MODERN SLAVERY & HUMAN RIGHTS | POLICY & EVIDENCE CENTRE

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# Respecting Rights in Renewable Energy

## Addressing forced labour of Uyghurs and other Muslim and Turkic-majority peoples in the production of green technology

### Research Summary

January 2024

Authors: **Chloe Cranston, Anita Dorett, Edie Martin, Professor Laura T. Murphy and a team of anonymous researchers**

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Research by:

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This is a summary of the research project carried out by a collaboration between Anti-Slavery International, Sheffield Hallam University and Investor Alliance for Human Rights.

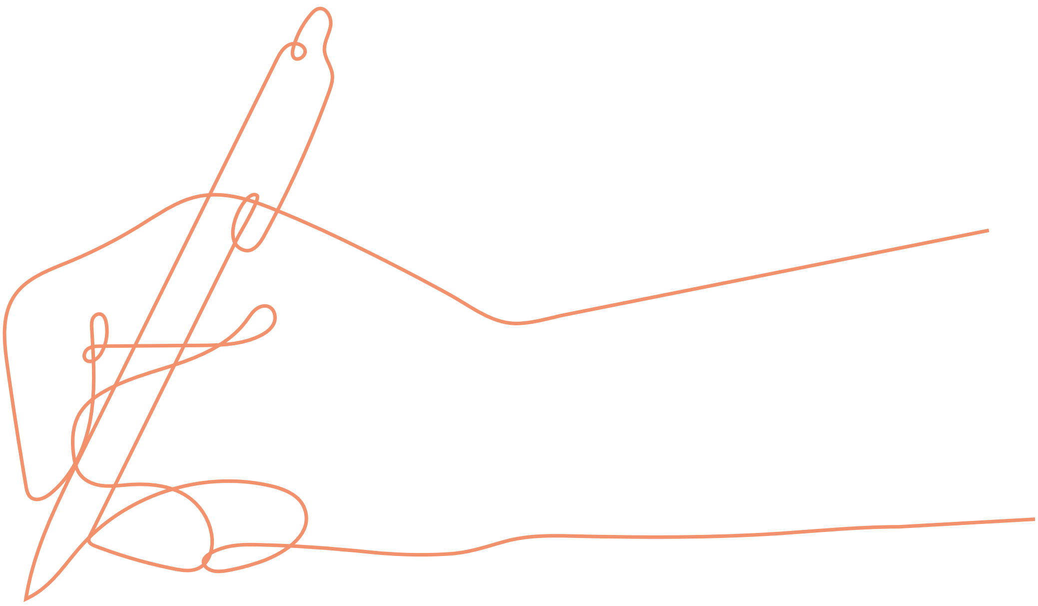
This summary is published in parallel with detailed guidance for investors on Uyghur forced labour in green technology, and a policy brief to the UK government. Another output from this project, the report entitled "*Over exposed: Uyghur Region Exposure Assessment for Solar Industry Sourcing*", was published in August 2023 by Sheffield Hallam University.

All the outputs can be accessed on the Modern Slavery PEC website at modernslaverypec.org/resources/Uyghur-forced-labour-green-technology.

The project was funded through an open call for proposals by the Modern Slavery and Human Rights Policy and Evidence Centre (Modern Slavery PEC), which in turn is funded and supported by the UK Arts and Humanities Research Council (AHRC).

The Modern Slavery PEC has actively supported the production of this Research Summary. However, the views expressed in this summary and the full report are those of the authors and not necessarily of the Modern Slavery PEC.

Laura Murphy was recently a Research Professor with Sheffield Hallam University. She is currently serving as an official with the Department of Homeland Security. This guidance was completed prior to her current government service and should not be attributed to DHS or the U.S. Government.



# Key findings

This research examines approaches to addressing state-imposed forced labour of Uyghurs and other Turkic and Muslim-majority people in the Xinjiang Uyghur Autonomous Region (Uyghur Region), with a focus on solar and electric vehicle battery supply chains. It aims to help investment professionals better understand and address the risk of exposure to forced labour in their green technology holdings. The research also provides supplementary recommendations for how policy makers can facilitate meaningful action from both the business and investment community.

## Key findings include:

1. The vast majority of solar modules produced globally continue to have exposure to the Uyghur Region; this risk increases significantly when companies operate in China. Despite global attention on the issue of Uyghur forced labour, information regarding solar industry sourcing is becoming less transparent over time.

