

Why investors should engage automotive companies on the impacts of their supply chains: **Risks and Opportunities**



Lead the Charge

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Executive Summary

The global automotive industry is undergoing a profound transformation as it shifts from internal combustion engine (ICE) to electric vehicles (EVs). This transition is not only transforming the cars we drive, but is also propelling a far-reaching overhaul of automotive supply chains. As automakers work to build out new supply chains for EVs, they face a range of ESG risks and opportunities that will have significant implications for these companies and the value they create for shareholders.

The supply chains of automotive companies can significantly influence their financial and ESG performance. **Supply chains are a significant source of material risk**, which is “typically driven by ESG factors, such as natural resource depletion, human rights abuses and corruption” that can harm the reputations, operations and financial performance of investee companies. Conversely, **effective management of supply chain ESG can bring both short-term and long-term financial benefits**, such as increased revenue, better regulatory compliance, and enhanced stakeholder confidence ([UN PRI, 2017](#)). A [study of US firms](#) has provided evidence of these benefits, demonstrating that firms that “better manage supply chain ESG exhibit higher future stock returns,” which persist “for at least three years.”

Automotive supply chains also represent a **strategic lever for advancing the ESG goals of investor stewardship strategies**. A [study by Trucost](#) estimates that 95-96% of the automotive sector’s environmental impacts are located in the supply chain, when compared to its direct operations. When automotive companies take action to address these impacts, they can not only reduce their own environmental footprint but can drive improved sustainability standards and practices across multiple industries, showcasing the potential of automaker supply chain action to catalyze positive environmental and social outcomes.

As the EV transition accelerates, the focus on automakers’ ESG impacts will increasingly turn to their supply chains, providing investors with an important role to play in ensuring that automakers can more effectively manage the ESG risks and opportunities within their supply chains.

By constructively engaging with automotive companies on these issues, setting expectations for ESG risk management and disclosure, and allocating capital in ways that drive the industry towards greater sustainability, investors can mitigate financial risks and drive long-term value, as well as positive social and environmental outcomes, across their portfolios.



Automotive supply chain risks and opportunities for investors

AUTOMOTIVE SUPPLY CHAIN DECARBONIZATION AND SUSTAINABILITY

RISKS FOR INVESTORS

Failure to meet 1.5° C-aligned climate goals: A Polestar and Rivian commissioned report has shown that, even when making rapid progress towards a fully electrified global vehicle fleet, automakers will exceed their 1.5° C carbon budget unless they also aggressively reduce upstream scope 3 emissions. To stay within the emissions budget, the transition to EVs “must be accompanied with an 81 percent reduction in supply chain emissions by 2032.” Investors in the automotive industry that have committed to align their portfolios with the goals of the Paris Agreement therefore risk missing these targets unless automakers intensify their efforts to reduce their supply chain emissions.

Growing regulatory risks: New regulations, especially in the EU, are imposing increasingly stringent requirements on supply chain sustainability. Regulations such as the EU Batteries Regulation and the Corporate Sustainability Directive (CSDDD) impose risks of hefty financial penalties and market access restrictions for non-compliance. Others, such as the Carbon Border Adjustment Mechanism and France’s EV Subsidy regime, portend to put laggards on supply chain decarbonization at a competitive disadvantage. Automakers that fail to get ahead of these regulatory trends and demonstrate meaningful improvements on supply chain sustainability face severe transition risks that can adversely impact profits and shareholder value.

OPPORTUNITIES FOR INVESTORS

Driving progress on decarbonization goals across multiple industries: As a leading source of demand for steel, aluminum and batteries globally, the automotive industry presents a unique opportunity for climate-conscious investors to advance their climate commitments. By leveraging their substantial purchasing power, automakers can unlock critical investments in green steel and aluminum, catalyzing the decarbonization of these hard-to-abate sectors, currently responsible for approximately 13% of the world’s CO2 emissions. Automotive supply chains therefore represent a strategic lever for investors to accelerate progress towards their emissions reductions targets across multiple industries in their portfolios.

Competitive advantage opportunities: As consumers increasingly look to minimize their impact on the environment, ESG-related claims are driving higher product growth. These dynamics are becoming particularly salient in the EV market, as competition between OEMs for environmentally-minded EV consumers intensifies. Investors can capitalize on these trends by supporting EV manufacturers to strengthen their supply chain sustainability performance as a key strategy to differentiate their brands from competitors, capture market share and gain consumer loyalty.

AUTOMOTIVE SUPPLY CHAIN DUE DILIGENCE AND RESPONSIBLE SOURCING

RISKS FOR INVESTORS

Litigation and operational disruptions:

Suppliers of automotive companies that fail to respect human rights and environmental standards are facing a rising tide of costly legal challenges, which can result in huge fines or the suspension of licenses. As mandatory human rights and environmental due diligence (HREDD) laws gain momentum across major markets, these legal risks will increasingly extend to downstream companies. Financial penalties for non-compliance with the CSDDD, for example, can reach 5% of the company's net worldwide turnover. Suppliers that violate human rights also expose automakers to social unrest that can cause operational disruptions and reputational damage, shutting down or delaying projects for months on end at a significant cost to downstream companies.

The financial risks of Indigenous Rights violations in automotive supply chains:

Over half of the energy transition mineral resource base is located on or nearby Indigenous lands, raising the risk of conflicts and legal disputes if these minerals are extracted without Indigenous Peoples' Free, Prior and Informed Consent (FPIC). Courts have increasingly ruled against projects lacking FPIC, causing costly delays and suspensions that negatively impact not only the implementing companies but also their downstream customers. Investors should therefore see due diligence on FPIC as a strategic investment to mitigate these risks.

Risks to shareholder value: Human rights violations in automotive supply chains can not only depress the market capitalization of upstream companies and projects, but also negatively impact the share price of downstream companies, as evidenced by the impact of supply chain scandals on companies such as Boohoo and Top Glove.

OPPORTUNITIES FOR INVESTORS

Driving improved environmental and social performance across investment portfolios:

Engaging with automotive companies to enhance their supply chain human rights and environmental due diligence offers investors a strategic lever to improve ESG performance across multiple portfolio companies and sectors. Global automotive companies sit at the top of a supply chain that spans multiple industries and thousands of suppliers. Through robust policies, due diligence and supplier engagement, automakers can use this leverage as a force for good, driving a race to the top on human rights, environmental and labor standards within the industries that depend on auto supply chains as a key source of revenue.

Business opportunities for automotive companies:

Automotive companies can achieve significant economic benefits by proactively driving improved human rights, environmental and labor standards in their supply chains. Effective supply chain ESG management can drive financial gains through increased productivity and reduced operational costs, compliance with regulations, enhanced stakeholder confidence, facilitating technology adoption, improved labor retention, and better management climate and social risks, ultimately creating value and innovation throughout the supply chain.

Creating enabling conditions to achieve climate commitments:

Strong supply chain HREDD is also a key enabling factor for ensuring a successful transition to EVs and renewable energy. For example, it is essential for unlocking reliable and diversified sources of transition minerals. Supporting automakers to strengthen their HREDD systems, Supply Chain Due Diligence and Responsible Sourcing including on FPIC, is therefore complementary to investor efforts to advance the goals of the Paris Agreement.

