

Accelerating automotive action on clean and equitable supply chains

A comparative analysis of automaker performance in building equitable, sustainable and fossil-fuel free supply chains

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About this report

This is the third annual Leaderboard on automotive supply chains, published by Lead the Charge. The Leaderboard evaluates 18 of the world's leading automakers on their efforts to eliminate emissions, environmental harms, and human rights violations from their supply chains. This report summarizes and analyzes the key findings from the Leaderboard, highlighting progress and gaps, calling out leaders and laggards, and identifying challenges and opportunities for the year ahead. The full dataset of the Leaderboard, together with additional data on individual company performance, can be found on the Lead the Charge website.

Design: Studio Lake.

CHAPTER 001

Executive Summary



This report is based on an analysis of the third edition of the Lead the Charge Leaderboard, which assessed 18 of the world's leading automakers against over 80 indicators that evaluate these companies' efforts to eliminate emissions, environmental harms, and human rights violations from their supply chains. The Leaderboard aims to establish a new expectation – and competitive advantage – for what it means to prot electric vehicle (EV), but an EV with an equitable, sustainable, and fossil-free supply chain.

The Leaderboard covers two main aspects of company policies and practices: those focused on building fossil-free and environmentally sustainable supply chains, and those focused on ensuring respect for human rights and responsible sourcing throughout their supply chains. Companies are given a percentage score enabling an assessment of both how close each automaker is to the scorecard's expectations of what constitutes a clean car, as well as comparisons between automakers.

Scores are based on a comparative analysis of company policies and activities as disclosed in

publicly available company reporting that has received board level sign off, as opposed to press releases, media or third-party reports. The cut-off date for company disclosures to be included in the analysis was July 01, 2024.

Now in its third edition, the Lead the Charge Leaderboard makes it possible to continuously track company and industry progress towards building an equitable, sustainable, and fossil-free EV supply chain.



Results from the 2025 Leaderboard

This year's analysis shows that the industry continues to make steady progress: the total average score across all 18 automakers rose by 3 percentage points in the 2025 edition compared to the previous year.

Performance improvements were particularly prominent in the "General" climate and human rights subsections, which evaluate automakers' overall approach to addressing climate, environmental and human rights impacts within their supply chains, with scores in these two subsections each rising by 8 percentage points. Responsible transition mineral sourcing saw the third largest performance improvement, with the average score for this subsection rising by 5 percentage points.

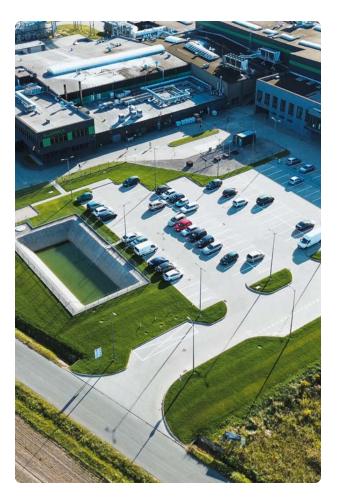
It is no coincidence that these subsections address the same issue areas that have been targeted by recently approved policies and regulations, such as the EU Battery Regulations and the Corporate Sustainability Due Diligence Directive (CSDDD).

Stronger progress by the industry in these areas is a testament to the important role of public policy and regulations in driving better performance by the industry. This further illustrates why accountability regulations such as the CSDDD, which is currently at risk of being watered down in terms of obligations and scope, should not be weakened, as this would jeopardize the progress achieved and the promising path of change.

Another encouraging finding of the Leaderboard is that, after two years of near industry-wide inaction on Indigenous Peoples' rights, this year's results show some initial indications of growing momentum on this issue, with several automakers making new commitments or improving their performance in this area.

Nonetheless, the rate of progress by the industry continues to be woefully inadequate. For the third year running, no automaker achieved a total score of over 50% and the total average score across all 18 automakers is just 22%.

It is especially disconcerting that, after an initial flurry of progress by multiple automakers on steel and aluminum decarbonization last year, automaker



performance in this area has largely stagnated. Further, despite some notable progress by several automakers, over 50% of companies did not improve their performance at all on Indigenous Peoples rights or workers' rights.

The Leaderboard also reveals that many automakers have put in place robust policies and commitments, but are falling short when it comes to the hard work of implementation. A common theme across the Leaderboard is that scores for indicators focused on policies, commitments and targets continue to be noticeably higher than those focused on providing evidence of actual implementation.

The industry can, and must, do better. The current picture of spotty performance across different issues provides opportunities for companies to radically improve their scores by replicating best practices: over half of the indicators are fully met by at least one company and companies could increase their scores to over 70% by matching the practices of their highest performing peers across different areas.

Main Findings



TESLA continued to make strong progress this year, improving its overall score by 8 percentage points and obtaining the number one spot in the Leaderboard. It is followed by **FORD** and **MERCEDES** in second and third place respectively. However, **this is a 3-way dead heat, with just 1.4 percentage points separating Mercedes and Tesla**. This means that any positive action or regression by any of these companies can easily reshuffle the top spots in next year's edition.

Mercedes-Benz

MERCEDES is the only automaker that is in the top five highest scorers across each of the eight subsections, demonstrating that it is possible for automakers to make robust progress across all of the issue areas covered by the Leaderboard simultaneously.



Former top-ranking automaker, **FORD**, has made practically no progress on its overall score. Its marginal score increase of 4 percentage points in the fossil-free and environmentally sustainable supply chains section has been off-set by a drop in score of virtually the same value on human rights.



VOLVO achieved the largest score increase of 9 percentage points, improving its performance across 7 of the 8 subsections and also achieving the largest score increase in the fossil-free and environmentally sustainable supply chains section, where Volvo was already the top scorer. Volvo's performance demonstrates that industry leaders can continue to raise the bar for others to follow, without having to sacrifice their rate of progress in other areas.



For the second year running, **GEELY** received one of the largest score increases in the Leaderboard. This year, it achieved the joint largest score increase in the human rights section, together with Volkswagen and Kia, and also improved its score in the fossil-free and environmentally sustainable supply chain section, where it retains its position as the top-ranking East Asian automaker. This has enabled **GEELY** to rise in the rankings by one position: it is now the second highest scoring East Asian automaker overall, behind **HYUNDAI** by 3 percentage points.



VOLKSWAGEN and **KIA** were also among the strongest performers of this year's Leaderboard, each increasing their overall scores by 8 percentage points on the back of noteworthy improvements across both sections of the Leaderboard. As a result, both automakers climbed up in the rankings by one position, to 5th and 12th place respectively.

Initially the top scoring East Asian automaker of the Leaderboard, **NISSAN** has continued its descent down the rankings this year. It is one of the worst performers, improving its score against seven indicators across the entire scorecard. **TOYOTA**, meanwhile, is the only automaker out of all those evaluated since 2023 that has not improved its score for the fossil-free and environmentally sustainable supply chains section in the slightest.

Despite having the most room for improvement, the bottom-ranked companies remain the same as last year. **BYD** and **GAC** have improved by 2 percentage points, while **SAIC** remained at the same 1% overall score as last year.

In the fossil free and environmentally sustainable supply chains section the top three performers have further extended their lead over the remaining companies, achieving scores that are equal to or more than double the industry-wide average score. However, in the human rights section the reverse has occurred: with the top performers making barely any gains at all, and those companies in the middle and lower down in the rankings managing to significantly close the gap with the industry leaders.

Fossil-free and Environmentally Sustainable Supply Chains

Companies scored on average 19% on efforts to make their supply chains fossil-free and environmentally sustainable, an increase of just 3 percentage points compared to the 2024 Leaderboard.

Despite some encouraging initial progress by several automakers in last year's edition of the Leaderboard, scores this year on steel and aluminum decarbonization have stagnated: rising by just 1 percentage point. **HYUNDAI, TOYOTA, BYD** and **GAC** are the only automakers that have not improved their performance in these areas since the first edition of the Leaderboard.

VOLVO, already the industry leader in the climate and environment section, increased its total score by 10 percentage points - the largest score increase out of all 18 automakers for this section. Volvo continues to be the industry leader on steel and aluminum decarbonization, where it further extended its lead over other automakers, achieving an average score for these two subsections that is more than four times higher than the industry average.

BMW shot up the rankings to first place in the General climate and environment subsection, achieving a score of 60% - the highest score for an individual subsection across all 18 automakers in the fossil-free and environmentally sustainable supply chains section. **TESLA** also significantly improved its performance in this section, improving its score by 24 percentage points. Overall, progress in this subsection was much more encouraging, with an average score increase of 8 percentage points.

Company performance on addressing **deforestation risks** in their supply chains was poor overall and noticeably less advanced than the progress made by companies in other industries on this issue, where greater transparency, more ambitious commitments and stronger due diligence is more commonplace than in the automotive industry.