2. Investors' attempts at due diligence and responsible stewardship on the issue of Uyghur forced labour in green technology supply chains are stymied by a variety of interlocking factors, including the restrictive legal and political environment in China leading to opaque supply chains.

3. Investment professionals had a limited understanding of how the distinctive context of state-imposed forced labour in the Uyghur Region – including the inability to conduct human rights due diligence on the ground and the impossibility of direct remediation – necessitates alternative approaches to risk management.

4. Outside of China, governments have not introduced sufficient financial incentives and regulatory measures on businesses and investors to mandate or incentivise them to limit their exposure to the Uyghur Region. This has resulted in investors continuing to invest or hold investment in implicated solar and electric vehicle businesses, and not considering divestment options. Investors noted concrete measures from regulatory bodies to address Uyghur forced labour risks, and from ESG data providers to identify such risks within relevant companies and sectors, would help shift the landscape of green technology investment and procurement.

5. Despite a clear need for industry innovation and supply chain diversification, China's dominance of green technology supply chains and a perceived lack of emerging alternatives has bred fatalism within both the business and investor ecosystem. The conflict between climate and human rights commitments has led investors to feel they have 'no choice' but to invest in companies sourcing or connected to the Region, despite the egregious human rights harm.

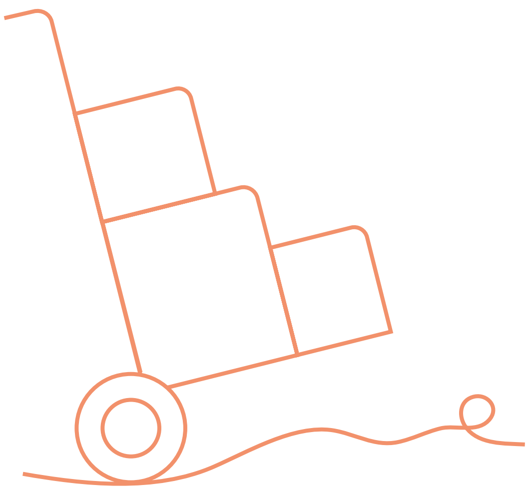
# Background

The urgent need for a transition to clean energy has rapidly accelerated the growth of the solar and electric vehicle (EV) industries over the past decade. This industrial boom is heavily reliant on the Xinjiang Uyghur Autonomous Region (Uyghur Region), northwest China, as a hub for either the quarrying, processing, refining, manufacturing and/or export of materials and components for green technology supply chains. In the Region, the Chinese Government is currently subjecting Uyghurs and other Turkic and Muslim-majority peoples to an unprecedented system of state-imposed forced labour. In addition to exposure to egregious human rights violations, the Region's green technology industry is heavily reliant on coal-based energy.

The Chinese state and Chinese businesses' mutual investment in the continuation of forced labour programmes restricts all credible on-the-ground due diligence and remediation of impacted stakeholders. The conditions perpetuated by the system of state-imposed forced labour present distinct risks for investors and other economic actors with holdings in the green technology sector and necessitate tailored approaches to risk management including divestment.

As part of this research, the authors developed 'Investor Guidance', which provides investment professionals with the tools to identify, exclude or engage businesses linked to human rights violations against the Uyghur people from their green energy portfolios. This Guidance also explores how investors can re-channel investments into companies which champion sustainability, innovation, and supply chain resilience.

A coordinated and comprehensive response from governments and international institutions will be critical to helping investors and industries operationalise the changes necessary to shift the landscape of green energy production. As such, the research team has also published a policy brief on Uyghur forced labour in renewables and green technologies. Although targeted to the UK Government, this policy brief includes recommendations which should also be applied by other governments.



# Methodology

This research was conducted between March and September 2023. In the first phase of the project, the team's researchers from Sheffield Hallam University reviewed publicly available data, including corporate disclosures and shipping records, to map 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 in the USA. The research, published separately, revealed that a number of the world's largest solar manufacturers continue to source inputs which are at risk of exposure to Uyghur forced labour.