Evaluating Automakers' Supply Chain Performance with the Lead the Charge Leaderboard

The [Lead the Charge Leaderboard](#) offers investors valuable insights and data into how effectively automakers are managing ESG risks and opportunities in their supply chains. By evaluating 18 leading automakers across more than 80 indicators related to climate, environmental sustainability and human rights, the Leaderboard highlights key industry leaders and laggards, best practices, and areas needing industry-wide improvement. The annual benchmark emphasizes practical implementation over policy commitments, providing investors with a useful tool to engage with automakers on the effectiveness of their supply chain ESG management.

The Leaderboard can help investors to identify:

- Which automakers are more effectively capitalizing on the business opportunities related to supply chain sustainability, and which automakers are falling behind.
- Supply chain risks that automakers are failing to address, collectively and/or individually.
- Current supply chain ESG management best practices at the industry-wide level.
- Industry trends that can provide valuable insights into opportunities for investors to use their leverage in ways that achieve the greatest impact.

Recommendations for investors

Investors in major automotive companies can drive the transition to cleaner, more equitable, and environmentally sustainable automotive supply chains through the following actions:

- **Policies, Targets and Governance:** Review and refine public commitments to align portfolios with the Paris Agreement and international human rights standards, ensuring that they adequately encompass supply chain impacts. Incorporate standards and metrics on HREDD, FPIC, and workers' rights into operational policies and decision-making processes.
- **Investor engagement:** Develop engagement strategies for the automotive sector to drive meaningful changes by automakers on supply chain ESG, using the Leaderboard as a tool for identifying priority engagement areas. Engage systemically and cross-sectorally to support an enabling environment for accelerating progress towards sustainable auto supply chains.
- **Response and Escalation:** When adverse supply chain impacts have been identified, escalate engagement to ensure that automakers take action to mitigate and remedy these impacts. Support shareholder resolutions for improved disclosures and practices, and file or co-file resolutions as needed to drive faster action by industry laggards.

Introduction

The global automotive industry is undergoing a profound transformation as it shifts from internal combustion engine (ICE) to electric vehicles (EVs). This transition is not only transforming the cars we drive, but is also propelling a far-reaching overhaul of automotive supply chains. As automakers work to build out new supply chains for EVs, they face a range of ESG risks and opportunities that will have significant implications for these companies and the value they create for shareholders.

The supply chains needed to manufacture the growing number of EVs are a **significant source of material risk** to automotive companies and their shareholders. When these risks are inadequately managed, they can result in penalties, lengthy litigation processes, operational disruptions and reputational harm. On the flip side, effective supply chain ESG management by automakers can **unlock new business opportunities for long-term value creation**. Furthermore, automotive supply chains represent **a strategic lever for advancing the ESG goals of investor stewardship strategies**, providing opportunities for institutional investors to advance their human rights, climate and environmental commitments across multiple industries within their portfolios.

A 2021 survey of 1,000 investment managers in the United States and the United Kingdom showed a broad recognition by investors of these risks, with 84% of respondents stating that risks related to supply chain sustainability and ESG standards are a financial threat to their investments, and 88% responding that supply chain sustainability standards will be a key criterion for investment decisions over the next ten years. However, the surveyed investment managers also expressed low levels of confidence in companies' ability to meet the sustainability standards they have set for their supply chains, particularly when it comes to scope 3 emissions and labor practices.

As the EV transition accelerates, investors have a crucial role to play in bridging this gap within the automotive sector in order to ensure that automakers more effectively manage the ESG risks and opportunities within their supply chains. By constructively engaging with automotive companies on these issues, setting expectations for supply chain ESG risk management and disclosure, and allocating capital in ways that drive the industry towards greater sustainability, investors can mitigate financial risks and drive long-term value, as well as positive social and environmental outcomes, across their portfolios.

This briefing by the Lead the Charge network provides an overview of the different sources of risk and opportunities within automotive value chains that can affect the financial and ESG performance of investments. It also includes a selection of illustrative examples of effective investor engagement on supply chain ESG, from the automotive industry and beyond. Finally, it explains how the Lead the Charge Leaderboard can support investors to identify risks and opportunities in automakers' supply chains, and offers a series of recommendations for investors that would like to proactively engage automotive companies to improve their supply chain ESG management.

1.1. Why investee companies' supply chains matter

Material risks to investee companies and their shareholders

A [UN PRI report](#) explains how supply chains expose companies to hidden risks, which are “typically driven by ESG factors, such as natural resource depletion, human rights abuses and corruption” and “can harm the reputations, operations and financial performance of businesses or assets owned by investors, as well as investors’ own reputations and investment performance.”

A [study of publicly traded U.S. companies](#) provides “large-scale evidence” of these risks to investment performance, finding a significant correlation between supply chain ESG and a company’s future stock returns, with negative ESG incidents within a company’s value chain dampening stock prices.

Opportunities for financial value creation

Conversely, the UN PRI report continues, a company’s supply chain can also be “a significant source of value creation and innovation,” which means that effective management of supply chain ESG “brings both short-term and long-term financial benefits.” According to the UN PRI, these benefits include:

- Higher company revenue from increased labor and process productivity due to the “positive correlation between good management of labor rights and product quality, lead times and cost of goods sold;“
- Being able to respond more quickly to emerging regulation or legal obligations that incur supply chain responsibilities;
- Protecting their (social) license to operate;
- Avoiding the loss of government contracts, as government procurement is increasingly including ESG criteria;
- Increasing confidence from a wide range of stakeholders including clients, customers, communities, regulators, lenders and employees;
- Developing long-term, trusting partnerships with their direct suppliers; and
- Reducing costs through better financial risk management and enhanced business continuity.

The [aforementioned study of U.S. firms](#) also provides evidence of these financial benefits, demonstrating that firms that “better manage supply chain ESG exhibit higher future stock returns,” which persist “for at least three years.” Further, the study found that this positive correlation was more pronounced “among firms with a more complex and opaque supply chain” and whose customers are more “socially conscious,” two characteristics that apply to EV manufacturers.



Advancing ESG goals across investment portfolios

Finally, the supply chains of investee companies represent a strategic intervention point for advancing ESG goals. Studies have estimated that a company’s supply chain can account “for more than 80 percent of greenhouse-gas emissions and more than 90 percent of the impact on air, land, water, biodiversity, and geological resources” when compared to its own operations. For the automotive sector specifically, a study by Trucost estimates that 95-96% of its environmental impacts are located in the supply chain compared to its direct operations.¹

When major downstream companies, such as automakers, take action to address these impacts, they can not only improve their own ESG performance but can also create multiplier effects that drive improved standards and better practices across the range of industries that depend on these supply chains as a key source of revenue. Corporate action on supply chains therefore holds enormous potential to drive positive environmental and social outcomes.

The following sections expand on these risks and opportunities as they relate to supply chain sustainability and human rights impacts for the automotive sector.



1 Note this study does not include downstream impacts, which include tailpipe emissions.

Supply Chain Decarbonization and Sustainability: Risks and Opportunities

2.1. Risks for investors

Failure to meet 1.5° C-aligned climate goals

Recent modeling by [Kearney, commissioned by Polestar and Rivian](#), found that even under an ambitious scenario of transitioning to a fully electrified global vehicle fleet by 2032, automakers would still exceed their 1.5° C carbon budget unless they aggressively tackle upstream scope 3 (supply chain) emissions in tandem, starting now.

