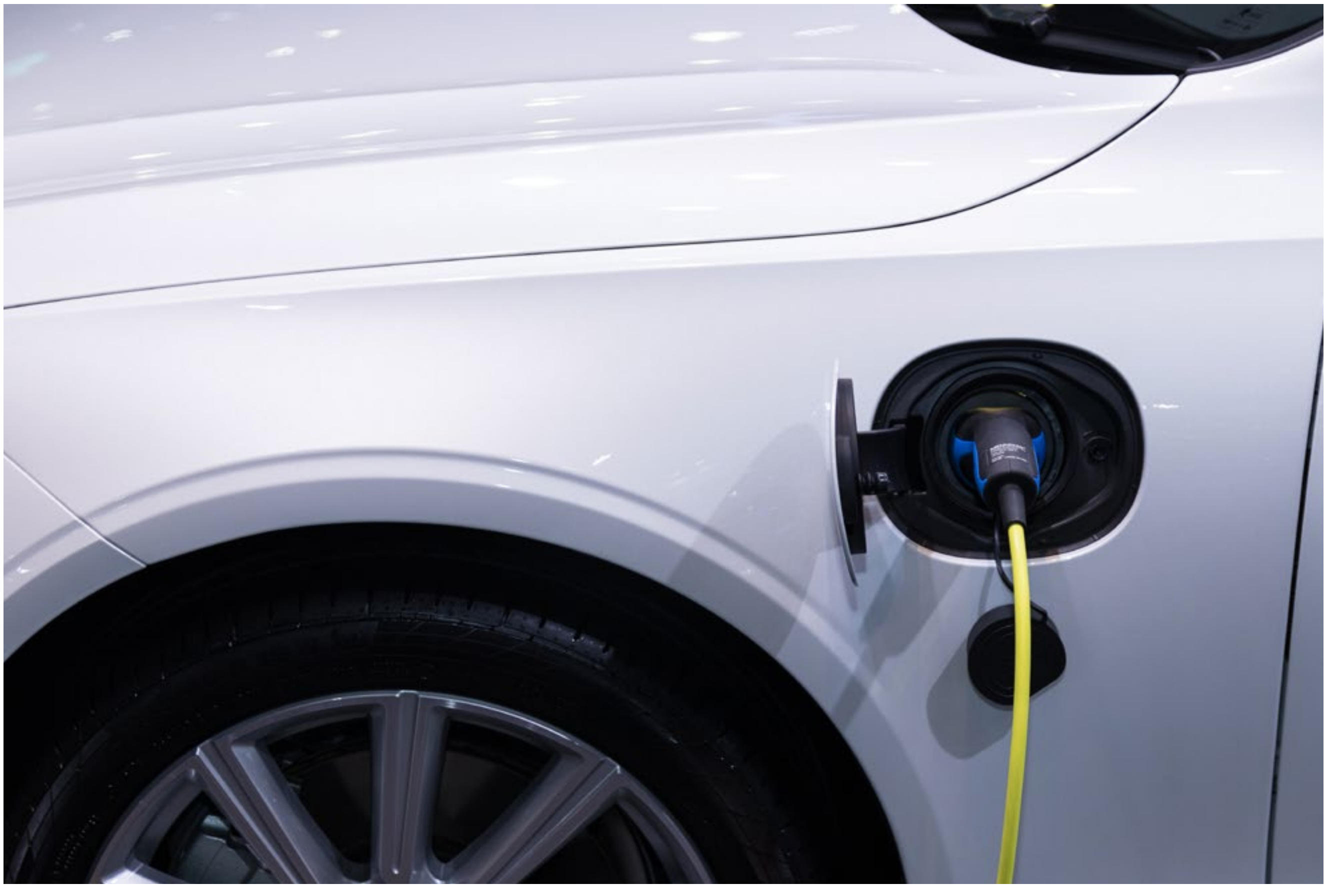
11. Note that the IEA states that "India's solar PV ambitions for both demand and supply, supported by concrete policies, are critical for solar PV supply chain diversification and resiliency. In the short term, however, manufacturing the entire solar PV supply chain in India would be almost 15% more emissions-intensive than in China. Therefore, a compromise between total or partial self-sufficiency and lower emissions will need to be reached while high-emissions-intensity countries work towards decarbonising their domestic power generation", see here.

12. The IEA includes hydropower and gas, both of which have a carbon footprint, among alternatives that could reduce the carbon emissions of manufacturing at this stage and at least one of the 30 countries uses nuclear power in its energy mix. The IEA states that: "The greatest number is in sub-Saharan Africa and Eurasia, where several countries have low-carbon shares exceeding 60% thanks to relatively high hydropower use. Hydropower could be key to lower emissions from wafer and polysilicon manufacturing because it offers affordable, carbon-free electricity to manufacture these products competitively. (…) Within China, however, hydropower also makes Qinghai and Yunnan provinces economically attractive sites with low-carbon intensities. (…) In Eurasia, hydropower offers clean, affordable electricity (…). A number of countries in the Middle East and North Africa, where gas makes up a large share of electricity production, also have affordable electricity tariffs for polysilicon and wafer production diversification." However, consideration must also be given to ensure that shifting polysilicon production to these countries would not overburden their energy infrastructure or encourage hydropower growth at the expense of displacing local populations and degrading water sources. It is critical that production of green technology inputs proceeds not only without forced labour, but also with free, prior, and informed consent (FPIC) from the communities their operations may impact. Please note that Ethiopia (included in the sub-Saharan Africa group of countries mentioned above) also has nuclear in its energy mix.