In the second phase of the project, the authors conducted one-on-one interviews with investment professionals regarding their approaches to addressing Uyghur forced labour in their green energy portfolios. In total, the team interviewed 17 investors operating in eight countries, affiliated with a broad range of investors from pension funds, private equity to global fund managers. The investors they engaged with ranged from those directly invested into Chinese green technology companies to those investing further up the supply chain (i.e. in companies that source from Chinese green technology companies). Generally, these investors were already considered 'progressive' on human rights issues, which may have impacted our findings.

Once researchers reviewed the findings from our preliminary interviews, they held a two-day intensive in-person workshop with a smaller group of investors together with human rights researchers and civil society experts to explore issues raised and workshop potential solutions. The nine investor workshop participants operated in the USA, the UK and Europe, and worked for some of the world's largest asset management firms, a renewable energy development firm, pension funds and faith-based ethical investment firms. All data collected during the interviews and the workshop was anonymised.

After the team collected the necessary data, the preliminary interview and workshop data was reviewed and thematically analysed by the report's co-authors. This analysis was presented to an advisory committee, made up of industry experts and representatives of trade unions, civil society organisations and Uyghur advocacy groups for validation and supplementary expertise. Through expert insight, application of authoritative international business standards,[1] and triangulation with findings from the supply chains mapping exercise and other relevant reports, the authors developed a series of tools investors can use to protect their portfolios from exposure to Uyghur forced labour and shift the needle on action. This has been published alongside this Research Summary as Investor Guidance.

1. These standards include UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and the UN Global Compact.

# Key findings

## 1. The vast majority of solar modules produced globally continue to have exposure to the Uyghur Region.

Sheffield Hallam University's (SHU) updated mapping of solar supply chains, published separately in a report entitled "Over-Exposed", found that a majority of the world's solar modules continue to be exposed to Uyghur forced labour. The risk of such exposure increases significantly when companies operate in China. The research also indicated that, as a result of global attention on the issue of Uyghur forced labour, information regarding solar industry sourcing is becoming less transparent over time, likely due to intentional concealment. This activity is thwarting the world's ability to source responsibly. In light of these findings, SHU's report provides a new model of assessment for the solar industry to identify exposure to state-imposed forced labour in the Uyghur Region.

**The following findings summarise feedback from the interviews and the workshop with investment professionals on their approaches to managing exposure to Uyghur forced labour within their green technology holdings.**

## 2. Investors' attempts at due diligence and responsible stewardship on the issue of Uyghur forced labour in green technology supply chains are stymied by increasingly opaque supply chains, due to restrictive Chinese regulation, and a reliance on corporate self-disclosure.

The Chinese government's increasingly restrictive legal and political environment severely limits both supply chain transparency and the productivity of engagement with green technology suppliers. It was noted that companies based outside of China have a track record of blaming due diligence failures on the opacity of China-based supply chains and accepting information provided by suppliers with scant due diligence or verification. This constraining environment reduces the impact of investor engagement with green technology companies operating in, or with linkages to, the Region. This situation calls into question the effectiveness and viability of continuing engagement as a solution to addressing Uyghur forced labour.

## 3. Investment professionals had a limited understanding of how the distinctive context of state-imposed forced labour in the Uyghur Region – including the inability to conduct human rights due diligence on the ground and the impossibility of direct remediation – necessitates alternative approaches to risk management.

Traditional responsible stewardship tools are not equipped to address the risks of state-imposed forced labour, as they presume an investor has capacity to influence a company's behaviour. In the Uyghur Region, the state's role in imposing and sponsoring the forced labour practices significantly reduces investor leverage. In this context, given the severity of the harm, international human rights guidelines indicate that divestment from companies operating in the Region is the sole responsible approach to risk management (evidence of this is set out in detail in the Investor Guidance). Investors' lack of technical understanding on the irremediability of state-imposed Uyghur forced labour leaves them unequipped to make responsible investment decisions.

As evidence of this, only a small minority of the interviewed investment firms had committed to divesting from Uyghur Region-based holdings. Many investors expressed that it was critical for them to remain invested in green energy industries, even if this meant staying invested in the Region and attempting to use their leverage to improve company conduct. Although participants regarded divestment as a legitimate "last resort", the interviewees didn't provide a clear picture of what factors would trigger strategic divestment, and in what timeline.

## 4. Regulators and data platforms are failing to provide the frameworks and data that could enable meaningful action on Uyghur forced labour exposure.