Only marginal gains were made in the battery sustainability subsection, although several companies made more substantial improvements. **MERCEDES** was able to take the top spot from **TESLA**, with **RENAULT** coming in third place. Renault's performance in this area over the past two years has been particularly impressive: it has more than doubled its score from the first edition of the Leaderboard, rising from sixth to third place in the rankings. All three top performers, including Tesla, have continued to increase their score in this subsection, with their scores now more than double the industry-wide average score of 16%.

Together with **SAIC**, the three Japanese automakers - **TOYOTA**, **HONDA** and **NISSAN** - were the only automakers evaluated that did not improve their scores in the fossil-free and environmentally sustainable supply chains section.

STELLANTIS was the lowest performing European automaker on fossil-free and environmentally sustainable supply chains and was also overtaken by both **GEELY** and **HYUNDAI** in this section this year.

Human Rights And Responsible Sourcing

The industry has once again made some progress on human rights: the average score now stands at 25%, 4 percentage points more than last year. While this is positive, the pace of progress is awfully slow and the sector's uptake and implementation of human rights commitments remains alarmingly low. Apart from Ford, no other automaker has passed the 50% mark for the human rights section, and Ford is only just over.

Despite a poor year-over-year performance, **FORD** has managed to remain at the top of the Leaderboard on human rights. The company actually dropped its overall score achievement from 54% to 52%. Together with Ford, **NISSAN** and **STELLANTIS** were the only other two companies that regressed over their 2024 overall Human rightss.

TESLA was able to take second place from **MERCEDES**, albeit with a negligible difference between the two companies' scores. Tesla scored considerably higher than Mercedes on responsible transition mineral sourcing, whilst Mercedes achieved a score on workers' rights that was almost double that of Tesla's, the only Western company to not have a collective agreement with its workers.

GEELY, **KIA** and **VOLKSWAGEN** were the strongest overall improvers on human rights this year, all increasing their overall scores by 11 percentage points. Geely improved its score in the General human rights subsection by an impressive 24 percentage points. Together with **TESLA**'s improvement in the General climate and environment section, this represents the joint largest score increase for a single subsection across the Leaderboard. **VOLKSWAGEN** and **KIA** also achieved impressive score improvements in the General subsection, with Volkswagen leaping up the rankings from 7th to 2nd place, behind Ford by less than one percentage point.

Unlike last year, **US** automakers have made the least progress compared to all other regions. This year, it is the East Asian companies that have made the greatest progress collectively, although there are marked differences between countries and companies.

There are also marked differences in achievement between human rights subsections. The average score in **the general human rights due diligence** section was 43%, the highest of all subsections. This is also the subsection that saw the greatest improvement this year, with an average overall score increase of over 8 percentage points.

The average achievement score on **transition minerals** increased by just over four percentage points to 29%, representing the third largest score increase for a subsection across the Leaderboard. This section also continues to feature the highest score for a single subsection, with Ford scoring 89%.

After two years of near industry-wide inaction, this year saw some **initial glimmers of hope with regards to Indigenous Peoples rights**, with 5 automakers either making new commitments or improving their existing performance in this area. However, with an average score of just 6% across all companies, this continues to be the lowest scoring subsection by far. Far too few companies have explicit commitments or policies on Indigenous Peoples rights, and those that do still have a long way to go with regards to ensuring their effective implementation.

55% of companies made no progress on workers' rights, resulting in an average score improvement of just two percentage points.

BMW is the only company that requires suppliers to pay a living wage. **FORD**, **STELLANTIS**, and **VOLVO** all commit to a living wage in their own human rights policies, but paradoxically do not require their own suppliers to pay a living wage. Only Stellantis explains how it calculates the living wage.

GAC and **SAIC** are the lowest scoring across the human rights section, while national peers **BYD** and **GEELY** are beginning to make more progress, with Geely scoring 15 and 17 percentage points higher than GAC and SAIC respectively.

GM continues to be the worst performing US company on human rights: scoring half of **FORD**'s overall Human rights, and 21 percentage points less than **TESLA**. **RENAULT**, meanwhile, remains the worst performing European company in this area.

Despite regressing on some human rights commitments and making no progress on Indigenous Peoples' rights, **HYUNDAI** is still the best human rights performer among the East Asian automakers. It is also the top improver on transition minerals this year. At the same time, its score drop of 7 percentage points on workers' rights is the third largest decrease on human rights across all 18 companies.

Scores from the 2025 Edition of the Lead the Charge Leaderboard

RANK	AUTOMAKER	FOSSIL FREE AND ENVIRON- MENTALLY SUSTAINABLE SUPPLY CHAINS	HUMAN RIGHTS AND RESPONSIBLE SOURCING	OVERALL LEADERBOARD SCORE
01	TESLA	40%	46%	43%
02	Ford	33%	52%	42%
03	Mercedes-Benz	38%	39%	41%
04	VOLVO	45%	32%	38%
05	※	27%	37%	32%
06	Ö	20%	39%	29%
07	gm	21%	25%	23%
08	RENAULT	22%	23%	23%
09	STELLANTIS	15%	31%	23%
10	(S) HYUNDAI	19%	24%	21%
11	GEELY	19%	17%	18%
12	KV	12%	20%	16%
13	NISSAN	12%	12%	12%
14	❤	5%	16%	10%
15	HONDA	4%	16%	10%
16	BYD	4%	7%	6%
17	GAC	6%	2%	4%
18	SAIC	2%	0%	1%

About Lead the Charge



What is Lead the Charge?

Lead the Charge is a diverse network of local, national, and global civil society organizations calling on automakers to radically transform their supply chains so they are free of fossil fuels, environmental harms and human rights abuses.

Network members work across multiple geographies and issues, with expertise in climate, environmental justice, human rights, Indigenous rights, heavy industry, ESG and more.

Our vision is an automotive industry where all vehicles are made:

01 — Equitably

Respecting and advancing the rights of Indigenous Peoples, workers, and local communities throughout the supply chain.

02 — Sustainably

Preserving and restoring environmental health and biodiversity across supply chains, while reducing primary resource demand through efficient resource use and increased recycled content.

03 — Fossil Free

100% electric and made with a fossil fuel-free supply chain.

What is the Lead the Charge Leaderboard?

The Lead the Charge Leaderboard, published annually and now in its third edition, evaluates the progress of 18 of the world's leading automakers towards this vision of building equitable, sustainable and fossil-free supply chains. As vehicle production shifts to electric vehicles (EVs) to reduce greenhouse gas emissions, the Lead the Charge Leaderboard aims to establish a new expectation for what is meant by "clean car". This means not just zero tailpipe emissions, but EVs with anequitable, sustainable, and fossil-free supply chain.

A clean car is thus defined as having:

- a fossil-free supply chain that also has the lowest possible negative impact on biodiversity, resource depletion, and ecosystem resilience; and
- a supply chain that respects the rights of Indigenous Peoples, workers, and local communities.

This definition, and the Leaderboard itself, was developed following a review of existing benchmarking initiatives, reporting standards, best practice supply chain initiatives and legislative requirements in the two of the largest EV markets (EU and United States). The indicators were aligned to international norms and widely recognized standards, such as the UN Guiding Principles on Business and Human Rights, the Task Force on Climate-Related Financial Disclosures, Global Reporting Initiative, the International Energy Agency, and the EU Taxonomy. Following their drafting, stakeholders were consulted on the proposed indicators which were subsequently refined. See the methodology for a more detailed explanation of the Leaderboard development.

Structure of the Leaderboard

The Leaderboard is designed to give companies a score out of 100%. This enables an analysis of relative performance between automakers and of how close or far companies are to meeting the expectations within the scorecard.

The Leaderboard is divided into two main sections: fossil-free and environmentally sustainable supply chains, and human rights and responsible sourcing.

Within each of these there are four subsections, representing different supply chain issue areas, which are outlined in the box below.

LEADERBOARD SECTIONS

Fossil-free and Environmentally Sustainable supply chains (climate and environment):

- Fossil-Free and Environmentally Sustainable Supply Chains (General)
- Fossil-Free and Environmentally Sustainable Steel
- Fossil-Free and Environmentally Sustainable Aluminum
- Fossil-Free and Environmentally Sustainable Batteries
 - Climate Lobbying (applied as a multiplier to total scores in this section)

Human Rights & Responsible Sourcing:

- Respect for Human Rights (General)
- Responsible Sourcing of Transition Minerals
- Respect for Indigenous Rights and Free Prior and Informed Consent
- Respect for Workers' Rights

The "General" indicators within both sections provide a baseline score, assessing automakers' general efforts to address human rights, emissions, and other environmental impacts across their supply chains. The other subsections provide a more focused analysis of their efforts to address particularly salient supply chain issues related to the transition to EVs.

Each of the subsections within the two sections of the Leaderboard follow the same indicator structure. Within the fossil-free and environmentally sustainable supply chain section, the indicators of each subsection are shaped around a SBTi report on supply chains which, although focused on emissions, provides a relevant framework for wider environmental impacts. Within the human rights and responsible sourcing section, the indicator design is shaped around UN Guiding Principles.