This is because, although the overall lifecycle emissions of EVs are far lower than their ICE counterparts, the production of EVs currently generates 35-50% higher supply chain emissions, primarily due to the addition of emissions-intensive battery production.

Kearney's report concludes that the transition to electric vehicles "must be accompanied with an 81 percent reduction in supply chain emissions by 2032 to stay within the allocated emissions budget for the passenger vehicles industry." These stark findings lay out the imperative for investors that have committed to align their portfolios with the goals of the Paris Agreement to proactively engage with the automotive companies in these portfolios so that they take robust action to reduce their supply chain emissions as they transition to electric vehicles.

The transition to electric vehicles "must be accompanied with an 81 percent reduction in supply chain emissions by 2032 to stay within the allocated emissions budget for the passenger vehicles industry"

Polestar and Rivian Pathway Report by Kearney

Growing regulatory risks

Governments, particularly in the EU, are responding to the threat of climate change with a wave of new supply chain-focused regulations that have major implications for automakers and their shareholders. *Automotive companies that fail to get ahead of these regulatory trends and demonstrate meaningful improvements on supply chain sustainability face severe transition risks, including potential legal penalties, loss of subsidies, restricted market access, higher material costs, and reputational damage.*

2023 saw the passage of the **EU Batteries Regulation**, which sets legally-binding carbon footprint, recycling, responsible sourcing and due diligence obligations for EV batteries placed on the EU market. With regards to emissions, the regulation will first require EV manufacturers to calculate and disclose the life cycle carbon footprint of their batteries. As a next step the EU will grade batteries according to different carbon performance classifications, after which a mandatory carbon threshold will prevent the dirtiest batteries from being placed on the EU market at all.

The EU Batteries Regulation also outlines the social and environmental risk categories that will be part of the mandatory due diligence, and imposes important requirements on automotive companies with regards to battery recycling, establishing increasingly stringent minimum levels of recycled content for new EV batteries sold in the EU market. The approval of the EU Regulation is already leading to a slate of similar legislative proposals in other countries, showing a growing movement by regulators to ensure that EV battery production is transparent, sustainable and aligned with global efforts on emissions reductions.

In May 2024, the **Corporate Sustainability Due Diligence Directive (CSDDD)** was also approved by the EU. Alongside requirements for large companies, such as automakers, to identify and mitigate adverse human rights and environmental impacts throughout their value chains, this directive will require such companies to adopt, put into effect, and report annually against a climate change mitigation transition plan (“CTP”), to ensure that the company’s business model and strategy are compatible with limiting global warming to 1.5 °C in line with the Paris Agreement. These CTPs must include time-bound emissions-reduction targets for scope 3 emissions. The CSDDD requires member states to implement “effective, proportionate, and dissuasive” penalties for non-compliance with the directive, including maximum fines not less than 5% of the company’s net global turnover.

Furthermore, the EU’s **Carbon Border Adjustment Mechanism (CBAM)** will put a carbon price on imports of emissions-intensive products, including steel and aluminum, starting in 2026. The CBAM is expected to be expanded in the future so that it covers a wider scope of products made with large quantities of steel and aluminum, such as passenger vehicles, a move that major steel companies such as ArcelorMittal are advocating for.

Individual EU member states are going even further. Most notably, France’s revised EV subsidy regime will, from 2024, only grant subsidies to EVs with a production carbon footprint below 14.75 tCO₂, with the aim of incentivising clean materials and energy for vehicle production, whilst also penalizing companies that fail to take action on these issues. Italy’s government has also expressed interest in this approach, indicating an emerging trend.

Investors have an important role to play in engaging automakers on their preparedness to comply with, and stay ahead of, this rapidly shifting regulatory landscape.

2.2. Opportunities for investors

Driving progress on decarbonization goals across multiple industries

The automotive industry is the largest consumer of aluminum and batteries globally and is responsible for 16% of global steel consumption, making it one of the largest end-users of steel, particularly high-grade premium steel.

Many institutional investors hold shares in companies across each of these sectors. The significant purchasing power of automotive companies over these industries therefore presents a unique opportunity for climate-conscious investors that are committed to the Paris Agreement, as automotive supply chains can be used as a strategic lever to accelerate the progress of other companies in hard-to-abate industries along 1.5 °C-aligned decarbonization pathways.

The possibility for automakers to leverage their purchasing power in order to drive the decarbonization of the steel industry is a case in point.

Automotive supply chains as a strategic lever for decarbonizing the steel industry

The climate policy think-tank [Sandbag explains](#) that automakers are uniquely well-positioned to lead the uptake of green steel because, in addition to their outsized purchasing power, “automotive manufacturers have a relatively simple and often well-integrated supply chain, with few players in the intermediate stages of manufacturing,” facilitating traceability and more stable relationships with steelmakers.

Moreover, Sandbag continues, the cost of sourcing automotive steel “is marginal compared to the value added to the vehicle during the manufacturing stages and its final price when sold to end-users.” This means there will only be a relatively small incremental cost to manufacture vehicles with low-carbon steel. Multiple studies² have estimated that the increase in the retail price of passenger cars would be well below 1%. The [CEO of ArcelorMittal](#) contends that this would result in a cost increase of just \$100 - 200 for the average car, while a [Transport & Environment report](#) calculates that the cost increase in Europe would be €57 for a BEV using 40% green steel in 2030 and just €8 for a BEV using 100% green steel by 2040.

Shifts by automakers towards the procurement of green steel could be further incentivized by strategic policy. For example, the [CEO of H2 Green Steel](#) has stated that buyers of fossil-free steel in the EU “will be paying about as much as buyers of conventional steel in 2030” due to the EU’s emissions trading system. In China, [a study by Transition Asia has shown](#) that targeted government subsidies for EVs using green steel of just \$100 per vehicle before 2035, and then \$50 per vehicle by 2050 would offset the cost of the green premium, providing on average 1.9 tons CO2 reduction per vehicle.

Beyond these direct benefits to the carbon footprints of individual vehicles, the potential ripple effects of growing automaker demand for green steel on global emissions reductions are enormous. [According to the IEA](#), a key challenge to decarbonize heavy industries, such as steel and aluminum, is that “the year 2050 is just one investment cycle away.” This means that it is imperative “to ensure that innovative near-zero emissions industrial technologies that are at large prototype and demonstration stage today reach markets within the next decade, when around 30% of existing assets will have reached 25 years of age and thus face an investment decision. If these innovative technologies are not ready, or not used even if ready, this would have a major negative impact on the pace of emissions reductions or risk an increase in stranded assets... The critical window of opportunity from now to 2030 should not be missed.”

Unlocking the necessary investments to bring these breakthrough technologies to market by 2030 will require major steel buyers, such as automakers, to [send strong demand signals](#) to steel manufacturers, so as to provide them, and their financiers, with greater certainty regarding a future market for near-zero emissions steel. It follows that if automakers were to signal their intention to manufacture their rapidly growing fleets of EVs with green steel, they could play a pivotal role in catalyzing the decarbonization of this industry, currently responsible for around [11% of global CO2 emissions](#).