Most positive business responses to engagement – that resulted in companies cutting ties with suppliers directly involved in Uyghur forced labour – were taken in response to risks flagged by ESG data providers, or regulatory measures. This indicates that recognition of the risk by external stakeholders, such as ESG data providers or policy makers, is a primary stimulus for company action, regardless of the scale or severity of the harm.

However, investor interviewees noted there is a lack of material incentive for firms to limit their exposure to the Uyghur Region. For this reason, many conveyed that concrete measures from regulatory bodies and more robust identification and evaluation of Uyghur forced labour risks in companies by ESG data providers would help shift the landscape of green technology investment and procurement:

- **ESG data providers**
  - ESG data providers are failing to flag companies' exposure to the Region. ESG data and rankings fail to incorporate academic research or perspectives from impacted stakeholders within its analysis. Despite a growing awareness

of these inconsistencies, interview participants reported that investor firms remain heavily reliant on data providers' rankings to inform investment decisions. This omission is affecting divestment considerations in alignment with global standards and exposing investors to legal and material risks.

- **Governments and regulatory bodies**
  - Many research participants reported that current global regulations incentivising investments into green energy (e.g., the EU Taxonomy), rarely include requirements on human rights standards. This indirectly encourages investors and companies to ignore social impact concerns within the green energy sector in pursuit of bolstering their renewable portfolios. The interviews also revealed that environmental regulation regularly fails to capture the climate harms associated with manufacturing in the Uyghur Region, by not explicitly requiring consideration of potential carbon footprints in green energy manufacturing, especially in lower tiers of production.
  - Global modern slavery regulation, which fails to adequately compel companies to remove products made with the use of forced labour from their supply chains, exacerbates this issue. The notable exception to this is the US Uyghur Forced Labor Prevention Act (UFLPA), which applies a rebuttable presumption that any product mined, produced or manufactured, wholly or in part, in the Uyghur Region is tainted by forced labour and consequently cannot be imported into the US. Many of the investors we approached noted that the UFLPA was the primary incentive for meaningful investor action. Companies operating in jurisdictions without import controls or comparable legislation have little material incentive to undertake the labour-intensive work of supply chain tracing and thus are less proactive in addressing portfolio exposure.

## 5. A perceived lack of alternatives to green technology produced with exposure to the Uyghur Region.

China's dominance of the global market for the processing and manufacturing of green technology inputs has reduced the competitiveness of potential alternative markets over the course of the past decade. As a result, many companies are now invested in existing technologies and business relationships embedded in the Uyghur Region that guarantee low costs and steady profit margins. Investor interviewees, especially low-risk investors such as pension funds, reported that they are unlikely to direct funds towards alternative technologies or innovative green energy solutions that do not offer the same level of efficiency, affordability or guaranteed return on investment.

Despite a clear need for industry innovation and supply chain diversification, our participants stated that China's dominance of green technology supply chains and the perceived lack of emerging alternatives has bred apathy within both the business and investor ecosystem. The growth and expansion of alternative technologies and manufacturing hubs will be essential to combatting this inertia.

# Key recommendations

## For the UK Government

For the full detail on and justification for the below recommendations for the UK Government, see our Policy Brief. These recommendations are directed towards the Foreign, Commonwealth and Development Office (FCDO), the Department for Business and Trade (DBT), and the Department for Energy Security & Net Zero (DESNZ), in particular.

### 1. Elevate the issue in relevant international forums and prioritise international collaboration on solutions to reduce reliance on the Uyghur Region for the solar and EV-battery sectors.

International collaboration is critical to avoiding protectionist policy solutions and ensuring that all markets have equal access to affordable renewable energy options with high labour, human rights and environmental standards. An integrated, global approach to the crisis of forced labour within green technology supply chains will enable a truly just transition, in accordance with Net Zero commitments.

**The UK Government should:**

a. Take a global leadership role by raising the crisis of Uyghur forced labour in the green technology industry on the agenda of international forums, including the UN, the G7, the Five Eyes, and the Commonwealth, among others, to promote international collaboration on solutions to reduce reliance on the Uyghur Region for the solar and EV-battery sectors.

b. Engage with partner G7 and other countries to urgently convene experts in key sectors to support solutions-orientated approaches to reducing reliance on the Uyghur Region.

c. At a national level, create and co-chair a working-level cross-Whitehall taskforce on the issue of Uyghur forced labour in green technologies to oversee the design and implementation of recommended policy responses. Although existing taskforces partially cover this issue, the specific crisis of Uyghur forced labour in green technology poses unique policy considerations, which requires a cross-industry approach and reconfiguration in policies to avoid silos between climate and human rights responses.

d. Integrate the crisis of Uyghur forced labour in the solar and EV-battery supply chains into the activities of all UK policy and working groups on the growth of renewable energy such as the existing Critical Minerals Taskforce, the Solar Taskforce, the Decarbonising Transport strategy, and the anticipated UK battery plant strategy.