In order to reward automakers' progress towards the delivery of clean vehicles, the scoring is intentionally weighted towards implementation indicators. These framings and weightings are set out below.

FOSSIL-FREE AND ENVIRONMENTALLY SUSTAINABLE SUPPLY CHAINS

INDICATOR CATEGORIES	% WEIGHTING
Disclose	100%
Target setting & progress	150%
Supply chain levers	200%

HUMAN RIGHTS AND RESPONSIBLE SOURCING

INDICATOR CATEGORIES	% WEIGHTING
Commit	100%
Identify	150%
Prevent, Mitigate and Account	200%
Remedy	200%

Within the Leaderboard, some indicators award points for participation in third party accreditation or certification schemes, commonly used by automakers as part of their environmental and human rights due diligence. Given the range in effectiveness of such schemes,3 a point modifier was developed to account for the disparity with regards to their robustness and effectiveness, with points being modified progressively downwards for schemes that fail to meet minimum criteria for effective governance and auditing. This analysis of third party schemes has also been published as a standalone

briefing. This analysis has not been updated for the 2025 edition of the Leaderboard, but will be updated later in 2025 to be included in the 2026 Leaderboard.

Within the fossil-free and environmentally sustainable supply chains section, climate policy lobbying is also considered as an additional factor, reflecting the important role automakers can play advocating for, rather than against, government efforts to raise standards and create a race to the top. As such, the Leaderboard includes a weighting that modifies automakers' overall scores in this section according to their ratings in InfluenceMap's evaluations of automakers' climate lobbying policies and practices.4

The indicators and score weightings provide the framework for assessing the automakers. Company policies and activities were then analyzed, which was limited to reviewing official company disclosures as opposed to press releases, media or third-party reports. This focus on company disclosures was adopted to ensure the analysis was based on official company policy and reporting that had received board level sign-off, as well as to encourage greater transparency in the industry. However, this year a change was introduced whereby information from company websites is also considered, provided official company documents explicitly refer to them and/or provide relevant links. The cut-off date for new or modified company policies to be included in this year's analysis was 01 July 2024.



In the course of this year's analysis, the scores against a small number of indicators were corrected from last year's assessment. In order to ensure a meaningful comparison in companies' changes in performance in the 2025 edition versus the 2024 edition, all comparative data presented in the report that shows changes in scores across both years uses the corrected data from the 2024 edition.

A more detailed description of the methodology, including changes that have been made this year can be found in *Automaker Supply Chain Leaderboard*- *Methodology* section of the Lead the Charge website. The appendix to the report also outlines the scorecard's individual indicators.



METHODOLOGY UPDATES FOR THE THIRD EDITION OF THE LEADERBOARD

Best practices and international standards for clean and equitable automotive supply chains are constantly developing. As such, a number of minor adjustments to the assessment framework were incorporated into the 2025 edition of the Leaderboard. Some of the more material changes are described below:

Fossil-free and Environmentally Sustainable Supply Chains

- Deforestation related indicators have been added to the "General" subsection address automakers' high risk exposure to deforestation and in response to increasing expectations from different stakeholders, including EU regulation in this area.
- Definitions of "low—carbon" steel and aluminium have been updated to reflect the present day consensus on what constitutes a sufficiently ambitious but technically feasible (with currently available technologies) carbon footprint for these materials.
- Additional scoring criteria on steel and aluminum offtake agreements have been added in order to better differentiate between more impactful practices and high performers in this area.
- Indicators on battery circularity have been further refined, in particular to integrate the important area of battery reuse / repurposing in addition to battery recycling.
- Some indicators have been refined for precision and consistency, such as the indicators on addressing water risks in supply chains, the indicators on third party assurance schemes and on disclosing quantities of low-carbon steel and aluminum used in production cycles.

Human Rights

- Some indicators have been broken down into a number of alternative paths or approaches to allow for greater differentiation between poor, good, and best practice.
- Some additional indicators or amendments to existing indicators seek greater granularity in the information that is disclosed, including in relation to companies' supply chain risks, the findings and responses to supplier risk assessment and monitoring measures, and reparations offered for adverse human rights impacts.
- Some of the new or amended indicators are now also followed by additional or amended indicators seeking quantitative and/or qualitative information or evidence to substantiate the relevant company statements.
- Some indicators have been refined for greater clarity and precision.

Which companies are we looking at?

The companies assessed within the Leaderboard were selected because they are the largest producers of EVs within specific regions, or are the largest global automakers. As such, the Leaderboard is focused on companies that are, or could be, leading the transition to EVs and who can therefore play a pivotal role in creating a race to the top on EV supply chain practices.

The companies selected are listed below. R-N-M Alliance sales data includes both Renault and Nissan, which were evaluated individually in the scorecard owing to them having largely separate

operations, policies and reporting (the alliance also includes Mitsubishi, which was not included in this year's scorecard as it constituted a slim share of the alliance's total EV sales). For the same reason Hyundai and Kia were evaluated separately in the scorecard despite having combined sales data.

All automakers were contacted before publication to provide the results and the opportunity for discussion, questions, clarifications, and feedback. All feedback received was reviewed, and where pertinent, incorporated into the final Leaderboard scores and this resulting report.

Automakers included within the analysis:

OEM	BEV Sales	Total Vehicle Sales	BEV %	Headquartered Country
BMW Group	364,001	2,243,785	16%	Germany
BYD	1,937,574	4,513,032	43%	China
Ford	148,336	4,030,064	4%	United States
GAC	380,251	817,239	47%	China
Geely Auto Group*	682,018	2,527,240	27%	China
GM	821,270	5,424,831	15%	United States
Honda Motor	65,659	3,789,631	2%	Japan
Hyundai Motor (inc. Hyundai and Kia)	190,326	3,200,080	6%	South Korea
Mercedes-Benz Group	252,840	2,104,218	12%	Germany
Renault-Nissan Alliance	134,572	2,520,120	5%	France/Japan
SAIC	261,795	1,456,717	18%	China
Stellantis	216,195	5,355,849	4%	Netherlands
Tesla Inc.	1,977,734	1,977,734	100%	United States
Toyota Motor Corp.	133,796	9,363,271	1%	Japan
VW Group	707,516	8,450,970	8%	Germany
Volvo Car Group*	175,194	763,389	23%	Sweden

^{*}Volvo Cars' and Geely Autos' sales are also combined in Marklines under Geely Holding Group, however Volvo Cars publishes disaggregated BEV sales data and so this data was used for Volvo and subtracted from Geely Holding Group's sales figures.

Source: Marklines. All figures are YTD up to and including July 2023. Data covers passenger vehicles only and covers Europe, China, South Korea, Japan, and USA and Canada

CHAPTER 003

Leaderboard Findings



The Lead the Charge Leaderboard assesses the world's leading EV and automakers on their efforts to eliminate emissions, environmental harms, and human rights violations from their supply chains. Disclosures from the 18 automakers selected were analyzed and assessed against the scorecard's criteria outlined in the accompanying methodology.

The results from this assessment are presented below and can also be found on the Lead the Charge website.

Overall scores and changes from 2024

This year saw modest progress by most companies. Apart from Stellantis and SAIC, all other companies saw an improvement in their overall score this year, ranging from one to nine percentage point increases.

However, the pace of progress will need to accelerate significantly if the auto industry is to successfully rise to the challenge ahead. For the third year running, no company achieved a total score of 50% or over and the average score across all automakers was just 22% (up from 18.5% in last year's edition). Like last year, companies' average score was slightly higher for human rights and responsible sourcing (25%) than for fossil free and environmentally sustainable supply chains (19%).

The 2025 Leaderboard again saw a change in the top performing automakers: Tesla and Ford swapped places, with Tesla now in the top spot, and Ford in second place. Tesla has managed to increase its overall score by 28 percentage points since the first edition of the Leaderboard: the

largest score improvement by a significant margin. Tesla's strong performance since 2023 shows that rapid progress by automakers is possible.

From fifth position, Stellantis dropped down to ninth, now behind all the other US and European automakers. Ford continues to lead on human rights, although its lead over other automakers was reduced, whilst Volvo continues to lead on fossil-free and environmentally sustainable supply chains, managing to extend its lead over the remaining automakers.

Mercedes, meanwhile, continues to perform well across both sections, finishing close with Tesla in both, and in third place in the Leaderboard overall. In fact, Mercedes is the only automaker that is in the top five highest scorers across each of the eight subsections, demonstrating that it is possible for automakers to make solid progress across all of the issue areas covered by the Leaderboard simultaneously.