2 [Paying the full price of steel – Perspectives on the cost of reducing carbon dioxide emissions from the steel industry](#) (Johan Rootzén & Filip Johnsson, 2016)
[Cleaning up steel in cars: why and how?](#) (Transport & Environment, 2024)
[Green Steel Economics: Comparing the Economics of Green H2-DRI and Traditional Steelmaking Around the World](#) (Global Efficiency Intelligence, 2024)

By taking similar action on aluminum as part of their transition to cleaner cars, *automakers could be instrumental in decarbonizing two industries that, combined, are responsible for approximately 13% of the world's CO2 emissions, more than the emissions currently emitted by all of the light-duty vehicles (cars and vans) on the road today.* This means that automakers, supported by their shareholders, could essentially double the emissions reduction impact of the EV transition by playing a leading role in enabling the decarbonization of the steel and aluminum industries.

Opportunities for competitive advantage

Beyond the possibility to shape global emissions reductions beyond the tailpipe, supply chain decarbonization also offers competitive advantage opportunities for automakers. Consumer surveys show large numbers of consumers willing to change their consumption habits to reduce their impact on the environment. A 2023 study by McKinsey and Nielsen demonstrated that these trends are already impacting product sales, with products making ESG-related claims achieving higher cumulative growth over the past five-year period compared to products that made no such claims.

In an increasingly crowded and ruthlessly competitive EV market, these dynamics will only become more important. As Bloomberg's Kyle Stock puts it, "if buying an EV is an exercise in value signaling" for the growing numbers of consumers concerned about their own impact on the environment, "it stands to reason that the brand with the strongest such signal will have particular appeal."

"If buying an EV is an exercise in value signaling, it stands to reason that the brand with the strongest such signal will have particular appeal."

Kyle Stock, Bloomberg

EV manufacturers therefore have an opportunity to highlight their progress on supply chain sustainability as a key differentiator from competitors that have not taken sufficient action. For example, according to the Mission Possible Partnership, EV manufacturers that use low-carbon steel have "a rare opportunity for genuine brand differentiation" and stand to benefit "in terms of a higher price, increased market access or increased consumer loyalty."

Investors can capitalize on these consumer trends by supporting automotive companies to accelerate their progress on supply chain sustainability as a strategy to capture EV market share.

Supply Chain Due Diligence and Responsible Sourcing: Risks and Opportunities

3.1. Risks for investors

Automakers that neglect human rights and environmental impacts of their supply chains on local communities, workers and Indigenous Peoples are exposed to legal, financial, regulatory and reputational risks that can lead to earnings volatility, reputational damage, business disruptions, and the erosion of stakeholder trust, all of which can directly impact sustainable value creation for shareholders.

Litigation and operational disruptions

Projects in automotive supply chains that have failed to secure a social license to operate, caused environmental destruction or violated human rights are facing a rising tide of legal challenges that have led to huge fines, such as the \$15 billion fine imposed on BHP and Vale for the Mariana dam disaster, or licenses being suspended, which happened to the Cobre Panama mine after huge protests in 2023.

As mandatory human rights and environmental due diligence (HREDD) laws gain momentum across major markets, these legal risks will increasingly extend to downstream companies, such as automakers, that fail to demonstrate robust due diligence processes in the face of such impacts in their supply chains. After the passage of the CSDDD for example, which will require major companies in the EU market to demonstrate the effectiveness of their HREDD systems, Hyundai Motor Group disclosed that it could be subject to a fine of up to \$5.8 billion if found to be in violation of the rules.

In addition to legal risks, supplier non-compliance with human rights and environmental standards can lead to social unrest that can grind projects to a halt, exposing automakers' supply chains to costly operational disruptions. As the OECD notes with regards to mineral sourcing: "any perceived benefit in deprioritizing short-term or localized risks is likely to diminish over time as the increased costs of ad hoc deal-making and corruption manifest into larger conflicts, impede investment, adversely impact communities and lead to unpredictable supply disruptions. This represents a significant cost, with a major mining project estimated to suffer costs of roughly \$20 million USD for every week production is delayed... Put simply, the failure to address ESG risks in the sourcing of minerals is a risk in itself to the security of supply."

"Any perceived benefit in deprioritizing short-term or localized risks is likely to diminish over time as the increased costs of ad hoc deal-making and corruption manifest into larger conflicts, impede investment, adversely impact communities and lead to unpredictable supply disruptions."

— OECD, *Responsible Is Reliable*

A report by the [Harvard Kennedy School, Shift and the University of Queensland](#) provides multiple examples of how such costs and delays have impacted extractive projects, and their customers, across the world. Community conflict in one country, for example, “led to stoppages and down days” that cost the project \$100 million USD per year.

Such risks are not limited to the extractive sector: the [Responsible Investment Association Australasia](#) also details how supply chains that are rife with “unsafe working conditions and underpaid workers can result in social unrest and / or industrial action at supplier level which can result in operational disruption ultimately affecting the whole value chain.” Hyundai Motor Group, for example, [had to “sever relations” with suppliers in Alabama](#) after it was found that they were using child labor. The company is now [facing a lawsuit from the Department of Labor](#) over the use of child labor by its suppliers.

Violations of Indigenous Peoples rights in automotive supply chains is becoming a particularly salient risk as the industry transitions to electric vehicles.



An Indigenous woman takes part in a protest against the Panamanian government contract with Canadian mining company First Quantum Minerals and its subsidiary Minera Panamá in Panama City on Nov. 2. Roberto Cisneros/AFP via Getty Images

The financial risks of Indigenous Rights violations in supply chains

A study published in Nature has estimated that over half of the energy transition mineral resource base is located on or nearby Indigenous lands, upon which Indigenous Peoples rely for their livelihoods and cultural practices. This increases the risk that these minerals will be extracted in a way that violates the rights of Indigenous Peoples to self-determination and Free, Prior and Informed Consent (FPIC), exacerbating conflicts and legal disputes with Indigenous communities.

Projects that proceed without meaningful consultation and consent will expose these companies, and their downstream customers, to legal, reputational and financial risks. Courts are increasingly ruling that resource extraction projects in countries that have failed to obtain the FPIC of affected Indigenous Peoples such as Ecuador, Guatemala and Australia should be suspended or canceled.

Projects that are not canceled can suffer protracted delays, such as the Mareña Renovables wind project in Mexico that was stalled for over 6 years due to litigation over the failure to obtain FPIC, directly impacting the downstream buyers that had signed purchasing agreements with the company.

These risks mean that ignoring Indigenous Peoples rights will ultimately make the energy transition more expensive. Automakers should therefore view obtaining FPIC not just as a legal obligation but as a strategic investment to avoid costly delays and ensure smooth project execution, taking steps to ensure that FPIC is included in risk assessments and project feasibility studies from the outset.

Investors should prioritize companies that have strong policies and implementation guidance regarding Indigenous Peoples and FPIC. They should engage with companies to encourage the adoption of these practices, therefore reducing their own risk exposure.



Protesters from the Huave community demonstrating against the Mareña Renovables scheme (Source: Santiago Navarro)

Risks to shareholder value

These material risks to automakers also extend to their investors. Violations of the rights of Indigenous Peoples, workers and local communities can rapidly escalate into global media firestorms, delays and disruptions that can depress market value. [A study of the financial impacts of protests against the Dakota Access Pipeline](#) found that they nearly doubled the cost of the project, including by inflicting a \$1.6 billion loss of market capitalization.