## 2. Employ domestic, development and trade policy to incentivise investment into alternative sources of supply to the Uyghur Region for green technology inputs, by examining options for funding research, financial subsidies, development finance, and public-private partnerships.

The UK Government should identify and support investment into countries and technologies which can offer alternative sourcing to the Uyghur Region, with high social and environmental standards with low-carbon footprints. As an example, the IEA notes that countries with high hydropower potential could be key to lowering emissions from polysilicon production, citing Angola, Ethiopia, Zambia and Mozambique as countries which "all offer cleaner and less-expensive electricity than is currently being used to produce wafers and polysilicon" in the Uyghur Region.[2]

**The UK Government should:**

a. Evaluate the effectiveness of policy measures introduced by other governments to scale-up domestic production and processing of green technology inputs, such as the EU Net Zero Industry Act, the US Inflation Reduction Act, and the German "Easter Package". This evaluation should consider labour, human rights and environmental standards, and the risks associated with "nationalistic" solutions to the crisis of Uyghur forced labour. Although for the UK, opportunities for the solar industry may be limited, the EV sector is considered to hold more promise (despite a recent stall in investment), if the UK Government provides long-term support to encourage investment in the industry and creates a stable business environment.

b. Examine opportunities to fund research into alternative technologies. The Friedrich Naumann Institute and the China Strategic Risks Institute, for example, recommend that the UK Research and Innovation Fund and its Innovate UK programme should identify and fund projects that will help British firms conduct further research and development into the commercialisation of perovskite solar cells, an alternative technology to silicon-based solar cells.

c. Examine opportunities to enable investment in affordable, rights-respecting alternative technologies and supply chains, through development finance, private-public partnerships, and collaboration with partner countries.

2. (Note that at least one of these countries uses nuclear power in its energy mix, and the inclusion of any one of these countries does convey endorsement of working conditions, respect of human rights, or environmental standards – including given the high human rights abuses associated with hydropower, and the risks of forced displacement of communities. Nonetheless, the IEA assessment does emphasise the potential for government action to examine and identify alternatives to the Uyghur Region.)

## 3. Incorporate representatives of the global Uyghur community, trade unions, indigenous peoples and other civil society in the development of policy and regulatory approaches to address Uyghur forced labour in green technology.

To mitigate the risk of merely shifting the problem whereby other communities' rights are violated in the name of finding alternative sources of supply, relevant stakeholders, including governments, industry associations and businesses (including investors), should include trade unions and representatives of indigenous peoples in discussions and agreements upon the design and implementation of policy in this area.

## 4. Introduce regulatory requirements on investors and businesses which will mandate human rights and environmental due diligence and disclosures on business relationships in and linked to the Uyghur Region, and create a legal imperative to remove Uyghur forced labour from global green technology supply chains.

**The UK Government should:**

a. Introduce a UK Business Human Rights and Environment Act, as proposed by civil society. 39 investors representing over £4.5 trillion in assets under management and advice support this proposed Act.

b. Introduce import controls that ban the import of products made wholly or partially with forced labour, including Uyghur forced labour, into the UK market. Anti-Slavery International will publish a full briefing on the recommended design of this regulation in the UK in early 2024, which will be available here once published.

c. Introduce human rights and environmental criteria to procurement requirements, tender evaluations for solar installations and EV manufacturing and other renewable energy production, and the existing Contract for Differences scheme. This should include requirements to 1) ensure no products, in whole or in part, are made with forced labour, and 2) analyse and provide the embodied carbon footprint.

d. Publish specific guidance for the UK renewable energy industries including solar and EV industries on Uyghur forced labour in their industries, building upon the existing UK guidance on Overseas Business Risk for China, and learning lessons from the US Xinjiang Supply Chain Business Advisory.

### 5. Strengthen and reform sustainable finance regulation, so that such regulation requires an assessment of social impacts in sustainability classifications and improves the quality of information provided by ESG data providers.