Lead the Charge Leaderboard

RANK	AUTOMAKER	FOSSIL FREE AND ENVIRON- MENTALLY SUSTAINABLE SUPPLY CHAINS	HUMAN RIGHTS AND RESPONSIBLE SOURCING	LEADERBOARD
01	TESLA	40%	46%	43%
02	Ford	33%	52%	42%
03	Mercedes-Benz	38%	39%	41%
04	VOLVO	45%	32%	38%
05	※	27%	37%	32%
06	8	20%	39%	29%
07	<u>gm</u>	21%	25%	23%
08	RENAULT	22%	23%	23%
09	STELLANTIS	15%	31%	23%
10	8 HYUNDAI	19%	24%	21%
11	GEELY	19%	17%	18%
12	KU	12%	20%	16%
13	NISSAN	12%	12%	12%
14	(P)	5%	16%	10%
15	HONDA	4%	16%	10%
16	BAD	4%	7%	6%
17	GAC	6%	2%	4%
18	SAIC	2%	0%	1%

Volvo was the biggest improver of the year, with a score increase of 9 percentage points. Volvo also achieved the largest score increase in the climate and environment section, where Volvo was already the top scorer. Volvo's score in this section is now double the industry average, and more than four times the industry average in the steel and aluminum subsections. The company's performance in this area demonstrates that industry leaders can continue to raise the bar for others to follow.

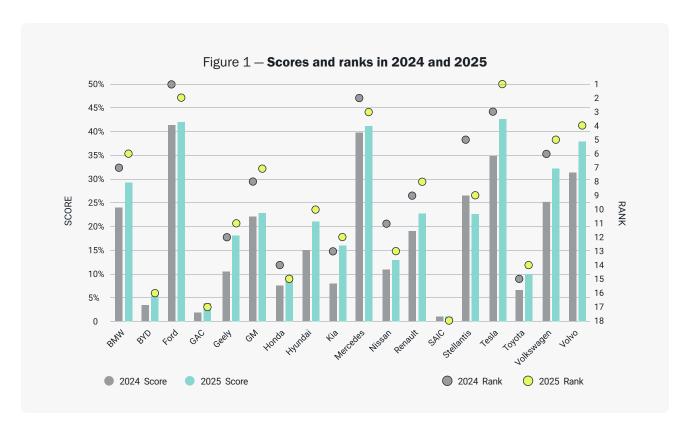
This pattern has not been replicated in the human rights section, which saw the performance of the industry leaders largely stagnating, with the most substantial score improvements occurring lower down in the rankings from companies such as Kia, Volkswagen, Geely, BMW, Toyota and Volvo.

Volvo's score improvement is followed by Geely, Volkswagen, Kia and Tesla, all of which achieved an overall score increase of 8 percentage points. As a result, Tesla was able to take the top spot in this year's rankings. However, Tesla's position in the number one spot is precarious as a key factor in its

top score was its positive climate lobbying score, for which it currently receives the highest ranking of the industry from InfluenceMap (evaluating practices up until May 2024). If climate lobbying performance was not taken into account for the Leaderboard scores, Tesla would continue in third place. Given reports that the company has been supporting the elimination of EV tax credits in the United States, Tesla could easily fall from the top spot in next year's edition unless it continues to maintain its strong pro-climate lobbying record.

Chinese automaker Geely also achieved one of the largest score increases in the Leaderboard for two years running. This year, Geely has managed the joint largest score increase in the human rights section, together with Kia and Volkswagen. This enabled Geely to rise in the rankings by one position: it is now the second highest scoring East Asian automaker overall, behind Hyundai by just 3 percentage points. Geely has also maintained its position as the top-ranking East Asian automaker in the fossil-free and environmentally sustainable supply chains section and climbed up the human rights rankings by 3 places.





Performance by individual automakers varies within and between sections. For example, while industry leader Volvo continued to lead in its approach to decarbonizing the steel and aluminum supply chains, its score in the battery subsection is less than half of the score of other top performers. On human rights, it lags behind most US and European automakers.

Stellantis, meanwhile, performs particularly well on General human rights due diligence, but the company's scores drop significantly on all other human rights subsections. Stellantis is also, by a significant margin, the lowest scoring automaker out of its European and North American peers in the fossil-free and environmentally sustainable supply chains section. This year, it is now the worst performing Western company of the Leaderboard overall.

The performance of the Japanese automakers Toyota and Honda tells a similar story. Both companies achieved important improvements in the human rights section, but neither automaker managed to improve their scores against a single indicator across all four of the climate and environment subsections. In fact, Toyota is the only company out of all those who have been evaluated since the first edition of

the Leaderboard that has not improved its score at all in this section since the 2023 edition.

The biggest improvements have been achieved in the General subsections for both the fossil-free and environmentally sustainable supply chains and the human rights and responsible sourcing sections, where average scores each rose by 8 percentage points. Responsible transition mineral sourcing saw the third largest performance improvement, with the average score for this subsection rising by 5 percentage points.

It is no coincidence that these subsections address the same issue areas that have been targeted by recently approved policies and regulations, such as the EU Battery Regulations and the Corporate Sustainability Due Diligence Directive (CSDDD). Stronger progress by the industry in these areas is testament to the important role of public policy and regulations in driving better performance by the industry. This further illustrates why accountability regulations such as the CSDDD, which is currently at risk of being watered down in terms of obligations and scope, should not be weakened, as this would jeopardize the progress achieved and the promising path of change.

Progress in the other subsections has been much more muted to almost non-existent. Despite some promising initial progress on steel and aluminum decarbonization last year, performance in these two areas has largely stagnated this year. Performance on the battery sustainability and workers' rights subsections has not been much better, with the average scores against these indicators rising by just 2 percentage points.

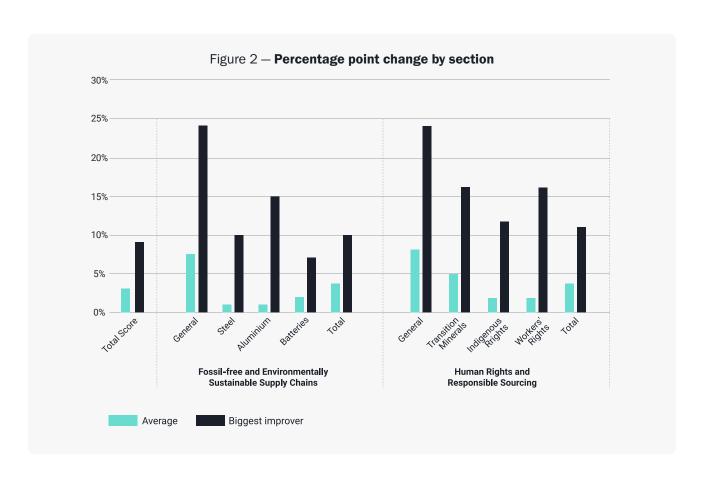
A similar picture emerges on Indigenous Peoples' rights, which continues to be the subsection with the lowest average score across all 8 subsections. However, this year did see some more noteworthy improvements compared to last year, with five automakers either making new commitments or improving their existing performance in this area, showing initial signs of some long-overdue momentum on this issue.

The failure of companies to make more substantial progress on the specific issue areas addressed by the Leaderboard signals a collective failure to take meaningful action beyond general commitments

and processes, and the need for companies to move swiftly from generic processes and systems to more targeted, granular, and demonstrable action.

As far as individual companies are concerned, Tesla achieved the largest score improvement for a single subsection in the climate and environment section for the second year running, while Geely achieved the same in the human rights and responsible sourcing section. The companies each improved their scores by 24 percentage points in the general fossil-free and environmentally sustainable supply chains and general human rights due diligence subsections, respectively.

Volvo and Ford were the only companies to improve their performance in all four climate and environment subsections, while BMW and Geely were the only two to do so in all four human rights subsections. These companies demonstrate that, with the right amount of ambition and dedication, important progress is possible not just on individual issue areas, but across the board.



The changing regulatory environment

The changing regulatory environment, led by the EU and China, is having an impact on automakers.

German automakers' stronger performance on all human rights categories, and on general human rights due diligence in particular, can be explained in part by existing human rights and environmental due diligence requirements under Germany's supply chain due diligence legislation, in effect since January 2023. However, similar legislation in France does not seem to be having an impact on Renault's performance - the company remains the worst performing European (and Western) automaker as far as human rights are concerned.