Downstream companies, and their investors, are not immune from these risks: in 2020, the share price of UK fashion retailer Boohoo [halved in just over a week following reports of labor rights abuses in its supply chain](#) and, in 2021, the US Customs and Border Protection [banned imports from Malaysian glove maker Top Glove over forced labor concerns](#), leading to a sharp decline in its share price. Investors need to be acutely aware of these risks and should set expectations for more robust due diligence and compliance measures from the companies in which they invest.

3.2. Opportunities for investors

Strategic lever for driving improved environmental and social performance across investment portfolios

As with supply chain decarbonization, engaging with automotive companies to strengthen their HREDD processes provides investors with a strategic point of leverage to drive improved ESG performance by multiple companies in their portfolios.

Automotive companies sit at the top of a supply chain that spans multiple industries, from raw material extraction and refining, to metal production and component manufacturing. For major global automakers, even just tier-1 suppliers can number in the thousands: Ford, for instance, [stated that it included 4,600 tier-1 suppliers in its 2023 supplier risk assessment](#). When taking an automotive company's entire value chain into account, the number of suppliers [proliferates to around 18,000, according to McKinsey](#) – which dramatically increases the potential reach of strong HREDD systems. By embedding robust human rights policies and due diligence processes into their procurement practices, and engaging suppliers that fall short, automakers can therefore drive a race to the top in terms of human rights, environmental and labor standards across multiple industries.

Forward thinking leaders in automotive companies are already recognizing the leverage they wield over global supply chains and are working to maximize their capacity to drive positive change. As [Marco Philippi, Head of Procurement Strategy for Audi](#), puts it: “If we have our suppliers enforce our sustainability ratings to their suppliers, we’re talking about 14,000 direct partners in 60 countries multiplied by ‘N’ acting on it. When we look across the group, it is 60,000 suppliers. This is a power we are aware of. We want to use our supply chain as a force for good.”

“If we have our suppliers enforce our sustainability ratings to their suppliers, we’re talking about 14,000 direct partners in 60 countries multiplied by ‘N’ acting on it. When we look across the group, it is 60,000 suppliers. This is a power we are aware of. We want to use our supply chain as a force for good.”

*Marco Philippi
Head of Procurement Strategy for Audi*

Business opportunities for automotive companies

Taking a proactive approach to driving improved human rights and environmental performance by suppliers can also yield considerable economic benefits for auto manufacturers and their shareholders. Participating companies in the [UN Global Compact's Think Lab on a Just Transition](#), for example, describe a range of benefits that embedding [Just Transition Principles](#) into their supply chain management policies and practices have brought to their companies, including:

- Enhanced productivity and reduced operational costs throughout their value chain;
- Facilitation of technology uptake by their suppliers;
- Improved access to, and retention of, skilled labor across their operations and their suppliers' operations; and
- Being better positioned to determine and manage the different climate and social risks throughout their supply chains that could compromise business operations.

Creating enabling conditions to achieve climate commitments

Finally, strong supply chain HREDD is also a key enabling factor for ensuring a successful transition to EVs and renewable energy. The [OECD has made it clear](#) that strong supply chain HREDD systems are key to unlocking “responsible, reliable and diversified global supplies of transition minerals... while ensuring that rules-based trade and investment and broader sustainability and resilience objectives are not undermined.”

This is especially evident as it relates to ensuring that global supply chains for the energy transition respect Indigenous Peoples' rights to self-determination and FPIC. [Journalist Andrew Kaminsky notes](#) that investing in FPIC processes “can pay massive dividends down the road” to potential transition mineral projects, as “Indigenous Peoples understand the land better than anyone, and they can provide critical information to companies to help them make better-informed decisions,” a reality to which “mining executives are taking note.” Automakers that embed FPIC into their supply chain due diligence systems will have the opportunity to build long-term trust and collaboration with Indigenous leaders, enhance their reputation, access new markets, and create value for shareholders.

“Indigenous Peoples understand the land better than anyone, and they can provide critical information to companies to help them make better-informed decisions”

— *Andrew Kaminsky*

Engaging automotive companies to drive better performance on supply chain HREDD is therefore a complementary strategy to investor efforts focused on advancing the goals of Paris Agreement.

Evaluating Automakers' Supply Chain Performance with the Lead the Charge Leaderboard

Lead the Charge is a diverse network of civil society organizations working across multiple geographies, with expertise on a wide range of issues including heavy industry and transport decarbonization, environmental sustainability and biodiversity, human rights due diligence, Indigenous Peoples' rights, ESG and more.

The vision of the network is an automotive industry where all vehicles are made:









- **Equitably:** Respecting and advancing the rights of Indigenous Peoples, workers, and local communities throughout the supply chain.
- **Sustainably:** Preserving and restoring environmental health and biodiversity across supply chains, while reducing primary resource demand through efficient resource use and increased recycled content.
- **Fossil-Free:** 100% electric and made with a fossil fuel-free supply chain.

For investors that wish to begin engaging automakers on their value chain impacts, the [annual Leaderboard](#) published by the network provides a clear and actionable benchmark for assessing how effectively automakers are managing ESG risks and opportunities in their supply chains.

Key features of the Leaderboard:

- **Evaluates 18 of the world's leading automakers across more than 80 indicators** aligned with internationally recognized standards and benchmarks on emissions reductions, environmental sustainability and human rights.
- **Indicators on supply chain decarbonization and environmental sustainability** evaluate the performance of automakers in their upstream scope 3 emissions, addressing environmental risks and impacts in their supply chains, and investing in circular economy and material efficiency interventions to increase the reuse and recycling of materials and reduce raw material demand. Automakers are first evaluated on their efforts to drive these changes across their whole supply chain and are then evaluated against more targeted indicators with regards to their efforts on steel, aluminum and battery supply chains specifically.
- **Indicators on human rights and responsible sourcing** evaluate the performance of automakers in conducting effective HREDD across their supply chains. Automakers are first assessed on their overall policies and practices of supply chain due diligence. The Leaderboard then evaluates their performance on managing salient risks related to the EV transition: the responsible sourcing of transition minerals; Indigenous Peoples' to Free, Prior and Informed Consent; and workers' rights across their supply chains.
- The assessment **emphasizes implementation over mere commitments or policy declarations**, with a greater weighting given to indicators requiring evidence of concrete actions and outcomes.