**The UK Government should:**

a. When feasible, review the anticipated UK Green Taxonomy and UK Sustainable Disclosure Requirements to incorporate social requirements across all tiers of supply chains. This can help to incentivise meaningful action by the financial sector on the issue of Uyghur forced labour and green technology.

b. Ensure that these regulations require companies to assess the carbon payback / emissions of suppliers and manufacturers at the lowest tiers of the supply chains when determining the sustainability or green credentials of products.

c. Ensure that proposed regulation on the ESG ratings industry not only considers ESG data providers' assessments of environmental sustainability, but also regulates and addresses problems concerning the poor quality of human rights data provided by the industry.

## For investors

**For more detail on recommendations for investors, see our Guidance for Investors.**

### 1. Conduct detailed, desk-based due diligence.

Investors cannot rely solely on ESG data providers, investee engagement or traditional media reporting to protect their portfolios from exposure to Uyghur forced labour. Detailed desk-based due diligence is essential for investment stewardship to align with responsible business standards. Such due diligence enables investors to identify whether their investee companies (or the parent companies, subsidiaries or suppliers of those companies) are either operating in the Uyghur Region or linked to the state-imposed forced labour taking place there.

### 2. Divest from companies operating directly in the Uyghur Region.

The scale, severity and irremediability of the harm associated with state-imposed Uyghur forced labour calls for a tailored approach to divestment, in line with the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises. The Investor Guidance provides a decision tree, which directly addresses the scenarios where engagement is a tenable response and where divestment is necessary, the latter always being the case in terms of direct investment into Uyghur Region-based entities.

Where engagement is recommended as the appropriate response, investors should proceed with a blend of caution and robustness. In facilitation of this, the Guidance incorporates practical tips for improving engagement with green technology companies and key responses to common rebuttals from companies.

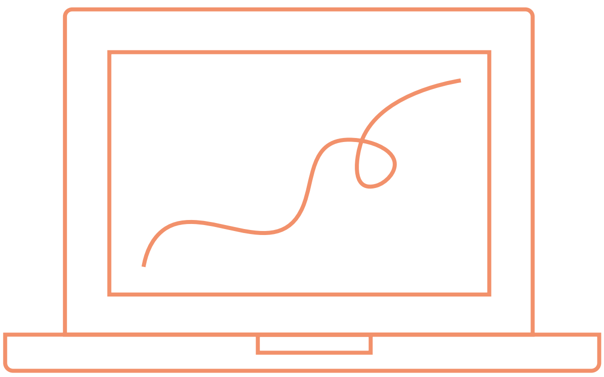
## 3. Advance investments in alternative green energy supply chains and solutions.

Investors should equip themselves with an understanding of current and emerging alternatives to solar and EV assets tainted with Uyghur forced labour. In parallel, investment professionals should convene aligned stakeholders to strategise opportunities for supply chain diversification and advocate for investment into sustainable green technology supply chains. These dual strategies will be critical to the development of cleaner manufacturing hubs and technologies.

## 4. Advocate for industry change through collective leverage.

Although individual divestment will protect individual firms from exposure to the Region, coordinated and collaborative action from the investor community is needed to change to the landscape of green technology supply chains. The research recommends investment professionals engage with the following stakeholders:

- **Investor coalitions** on maximising leverage with companies.
- **Civil society organisations and research institutions** on the pooling of research and data to streamline due diligence procedures.
- **Data providers** on incorporating comprehensive and robust indicators and methodologies that are based on international human rights and environmental laws, standards and frameworks.
- **Industry bodies** on addressing state-imposed Uyghur forced labour within their standards/codes.
- **Policymakers** on regulatory efforts to curb forced labour imports and incentives for supply chain diversification.
- **Stock market stakeholders** on incorporating international human rights standards as a listing requirement or index criteria.



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The Modern Slavery and Human Rights Policy and Evidence Centre is funded and actively supported by the Arts and Humanities Research Council (AHRC), part of UK Research and Innovation (UKRI), from the Strategic Priorities Fund.

Modern Slavery and Human Rights Policy and Evidence Centre
c/o British Institute of International and Comparative Law
Charles Clore House, 17 Russell Square, London, WC1B 5JP

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Registered Charity No. 209425

office@modernslaverypec.org

www.modernslaverypec.org