A growing lever of change includes recent advances in legislation at EU level. The EU Batteries Regulation came into force in August 2023, and the EU Critical Raw Materials Act came into effect in May 2024, although different parts of these regulations will come into effect gradually over the next few years. Following these two landmark laws, the EU Corporate Sustainability Due Diligence Directive (CSDDD) was approved in May 2024. The CSDDD requires large EU companies, or companies operating within the EU, to identify and address adverse human rights

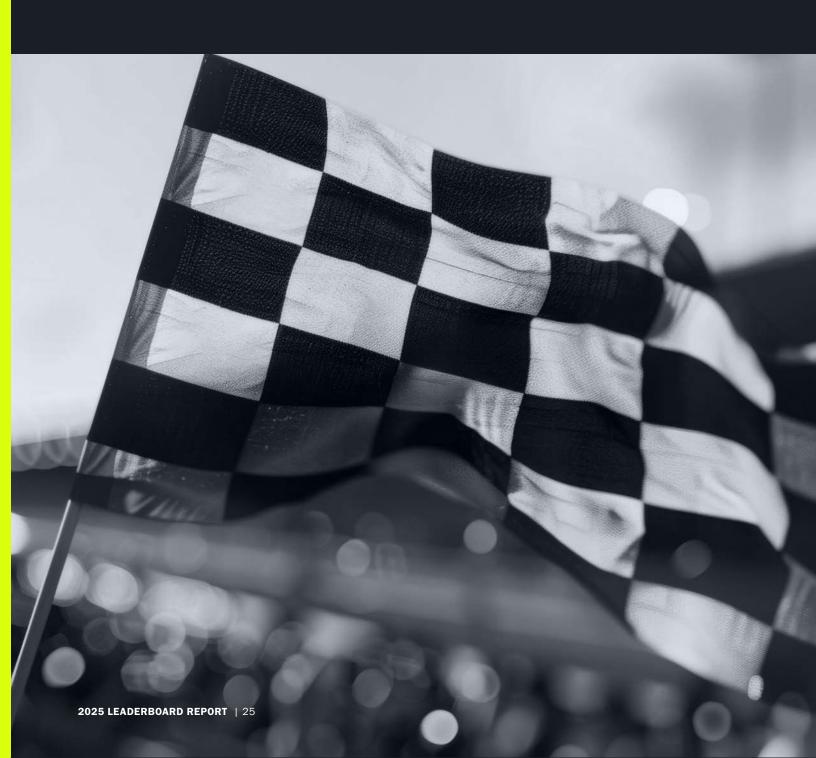
and environmental impacts in their operations, subsidiaries, and supply chains. The CSDDD also establishes a phased implementation, with the largest "in-scope" companies having to comply earlier than smaller companies.

In November 2024, the EU approved the Forced Labour Regulation, which will prohibit products made with forced labor from being sold in the EU market. This will apply three years after entering into force, therefore impacting goods sold into or from the EU from the end of 2027. As automakers bring their practices in line with the requirements of these laws, we should expect to see greater compliance with the Leaderboard indicators.

Although the majority of regulatory changes are occurring in Europe, we can also see noteworthy environmental rules in China, such as mandatory climate disclosures for scope 1, 2 and 3 emissions, as well as the expansion of the country's emission trading scheme to cover the emissions-intensive steel, aluminum, and cement industries. These positive regulatory developments could lead to much stronger performances by the Chinese OEMs against the fossil-free and environmentally sustainable supply chains indicators in future editions of the Leaderboard.



Who leads where?



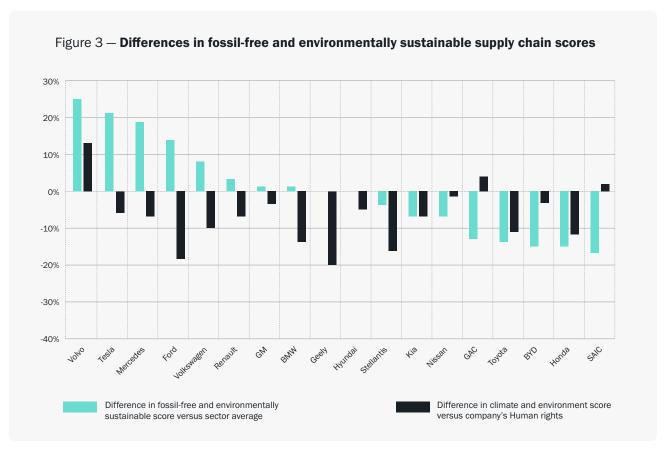
Fossil-free and Environmentally Sustainable Supply Chains

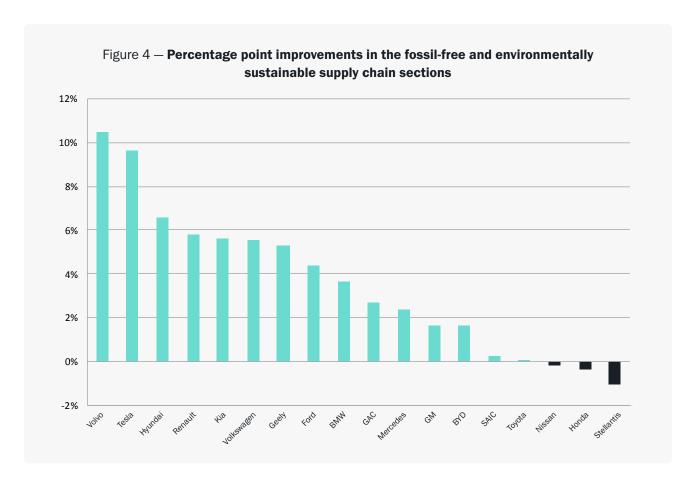
Companies scored on average 19% on efforts to make their supply chains fossil-free and environmentally sustainable. Although this represents a 3 percentage points increase compared to the 2024 Leaderboard, it is still lower than the average across the scorecard.

With a total score of 45%, Volvo continued to lead in the fossil-free and environmentally sustainable section. Tesla, with a score of 40%, ranked second, overtaking Mercedes with a score of 38%. The scores of these top three performers were equal to or more than double the industry-wide average score.

Ford and Volkswagen again ranked the 4th and 5th respectively in the fossil-free and environmentally sustainable section. With scores of 33% and 27%, these two companies still have a large gap to close with the top three ranking companies in this section, especially with regards to their performance in the steel, aluminum and battery supply chains subsections.







Most companies scored lower for the fossil-free and environmentally sustainable section than the human rights and responsible sourcing section. This contrast is most notable for Ford, the top performer in the human rights section, as well as for BMW and Stellantis, which have a score difference of more than 15 percentage points between the two sections.

The top performing companies Volvo and Tesla were also the biggest improvers within the climate and environment section, achieving score increases of 10 percentage points, with Volvo slightly edging out Tesla in terms of its overall improvement. In contrast, the companies at the bottom of the ranking in this section of the Leaderboard, such as Honda, SAIC and Toyota, have shown little or no progress.

Hyundai, Renault, Kia, Volkswagen and Geely also made some steady progress, each improving their scores by more than 5 percentage points. This has enabled Geely to maintain its position as the top-ranking East Asian automaker for this section, although the company is just 0.5 percentage points ahead of Hyundai. Both companies overtook Stellantis in this section this year.

Ford, BMW and GAC made more modest progress, increasing their scores between 3 and 4 percentage points. GAC's minor score increase enabled the company to overtake Honda and Toyota this year.

General indicators

The General fossil-free and environmentally sustainable indicators provide an overall baseline score for this section of the Leaderboard. They seek to capture a company's general approach to reducing supply chain carbon emissions and environmental harms, providing the foundations for automakers to take more targeted action on their steel, aluminum and battery supply chains.

Recognizing the increasing risk exposure of automakers to deforestation and land conversion in their soft and hard commodity chains, the 2025 edition of the Leaderboard includes new indicators related to deforestation among the general indicators. These new indicators assess automakers in terms of their disclosure, target setting and use of supply chain levers to address deforestation risks and impacts in their supply chains.

BMW made it to the top of this subsection, improving its score by an impressive 16 percentage points. The company is now the only company to score above 60% for a single subsection within the fossil-free and environmentally sustainable supply chains section. BMW's strong performance this year is primarily due to its above average performance on the new deforestation indicators. For example, BMW is the only company to explain how it considers deforestation risks in its supplier tender and contract process, explicitly stating that it "gives preference to suppliers that are committed to the principles of certified, sustainable agriculture and forestry in their land and forest use."

Mercedes and Volkswagen also managed to score more than half of the points available for this subsection, a notable improvement compared to the previous year when no automakers scored more than 50%.

The general fossil-free and environmentally sustainable subsection saw big improvements by Tesla, Renault, Volkswagen and BMW, each improving their scores by over 15 percentage points. Tesla achieved a 24 percentage point score increase, largely due to strengthening measures to incentivize its suppliers to reduce emissions and the company's above average performance on the new deforestation indicators.

Top five companies for general indicators

GEN RAI	NERAL NK	OVERALL RANK	GENERAL (CLIMATE AND ENVIRONMENT) SCORE
1	BMW	6	60%
2	Mercedes	2	54%
3	Volkswagen	5	51%
4	Renault	8	47%
5	Ford	2	45%

Renault achieved the second largest score increase in the general subsection, primarily due to disclosing additional requirements and incentives for its suppliers to reduce GHG emissions. Renault has one of the most precise supply chain emissions reduction targets, which includes three interim (2030) targets that are disaggregated according to key supply chain segments and priorities: batteries, extraction of raw materials and parts manufacturing, and recycled content. Renault also discloses that 80% of its tier 1 suppliers have now set emissions reduction targets, the highest percentage out of all the automakers that disclose this information.

Mercedes, however, has set the most ambitious supply chain emissions reduction target: aiming to reduce these emissions by 50% per car across the entire value chain by 2030, compared to 2020 levels. Mercedes is also one of only a few companies to disclose specific due diligence and supplier engagement activities it has undertaken to address deforestation risks in its supply chain, providing evidence of engaging leather suppliers in Brazil to address deforestation.