2024 Leaderboard Results

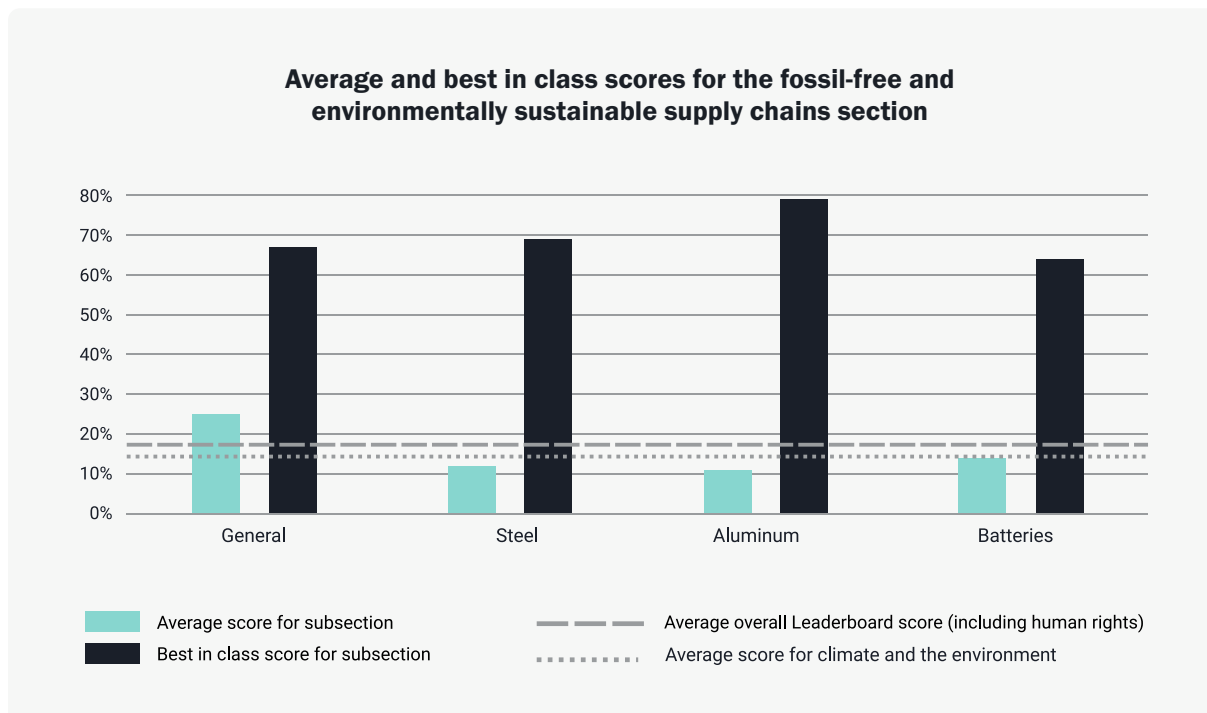
RANK	AUTOMAKER	FOSSIL FREE AND ENVIRONMENTALLY SUSTAINABLE SUPPLY CHAINS	HUMAN RIGHTS AND RESPONSIBLE SOURCING	OVERALL LEADERBOARD SCORE
01		29%	54%	42%
02	Mercedes-Benz	36%	44%	40%
03	TESLA	31%	39%	35%
04	VOLVO	36%	27%	32%
05	 STELLANTIS	16%	37%	27%
06		25%	26%	26%
07		17%	31%	24%
08		19%	26%	22%
09	RENAULT	17%	21%	19%
10	HYUNDAI	12%	18%	15%
11	NISSAN	12%	15%	13%
12	GEELY	15%	6%	10%
13	KIA	7%	9%	8%
14	HONDA	4%	11%	8%
15		5%	9%	7%
16		1%	5%	4%
17	GAC	3%	1%	2%
18		2%	0%	1%

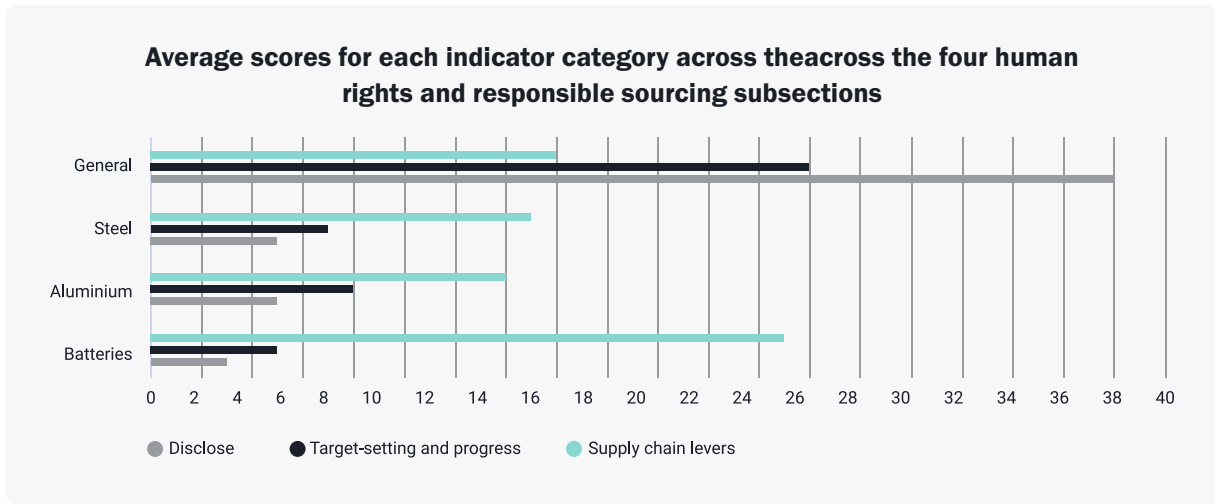
The Leaderboard can help investors **identify which automakers are more effectively capitalizing on the business opportunities related to supply chain sustainability**. [The latest edition of the Leaderboard](#), for example, reveals that Volvo and Mercedes are the clear industry leaders on steel and aluminum decarbonization, providing them with a head start on the opportunity to differentiate their EVs from competitors based on the cleaner materials used to manufacture them.

It also finds that Ford, Mercedes and Stellantis are leading the industry with regards to overall supply chain due diligence and responsible mineral sourcing, whilst Renault is the only company to have set public targets to increase the quantities of recycled nickel, lithium and cobalt in their EV batteries. This progress puts these companies at an advantage when it comes to compliance with new regulatory requirements in these areas, such as those contained in the CSDDD and the Battery Regulation in Europe.

Conversely, the Leaderboard can also **point investors to supply chain risks** that automakers are failing to adequately address. A clear example in this regard is the issue of Indigenous Peoples' rights: 11 of the 18 automakers evaluated in the 2024 edition of the Leaderboard continued to score 0% against these indicators.