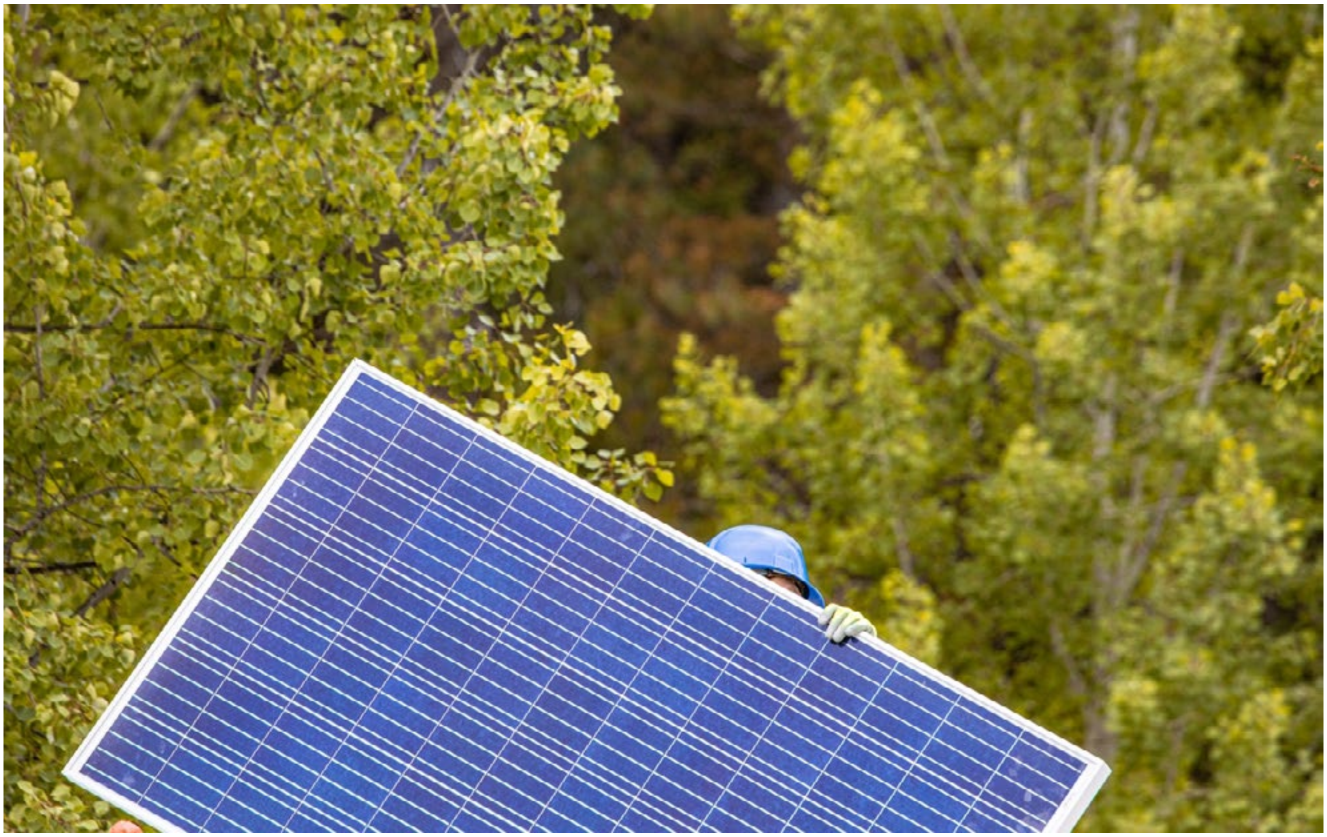
These efforts must focus on alternatives with strong labour rights, human rights and environmental standards, and lower carbon emissions than current production methods. To achieve these goals, investors must ensure that the development of alternative supply chains is rooted in 'tripartite plus' social dialogue, which includes trade unions, governments and employers. In addition, any alternatives developed should protect and respect the rights and interests of other relevant stakeholders, such as the right to free, prior and informed consent of indigenous peoples.

Helpful Resources

- Breakthrough Institute Paper on alternatives
- IndustriALL's just transition work
- International Trade Union Confederation (ITUC) just transition work
- Just energy transition hub from the Business and Human Rights Resource Centre, primarily focused on the rights of indigenous peoples and human and land rights defenders.
- The University of Nottingham Rights Lab, The Energy of Freedom



10. Conclusion



Tackling the green technology industry's exposure to Uyghur forced labour is an essential step towards building a more equitable world, that protects both the planet and the rights of all its inhabitants. As stewards of economic activity, investors have a key role to play in redirecting resources into low-carbon investments that promote shared prosperity, inclusive development and long-term sustainability.

The approach laid out in this resource should help investors to operationalise international business and human rights standards throughout their investment decision making processes, primarily through forensic due diligence and principled risk management. While the application of this model will require a certain degree of creative energy and collective action from the investor community, it also presents the sector with a host of opportunities to demonstrate leadership on two of the world's most pressing crises.

Investors have an opportunity to address and pre-empt future disruption to the green technology industry, resulting from regulatory challenges, litigation or operational risks. In doing so, not only will they protect Uyghur people from state-imposed forced labour, but they will also shore up the reliability of their returns. If operationalised effectively, this approach could drive the decarbonisation of renewable manufacturing, the resilience of energy supply chains and the sustainable development of some of the world's most rapidly expanding industries.

Bold leadership from the financial sector will be essential to building a better green economy; one that is guided by principles of inclusivity, sustainability and respect for human rights across the globe.