Although Ford continued to be among the top five companies in the general indicators section, it is closely followed by other companies that have made more notable progress in the past year, such as Hyundai and Tesla. Ford is the only company to score full points for the indicator on requiring suppliers to set GHG emissions reduction targets, requiring not only its tier 1 suppliers but also the subcontractors of those suppliers to establish science-based GHG reduction targets, action plans, and transparent reporting mechanisms.

Together with Tesla, Ford also achieves the highest average scores against the indicators on supply chain water management. Both companies require suppliers to disclose their water usage and set water reduction targets, and also disclose specific supplier engagement activities they have undertaken to minimize water usage in their supply chains. However, Ford lags behind Tesla, and several other automakers, with regards to the equivalent indicators on deforestation in this year's Leaderboard.

Stellantis lost its place among the top five automakers in this subsection and was one of the few companies whose score in this subsection actually decreased this year. This was the result of the company scoring below-average in the new deforestation indicators, combined with the company's failure to improve its performance against existing indicators.

Three Chinese automakers, BYD, GAC and SAIC, were the only companies that did not disclose information on their upstream Scope 3 emissions. While some of these companies have established carbon emission reduction targets in response to China's national strategy of "Carbon Peaking and Carbon Neutrality", the quality and specificity of the targets could be improved to meet industry best

practice. These three companies therefore sit at the bottom of the rankings of this subsection.

In contrast, Geely has set a good example for its national peers by disclosing its Scope 3 GHG emissions for purchased goods and services, and also setting lifecycle emissions reduction targets that include interim year targets, including a specific target to reduce its supply chain emissions by 20% on average for each car series by 2025.

The newly added deforestation indicators saw mixed performance across automakers. It is notable that more than half of the automakers (10 out of 18) have established some form of supplier requirement on deforestation and / or land conversion. However, none of the companies has disclosed any quantitative information regarding deforestation and conversion-free commodity volumes from their supply chains. Furthermore, only a small number of automakers (GM, Renault, Toyota and VW) have set targets to eliminate deforestation from their supply chains and each of these automakers have only set deforestation targets in relation to a single commodity (rubber). Finally, only five automakers provide concrete evidence of due diligence and/or supplier engagement activities to address deforestation risks and impacts in their supply chains.



CASE STUDY

Deforestation-Free Cars? Lessons from other industries to eliminate deforestation

By Mighty Earth and Rainforest Foundation Norway



The auto industry is significantly exposed to deforestation risks in the supply chains of the many materials that go into making a car - from the iron ore for steel, bauxite for aluminum, rubber for tires, leather for car seats, and increasingly the minerals that go into electric vehicle batteries. Deforestation and other land use changes are responsible for roughly the same amount of climate impact as the transportation sector globally.

2025 is a pivotal year. The <u>UN</u> has called for eliminating deforestation in supply chains by 2025. Many private sector companies also cite 2025 as the year they will meet their deforestation-free commitments. As of December 2025, in line with the European Union Deforestation Regulation (EUDR), companies that are found to have deforestation in their leather, rubber, timber and palm oil supply chains, will not be able to import these products into the EU. Additionally, the EU will implement the Corporate Sustainability Due Diligence Directive on over the course of the next few years.

This year's Leaderboard results show that some automakers have begun to take proactive steps to address deforestation in their supply chains. However, these actions are patchy and not nearly enough to meet the UN's 2025 deadline. Other industries, including those with complex multicommodity supply chains, are much further along in this process. The auto sector must learn from these examples.

Palm oil

For years, deforestation for palm oil was out of control, causing over <u>3 million hectares</u> of deforestation in Indonesia alone in the past 20 years.

Starting in late 2013, palm oil traders began to adopt No Deforestation, No Peat, No Exploitation commitments (NDPE policies). These policies allowed palm oil production to expand, but only on degraded land. Industry and civil society worked together to adopt the High Carbon Stock Approach (HCS) and the High Conservation Value toolkit (HCV) to determine which land was acceptable to convert into oil palm and which was not. These policies left intact forest landscapes untouched and protected ecosystem values and biodiversity, while also safeguarding the needs of communities living in these landscapes and making sure their sacred sites were off limits.

Today, <u>83% of companies</u> in the palm oil industry have put in place NDPEs and have transparent supply chains. These changes have led to a dramatic decline in deforestation related to palm oil throughout SE Asia.

Rubber

Rubber is responsible for up to <u>4 million hectares</u> of deforestation across the tropics since 1993. Learning from the palm sector, rubber producers, processors, tire makers, auto companies, and civil

society joined together in 2018 to form the Global Platform for Sustainable Natural Rubber (GPSNR). With members like Goodyear, Firestone, Bridgestone, Michelin and Continental, the Platform covers 60% of the global tire industry.

GPSNR members must commit to producing and sourcing natural rubber in a way that does not contribute to deforestation or degrade High Conservation Values (HCVs). They also have committed to supporting the restoration of deforested and degraded rubber landscapes and to respect human rights and support community livelihoods. GPSNR members are also required to report on their actions, including disclosing the steps they have taken to assess and mitigate the risks of deforestation, HCS assessments carried out by suppliers, and measures to support suppliers to mitigate deforestation risks. GPSNR is developing an assurance model that will provide increased accountability for members.

Cocoa

The cocoa industry is another forest-risk commodity that has committed to ending deforestation. According to the 2024 Chocolate Scorecard, 34 large cocoa and chocolate companies and 13 retailers have a no-deforestation and conversion policy in place for cocoa. Many have implemented traceability and deforestation monitoring systems, and are quickly preparing to become compliant with the upcoming EU deforestation regulations. This is an industry that is smallholder dominated and therefore more complex to trace, yet these global companies have committed to end deforestation in their cocoa supply chain, with time-bound targets.

Retailers

Similar to automakers, global food retailers also face the difficulty of addressing deforestation risks across many commodities, as they sell almost every kind of forest-derived product. While there is still a long way for the industry to go, global retailers have taken steps to implement deforestation and conversion free policies in parts of their complex, diverse, global supply chains.

For example, Aldi Sud has a time-bound commodity specific policy for palm oil, timber and paper products, soy, beef, cocoa, and coffee. Sainsbury's has committed to have deforestation and conversion free own-brand products by the end of 2025. Global

retail brands such as Unilever, Hershey and Danone, meanwhile, have applied their no deforestation policies across multiple commodities. Some brands have also made great strides in supply chain transparency, with frequent, public updates about their progress toward zero-deforestation goals for a range of commodities. For example, Nestle has disclosed that 93.4% of their primary supply chains for forest risk commodities are deforestation free.

Challenges for automotive supply chains

Auto supply chains are also complex and deforestation risks are hidden throughout a vehicle. Approximately half of the leather exported from Brazil is used by the automotive sector for car seats and interiors. Cattle ranching is the main direct driver of deforestation in the Amazon; Brazil has the biggest bovine herd in the world and all imports of Brazilian leather entail environmental risks such as deforestation and land-grabbing.

Similarly, mining <u>iron ore</u> for primary steel, <u>bauxite</u> <u>for aluminum</u>, and other minerals for car batteries have adverse impacts on forests, communities, and biodiversity across the globe. The nickel mining industry, for example, risks causing another 500,000 hectares of deforestation in Indonesia.

However, companies in these industries, as well automakers themselves, have made far less progress than other sectors when it comes to addressing deforestation risks and impacts.

Automakers and their suppliers within these industries must step up their efforts.

Stakeholders in the palm oil supply chain initially struggled to establish monitoring and traceability systems, but with sustained effort, they made it possible. If this could be achieved for palm oil, then there is no reason the same cannot be achieved for automotive supply chains. Standards such as the Initiative for Responsible Mining Assurance (IRMA) are beginning to address some of these concerns and can provide a pathway for auto and mining companies to address environmental and social risks in their supply chains. Learnings from the palm, cocoa, rubber and retail sectors provide a foundation for automakers to work from and begin taking greater responsibility for the impact of their supply chains on forests.

Fossil free and environmentally sustainable steel

The automobile sector accounts for 12% of global steel use. Steel, together with iron, forms on average around 15% of an EV's supply chain emissions footprint and around 27% for internal combustion engines vehicles. As such, the Leaderboard awards points to companies for disclosing the emissions from their steel supply chains, setting targets and reporting on progress to reduce these emissions, and using their leverage as major buyers of steel to accelerate the decarbonization of this industry, which is responsible for approximately 7-9% of the world's GHG emissions. Automakers are also awarded points for their efforts to recover and recycle steel.

Overall, the 2025 edition of the Leaderboard shows less satisfying progress compared to the notable momentum demonstrated in the previous edition. The findings also resonate with the latest report by the International Council on Clean Transportation (ICCT) which suggested that the fossil-free steel commitments of selected automakers fall short of the International Energy Agency (IEA)'s Net Zero pathway for decarbonization of the steel sector, where at least 25% of steel procured by automakers should be fossil-free by 2030. While steel decarbonization has become an important issue for the auto industry thanks to the pressure from civil society, investors and regulators over the past years, much more ambitious commitments and more concrete actions are needed from automakers.