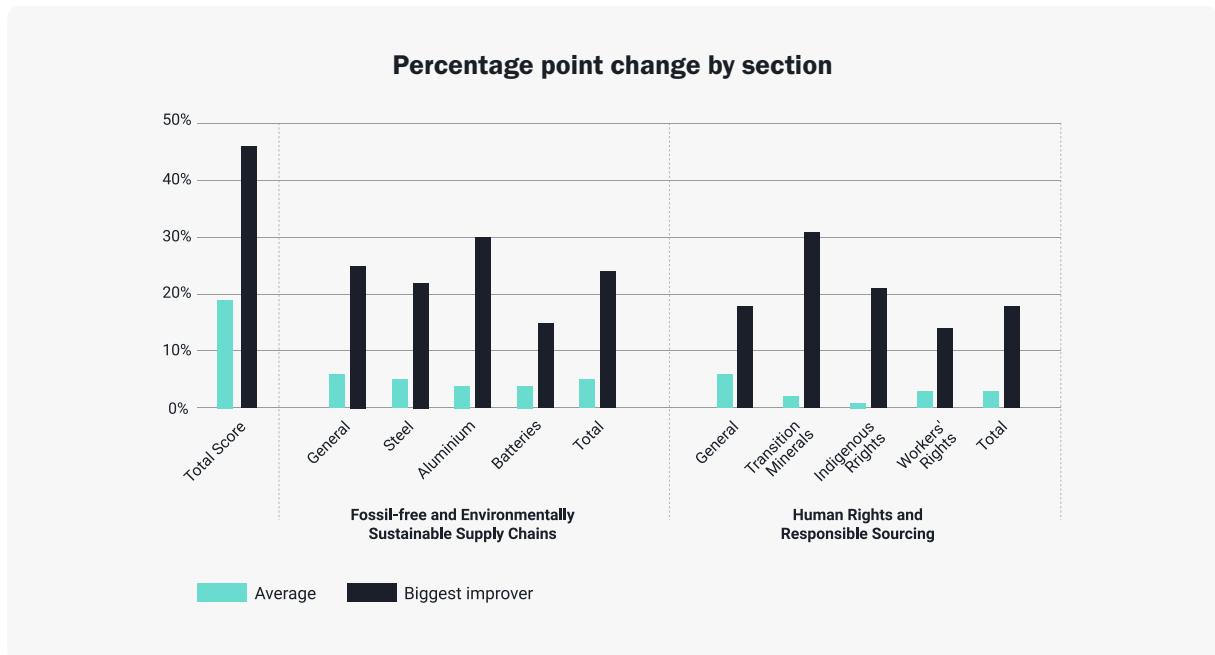
The Leaderboard can also be used by investors as a tool to **identify current best practices at the industry-wide level**, which can be referenced during engagements with automotive companies on supply chain issues. Whilst the overall average score in the 2024 edition of the Leaderboard was just 19%, the analysis also revealed that over half the indicators were fully met by at least one company and that adding up the highest scores achieved by any company against each indicator results in a total score of over 70% (referred to as the best in class score in the graphs below). Automakers can therefore achieve radical improvements simply by matching the best practice of their peers across different areas.





Finally, the Leaderboard also reveals **industry-wide trends** that can provide valuable insights into opportunities for investors to use their leverage in ways that maximize impact. The latest edition of the Leaderboard, for example, shows important progress is being made by automakers on steel decarbonization: in the 2023 edition around two thirds of automakers scored 0% on steel, while over three quarters scored less than 10%. In 2024, this situation has been reversed: now, automakers scoring 0% and less than 10% on steel are in the minority, representing just one third of the automakers evaluated. Moreover, it shows that East Asian automakers are falling behind the European and U.S. peers on this issue, and that there continue to be important gaps across the industry, such as a wide-ranging failure by automakers to calculate the carbon footprint of their steel supply chains.

Another important trend revealed in the 2024 edition is that the highest average score increase for a single subsection was that of the subsection on overall human rights due diligence, which saw notable improvements by multiple automakers - including several Chinese automakers. This suggests that advances in legislation on supply chain due diligence, such as those approved in the EU, are already having an impact on the due diligence practices of automakers.



Investor engagement on clean and equitable supply chains: examples from the automotive

Investor engagement on automotive supply chain sustainability is a relatively nascent area. This section therefore aims to illustrate what effective investor engagement on automotive supply chains can look like by highlighting successful initiatives of investor engagement on supply chain issues, both directly related to the automotive industry as well as from other sectors.

The Investor Initiative on Responsible Nickel Supply Chains

In February 2024, a group of 29 investors with over \$1.2 trillion in assets under management [launched a new initiative](#) calling on electric vehicle manufacturers and battery producers to enhance environmental and social due diligence in their nickel supply chains. The initiative, led by the Dutch Association of Investors for Sustainable Development (VBDO) and Rainforest Foundation Norway, urges companies to incorporate responsible mining practices, respect the rights of Indigenous peoples and local communities, and adopt time-bound commitments to achieve deforestation-free nickel supply chains, with 2025 as the latest cut-off date.

The [investor statement](#) outlines specific expectations for companies, including:

1. Respecting the Free, Prior, and Informed Consent (FPIC) of Indigenous peoples and local communities
2. Conducting third-party, independent audits using transparent standards and multi-stakeholder consultations during impact assessments
3. Adhering to the mitigation hierarchy to minimize negative impacts on ecosystems
4. Providing fair compensation and effective grievance mechanisms for affected communities
5. Committing to net-zero emissions in smelting and refining processes
6. Publicly reporting on the implementation of these policies and measures

The initiative aims to address growing concerns over the negative impacts of nickel mining, such as deforestation, pollution, biodiversity loss, and conflicts with local communities in Southeast Asia. By leveraging their collective influence, the investors seek to drive positive change and mitigate risks associated with the rapidly increasing demand for nickel driven by the electric vehicle industry.

Since launching, the [Initiative has grown to include 32 investors with US\\$ 2.8 trillion in combined assets under management](#).

Value Chain Engagement by Aviva Investors

Aviva Investors' [2023 Sustainability Review](#) outlines their stewardship approach, which is

coordinated across six different “layers of influence”, described by Aviva as “different parts of the system in which we have the agency, expertise and opportunity to engage and bring about change.” One of these layers of influence is value chain engagement, which involves “collaboration across industries to address structural challenges...synchronise efforts, share insights and optimise the value chain.”

The 2023 Sustainability Review details how value chain engagement has been employed for Aviva’s engagement approach across its three priority pillars for sustainability: Climate, Earth and People:

- On Climate, Aviva has “expanded existing supply chain engagement to include the demand side, and therefore now have greater expectations on companies engaging with entire value chains.” These expectations include “more credible and detailed transition plans, that clearly identify opportunities in low-carbon value chains” as well as “evidence of lobbying alignment” to demonstrate that companies “are supporting policy actions necessary to successfully decarbonise assets and value chains.”
- Aviva’s engagement approach for its Earth pillar, through its Natural Capital Transition Engagement Programme, includes setting expectations for companies to “identify and disclose the most material impacts and dependencies on biodiversity in their value chain” and “set ambitious SMART targets covering their most material biodiversity impacts, in line with emerging guidance from the Science-Based Targets for Nature.”
- Regarding its People pillar, Aviva’s Social Transition Engagement Programme aims to “to ensure companies demonstrate robust human rights disclosure and due diligence (HRDD) and work towards implementing a credible living wage commitment,” including by supporting “efforts to ensure workers in their value chains are paid a living wage.”

Aviva provides several examples of their engagement on these value chain priorities, including:

- Adopting a “more holistic value chain approach” towards their engagement activity on sustainable aviation fuels. This focused on bringing together companies from across the aviation value chain to discuss shared systemic bottlenecks impeding decarbonisation and collectively identify key policy mechanisms that would help create a more enabling approach.
- Engaging senior stakeholders at Tesco to encourage the company to articulate its transition strategy more clearly and set more ambitious emissions reduction targets, with an emphasis on the firm’s agricultural value chain, a key priority as 90% of Tesco’s emissions footprint originates in its value chain. The company has now become “one of the first companies globally in the consumer sector to set validated SBTs on all categories of GHG emissions, including Scope 3 emissions which originate from forests, land and agriculture (FLAG).”
- Jointly hosting a roundtable on supply chain labour rights with IndustriALL Global Union, which explored the challenges associated with social auditing in global supply chains and emphasised the importance of endorsing worker-centric models grounded in binding agreements between global corporations and trade unions, such as Global Company-Trade Union Agreements (GC-TUAs), and the role investors can play in this.