Volvo maintained its position as the industry leader in the fossil free and environmentally sustainable steel subsection of the Leaderboard. It is also the only company this year that has increased its score by more than 5 percentage points. This is due to Volvo's effort in disclosing disaggregated emissions from its steel supply chain in the LCAs for new electric vehicle models and for setting a new commitment for all of its steel suppliers to become members and certify their sites with ResponsibleSteel by 2030. Volvo's continued progress in this section sets a clear example of how industry leaders can continue to raise the bar for others to follow.

There is no change in the rank of the top five companies for the steel section from the 2024 edition. Ford's score increase of 5 percentage points,

mainly due to new disclosures on its steel recycling efforts, has enabled the company to close the gap between the top 3 scorers.

Top five companies for fossil free and environmentally sustainable steel indicators

STE	EL RANK	OVERALL RANK	STEEL SCORE
1	Volvo	4	57%
2	Mercedes	3	24%
3	Tesla	1	22%
4	Ford	2	21%
5	GM	7	18%

Tesla continues to be the only company that discloses disaggregated scope 3 emissions for its entire steel supply chain, although the company did not make any progress against the steel indicators this year.

No automakers scored additional points this year for setting targets to increase their use of green steel, leaving GM, Ford and Volvo as the highest scorers on this indicator. As members of the First Movers Coalition (Ford and GM) and SteelZero (Volvo), these companies are the only companies to have set 2030 targets for green steel procurement that apply to 100% of their global steel supply chain. Mercedes and Renault have also set steel decarbonization targets but only met a lower scoring threshold for this indicator because, in both cases, it was not possible to determine their level of ambition in relation to their entire steel supply chain.

Mercedes is the only company to score full points on the indicator focused on establishing purchase agreements with suppliers to suppliers to incentivise investment in and greater production of fossil free steel. The company discloses multiple agreements that the company has signed with suppliers in both Europe and North America, including a binding contract signed with H2 Green Steel for the supply of 50,000 tonnes of steel produced at the company's green hydrogen DRI-EAF facility in Sweden and a contract signed with Steel Dynamics for the supply of more than 50,000 tonnes of CO2-reduced steel produced with green electricity at the company's plant in Alabama.

Regarding efforts on steel recycling and the use of scrap / secondary steel, Geely and Volvo continue to be the only companies to score points for setting targets to increase their use of recycled steel by 2030. However, this year Kia and Stellantis also scored additional points for disclosing some quantitative information regarding the use of steel scrap in their production cycles. Hyundai, Kia and Volvo are the only companies that provide this data for their entire annual production cycles, although none of the companies differentiate between the use of pre and post-consumer steel scrap. Ford and Geely, on the other hand, did disclose information on closed-loop

processes they are implementing for steel recycling that explicitly mention efforts to recycle and reuse post-consumer scrap steel.

Finally, it is disappointing that the five companies at the bottom of the ranking in the steel section (Honda, Toyota, GAC, BYD and GAC) continued to score 0% across all indicators. While some of these companies have made improvement in the general indicators of this section, they have not been able to demonstrate more targeted action on steel supply chain decarbonization and sustainability specifically, unlike their national peers Nissan and Geely.



CASE STUDY

Automakers Can Drive Green Steel Development in China

Written by Transition Asia

China launched its steel decarbonisation initiatives later than many developed nations. However, it has since achieved considerable progress, laying the groundwork for a potential leadership role in the global green steel transition. Transition Asia believes China will lead the global green steel race through both comprehensive national low-carbon strategies and an accelerating shift towards low-carbon practices in the automotive sector.

China's Strategic Path to Green Steel Leadership

1. Green Hydrogen

China leads in green hydrogen development with national targets. As of June 2024, renewable hydrogen capacity reached 100,000 tonnes annually, with 8 million tonnes in development.⁵ Regarding the cost, the China Hydrogen Alliance forecasts green hydrogen costs will decrease to \$4/kg by 2025 and \$2.4/kg by 2030.⁶ Transition Asia estimates a 29% premium reduction when the H2 price drops from \$5/kg to \$4/kg and a 10% reduction when it reaches \$2.4/kg.

2. Renewable Energy

China leads globally in wind and solar capacity, providing ideal conditions for green hydrogen and low carbon electric arc furnace (EAF) production. While major steel provinces aren't in the most renewable-rich areas, they have renewable energy (RE) resources comparable to European H2-DRI (direct reduced iron) project locations. Transition Asia finds that using 100% RE for EAFs adds minimal costs while cutting emissions by 89-91% in scrap-EAF and H2-DRI-EAF steelmaking.

3. DRI: Projects and Raw Material Security

China is developing DRI projects with an estimated capacity of 6 million tonnes annually. These facilities currently use fossil-based hydrogen but are ready to switch to green hydrogen when pricing and infrastructure allow.

H2-DRI-EAF production needs 67% iron content ore, above China's domestic 62% grade. China currently imports 80% of its iron ore. In order to ensure

material security and stable supply of high grade iron ore, China is aiming for 370 million tonnes of reserves by 2025 through the "Cornerstone Plan" and international mine development.⁸

4. Industrial Rationalization to Enable Low-carbon Transition

China is prioritizing the industry-wide transformation for a low-carbon future by halting steel capacity replacements and setting EAF production targets of 15% by 2025 and 20% by 2030. To achieve this, the country aims to consolidate the industry, targeting the top five steel enterprises to hold 40% market share and the top 10 to account for 60% by 2025.9 While this restructuring impacts the labor market, it creates opportunities to retire inefficient blast furnaces (BFs) and strengthens the capacity of leading companies to develop EAF and DRI facilities.

5. Anticipation of Steel Inclusion in China's Emission Trading System

China's Ministry of Ecology and Environment (MEE) issued draft proposals in late 2024 to include steel in its emissions trading system (ETS). Currently, China adopts the carbon emission allowance mechanism, where high emitters must purchase additional allowances if their emissions exceed their free allowance cap or face penalties, while low emitters can profit from trading surplus allowances. With free allowances set to gradually tighten from 2027, China ETS could serve as a powerful incentive for steelmakers' continued efforts toward carbon reduction.

Faster and Further: What Automakers Must Do to Drive Steel Decarbonisation

Green steel procurement adds less than 1% to vehicle costs at hydrogen prices of \$5/kg, offering automakers a cost-effective way to reduce Scope 3 emissions. ¹⁰ In China, green steel MoUs lack legal enforceability, creating uncertainty in supply chains.

Longer commitments are needed to ensure certainty throughout the supply chain. Adopting binding, long-term agreements—following Europe's example, where companies like Stegra have secured

7-year contracts with automakers such as ZF and KIRCHHOFF—can help stabilize supply and reinforce demand for green steel.

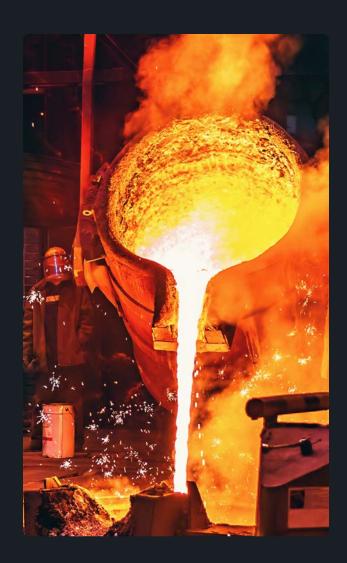
Standardisation of Green Steel needs support

Despite the growing number of green steel products, many lack transparency in their production methods and emissions data, with some using mass-balanced approaches to mix in low-carbon steel. The industry urgently needs clear, transparent, and unified standards to differentiate genuine low-carbon steel from greenwashed products. As key buyers of steel, automakers are well-positioned to influence industry-wide standards through their procurement practices, driving the development of credible, sustainable benchmarks for low-carbon steel.

Scrap Recycling

Automakers have a unique advantage in scrap recycling. While scrap often faces quality and contamination issues because of the complexity of the steel recycling system, automakers can collect and recycle clean scrap back to steelmakers, creating a win-win scenario where both parties benefit while supporting low-carbon secondary steel production.

Steelmakers and automakers are natural allies in decarbonisation as their decarbonisation goals are linked and can affect the entire value chain. Beyond green steel supply, more partnerships are suggested, such as aligning mutual decarbonisation strategies and jointly developing low-carbon pathways.



Fossil free and environmentally sustainable aluminum

Aluminum is another major contributor to emissions within the automotive supply chain, accounting for an estimated 27% of the supply chain emissions of EVs. Aluminum is used for a wide variety of vehicle components, particularly in EVs as automakers compensate for heavier batteries with lighter chassis and panels.

Shifting to clean energy sources and using new technologies to eliminate direct CO2 emissions from the refining and smelting processes are key to decarbonizing aluminum production.