ICCR’s Equitable Global Supply Chains Initiative

Investor members of The Interfaith Center on Corporate Responsibility (ICCR) are driving systemic change across multiple global supply chains through the [Equitable Global Supply Chains](#) initiative. By engaging with companies that have a high risk of forced labor in sectors like apparel, food, and electronics, ICCR’s members are pressing for comprehensive human rights due diligence and the adoption of responsible practices.

The initiative focuses on three key areas:

- **Worker-Driven Social Responsibility:** Promoting legally-binding agreements between workers and companies to ensure respect for workers' rights, as exemplified by the International Accord and Pakistan Accord.
- **Prohibiting Import of Forced Labor Goods:** Preventing the importation of goods made with forced labor to combat severe human and labor rights abuses in global supply chains.
- **Responsible Contracting:** Encouraging the integration of responsible contracting principles into buyer-supplier contracts to foster shared responsibility for human rights.

Through dialogue, shareholder resolutions, policy advocacy, and collaboration with investors and human rights organizations, ICCR has achieved significant impact. This includes supporting the efforts to obtain signatories to the International Accord, commitments from 500 factories to improve worker safety through the Pakistan Accord, and mobilizing investors to press dozens of companies to promptly pay suppliers for existing orders and to take action on forced labor in their supply chains.

5.3 Find It, Fix It, Prevent It Initiative

The [Find It, Fix It, Prevent It initiative](#), launched by CCLA Investment Management in 2019, brings together 65 investors, representing £15 trillion in assets under management, to address modern slavery in corporate supply chains. Participating investors in the initiative engage with companies in high-risk sectors, such as hospitality and construction, to encourage them to proactively identify, remediate, and prevent modern slavery in their operations and supply chains.

Find it, Fix it, Prevent it combines three workstreams:

- Corporate engagement – using the collective influence of investors to engage companies to be more active in driving out modern slavery.
- Public policy – advocating with government, legislators and regulators on modern slavery and broader human rights policy reforms.
- Investor data – working to increase the amount and quality of data available to investors on both the provenance of modern slavery and on corporate performance on modern slavery.

The Initiative has developed a [set of expectations and a framework](#) for investors wanting to engage investee companies on their due diligence efforts related to modern slavery. This corporate engagement framework is undertaken through an annual engagement process, with each step entailing a number of detailed engagement points.

Through targeted investor engagement, [the initiative has successfully driven positive change](#). Companies engaged by investors, such as Compass Group and InterContinental Hotels, have not only strengthened their due diligence processes but also reported finding, fixing, and preventing modern slavery cases. The initiative is also working to influence public policy, promote better modern slavery data, and raise awareness about the urgent need for businesses to take action.

In 2023, CCLA launched a [Modern Slavery Benchmark](#) covering the top 100 UK listed equities and the degree to which they disclosed 'Finding, Fixing, and Preventing' Modern Slavery in their public disclosures. Some Members of Find it Fix it Prevent it are using the benchmark in their engagement with companies, others have expressed interest in using the benchmark data in their own ESG analysis and engagement.

Recommendations for Investors

There are a range of different actions that investors in major automotive companies can take to drive the transition to cleaner, more equitable and environmentally sustainable automotive supply chains.

Policies, Targets and Governance:

1. Review and refine existing commitments, targets and policies to align portfolios with the goals of the Paris Agreement and international human rights standards to ensure that they are inclusive of the supply chain impacts of portfolio companies.
2. Incorporate supply chain ESG performance metrics into company assessments, due diligence and decision-making processes throughout the investment cycle, including by considering automakers' scores in the Lead the Charge Leaderboard alongside other metrics.
3. Incorporate Indigenous Peoples' right to FPIC, Just Transition Principles and responsible mineral sourcing standards into operational policies, procedures and engagement frameworks, setting clear expectations for portfolio companies to proactively address these issues in their supply chains.

Company engagement:

4. Develop engagement strategies for the automotive sector and specific automotive companies in investment portfolios on supply chain ESG performance. Use the Lead the Charge Leaderboard to identify leaders and laggards across different areas, and target engagement accordingly to drive meaningful changes in supply chain policies and practices. Suggested areas of engagement include:
 - **Commitments, targets and policies:** The adoption of robust targets and policies to eliminate fossil fuels, environmental harms and human rights violations from supply chains to the point of extraction. These targets and policies should be aligned with credible 1.5C transition pathways, including near-term targets no later than 2030, as well as international environmental and human rights standards. They should be followed by comprehensive roll-out plans and enforcement mechanisms.
 - **Disclosure and transparency:** The implementation of measures to improve supply chain traceability, disclosure and transparency. These include public disclosure of the company's progress towards any supply chain targets; supply chain mapping / tracing activities for improved supply chain transparency; and annual reporting on the the climate, environmental, and human rights risks and impacts of the company's supply chain, as well as the measures taken to identify, mitigate and remedy them.
 - **Supply chain leverage:** Actions that leverage automakers' influence and purchasing power to accelerate the just transition to fossil-free and environmentally sustainable global supply chains – from mining to manufacturing. These include signing advance purchase agreements with suppliers to unlock investments in fossil-free steel, aluminum and battery production; investments in recycling, reuse and material efficiency strategies; holding suppliers to contractually binding standards governing human rights due diligence, Free, Prior and Informed consent of Indigenous Peoples, environmental management, and workers' rights; and developing effective supply chain grievance and remedy mechanisms.

- **Just transition engagement:** Proactive engagement by automakers with supply chain rights-holders – including local communities, workers, Indigenous Peoples, and their elected representatives – civil society, multi-stakeholder initiatives, suppliers, and governments to advance a just transition through stronger standards, policies, legislation and transparency across the auto industry and its supply chain.
5. Engage cross-sectorally and systemically to support an enabling environment for a just transition to sustainable automotive supply chains. Target engagement at standard-setting bodies, industry associations, investor alliances, government agencies, sustainability data/index providers and other downstream or upstream companies in automotive supply chains.

Response and escalation:

6. When actual or potential adverse human rights and/or environmental impacts have been identified in an automotive company's supply chain, escalate engagement to ensure the company takes robust action to prevent, mitigate and enable remedy for these impacts.
7. Vote in support of shareholder resolutions calling for improved disclosures and practices on automotive supply chain sustainability and due diligence. Where necessary, file or co-file shareholder resolutions to accelerate corporate action by industry laggards.

The following resources provide complementary frameworks and guidance for investors and asset managers wishing to engage automakers on supply chain issues:

- [UN PRI: Managing ESG Risks in the Supply Chains of Private Companies and Assets.](#)
- [Responsible Investment Association Australasia: Investor Toolkit - Human Rights with a Focus on Supply Chains.](#)
- [Reconciliation & Responsible Investment Initiative: Investor Brief: Responsible Investment and Indigenous Peoples' Rights in the Energy Transition](#)
- [Amazon Watch: Respecting Indigenous Rights: An Actionable Due Diligence Toolkit for Institutional Investors.](#)
- [IIGCC: Investor approaches to scope 3: Its importance, challenges and implications for decarbonising portfolios.](#)
- [IIGCC: Steel Purchaser Framework.](#)
- [Rainforest Foundation Norway: Deforestation Risks of Leather Car Seats: An Action Case for Investor Engagement](#)



Lead the Charge

About this briefing:

This briefing was written collaboratively by members of the [Lead the Charge](#) network.

Design by Studio Lake

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