Maximizing secondary aluminum production is also critical to reducing emissions. The IEA projects that the combined share of aluminum produced from recycled new and old scrap needs to reach nearly 40% (at least 70% of this from old scrap) by 2030 to meet net zero. In addition to evaluating automakers' efforts to decarbonize primary aluminum production, the Leaderboard therefore also assesses their approaches to building closed loop processes for aluminum through recycling and recovery, which should include both pre- and post-consumer scrap.

As with steel. Volvo continued to top the Leaderboard on aluminum. With a score increase of 15 percentage points, Volvo is also the only company

evaluated that achieved a score increase of more than 10 percentage points compared to the previous year. This was also due to disclosing the disaggregated emissions from aluminum in the LCAs the company published in 2024 for new EV models. The company also improved its score by joining Ford and GM as members of the First Movers' Coalition (FMC) group on aluminum, setting a target for at least 10% of its primary aluminum procurement to be low-CO2 (per the FMC's definition) by 2030.

Other than Volvo, only Ford, Tesla and Geely improved their performance on the aluminum indicators this year.

Ford improved its score by 9 percentage points, enabling the company to surpass both Tesla and Mercedes and take second place in this year's rankings. This was the result of disclosing that the company has signed non-binding memorandums of understanding (MoUs) with strategic aluminum for the supply of low carbon aluminum. However, unlike Mercedes, the top scorer on this indicator, the company does not disclose any details about these agreements.

Tesla improved its score by 3 percentage points but dropped to third place in the rankings. Tesla's score increase is due to the company becoming a member of Aluminium Stewardship (ASI) in March 2024 and its requirement for aluminum suppliers to undergo the ASI Performance Standard certification process as a prerequisite for awarding new business contracts. As with steel, Tesla also continues to be the only automaker evaluated to disclose disaggregated scope 3 emissions for its aluminum supply chain.

Top five companies for fossil free and environmentally sustainable aluminum indicators

ALU	IMINUM RANK	OVERALL RANK	ALUMINUM SCORE
1	Volvo	4	44%
2	Ford	2	35%
3	Tesla	1	33%
4	Mercedes	3	24%
5	GM	7	21%



Although still behind GM and ranked 6th in the aluminum subsection, Geely managed to achieve a minor score increase of 3 percentage points, due to disclosing the percentage of scrap aluminum used in a specific EV model (25% used in its ZEEKR 001 model). Geely now joins two other automakers (Ford and Renault) that disclose the percentage of recycled aluminum used for some elements of their production cycles. However, Volvo and Hyundai continue to be the only companies that disclose this information for their entire annual production cycle. For Volvo this was 10% in 2023, whilst Hyundai reported a more impressive 25%. However, neither company disaggregates this information according to quantities of pre and post-consumer aluminum scrap.

Together with Volvo, Geely is also the only automaker to score points for setting a target to increase the use of secondary aluminum in its annual production cycle. However, unlike Volvo, the company only scores partial points for this indicator as the target is limited to aluminum usage by "core suppliers."

Overall, more than half (10 out of 18) of the automakers scored only less than 5% in the aluminum subsection, and the average score across the automakers was only 11%. Six companies (Kia, Honda, Toyota, GAC, BYD and SAIC) continue to score 0%, whilst Hyundai, Volkswagen, Stellantis and BMW all score less than 5%.

However, progress made towards building new green aluminum smelters - such as Century's planned facility in the United States - give hope that automakers will be able to improve their performance in this area in future editions of the Leaderboard.

CASE STUDY

Century's New Aluminum Smelter Set to Expand Domestic Supply of Low Carbon Aluminum in the United States

By IndustriousLabs



Century Aluminum is <u>under award with the U.S.</u>

<u>Department of Energy</u> (DOE) for up to \$500 million to build the United States first-ever "green smelter," in the coming years, turning the tide on decades of the primary aluminum industry's decline and pioneering a future of primary aluminum production that's reliant on clean energy. Once built, this groundbreaking project will help to breathe life back into an industry that, for decades, has suffered a lack of investment in modernization, skyrocketing electricity costs, and heightened global competition.

The new green smelter aims to double the nation's primary aluminum production capacity while slashing greenhouse gas emissions by up to 75% compared to the traditional facilities of today. For an industry long plagued by closures and job losses, the new facility will create thousands of family-sustaining jobs and pave the way for a cleaner, stronger industrial future.

A site for the green smelter has not been finalized, though when the project was announced in March of 2024, Century intended to locate the facility in the Ohio/Mississippi River Basins, with a <u>preference for Kentucky</u>. In a state historically affected by plant closures, including Century Aluminum's Hawesville facility that idled in 2022, the green smelter is envisioned as a potential driver of economic

revitalization and job creation. If located in Kentucky, the facility could position the state as a leader in industrial innovation while supporting American working people in advancing the clean energy transition, particularly in coal communities that once powered the nation. The green smelter offers a transformative opportunity to demonstrate how the industry can evolve equitably and sustainably, moving beyond outdated narratives about fossil fuels.

Century's green smelter is a critical first step toward securing a domestic supply of low-carbon primary aluminum that can serve growing demand from end use buyers, notably including the automotive sector.

Century Aluminum's proposed Green Aluminum Smelter Project was selected for investment by the Office of Clean Energy Demonstrations Industrial Demonstrations Program in March of 2024. This step of Century becoming under award kicks off the formal process of working with DOE to implement the proposed project.

Automakers, as large buyers of aluminum, can start taking proactive steps now to secure a supply of low-carbon aluminum from Century's new smelter by signing advance purchase agreements and <u>using</u> their voice to advocate for an expanded domestic supply of clean aluminum in the United States.

Fossil free and environmentally sustainable batteries

Battery supply chain GHG emissions are largely from the extraction, smelting and refining processes, with cell manufacturing constituting a smaller, but not insignificant, share. Reducing the carbon footprint of batteries can occur in a variety of ways, including by reducing the use of emissions intensive minerals, increasing the amount of recycled content and using renewable energy for mineral refining and cell manufacturing.

The scorecard reflects these priorities, while focusing on three key battery minerals: nickel, lithium and cobalt. In addition to emissions, it also addresses wider environmental impacts, such as biodiversity loss, resource depletion, water pollution and mining tailings waste.

Similar to the previous year, the scores of the top five companies in the battery subsection followed closely one after another.

Although the top five companies remained the same, there were some notable shifts in rankings. Mercedes increased its score by 5 percentage points and displaced Tesla for the top spot. This was mainly due to Mercedes' progress in battery recycling and battery mineral procurement. Last year, the company openeda new battery recycling factory in Kuppenheim that uses a mechanical-hydrometallurgical process to recover up to 96% of critical raw materials used in battery production. Additionally, the company signed a new direct sourcing agreement for low-carbon lithium with Rock Tech Inc. Mercedes also scored additional points for explaining the specific requirements it has put in place for its battery cell suppliers to reduce the environmental impacts of nickel, lithium and cobalt extraction, including by stipulating that the sourcing of these minerals is restricted to mines that are audited against the IRMA standard; a requirement also implemented by Volkswagen.

For the second year running, Renault also made notable progress: achieving a score increase of 7 percentage points and climbing the rankings to third place this year. Renault is the only company to have set targets for the recovery of battery metals (cobalt, nickel and lithium) from end-of-life-batteries and for the reuse of these metals in the company's new batteries, aiming for 80% by 2030 on both counts.

The company has also set the most ambitious battery supply chain decarbonization target, aiming to reduce the CO2 emissions from battery manufacturing by 35% for new models by 2030 compared to 2019.

Tesla also improved its score this year, but not by a large enough margin to retain its top ranking from last year. The company continues to perform strongly in some areas: it is still the only automaker that disclosed disaggregated Scope 3 emissions from its battery supply chain and has also disclosed a range of activities it has undertaken to address the environmental impacts of its nickel, cobalt and lithium sourcing. However, the company scores notably lower than key competitors on the battery circularity indicators, primarily for failing to disclose precise quantitative and qualitative information on its processes for battery repurposing and recycling.

Ranked 4th in the battery subsection, one place ahead of its ranking in the previous year, Volkswagen also made notable improvements, including working through its subsidiary PowerCo to develop "more sustainable cell chemicals without cobalt or nickel." Volkswagen is also the only automaker to contractually require its battery suppliers to use renewable electricity in their production processes.

Stellantis, which ranked first in the batteries subsection in 2023, continued its descent down the rankings this year, finishing in fifth place. The company has not improved its score on battery sustainability at all since the first edition of the Leaderboard.

Top five companies for fossil free and environmentally sustainable batteries indicators

BA	ITERY RANK	OVERALL RANK	BATTERY SCORE
1	Mercedes	3	37%
2	Tesla	1	36%
3	Renault	8	35%
4	Volkswagen	5	30%
5	Stellantis	9	24%

Other than the top five performing companies in the battery section of the Leaderboard, Geely also showed some notable improvements with a score increase of 7 percentage points. This is mainly due to the company's R&D investments in lithium-ion phosphate chemistries and battery recyclability.

Volvo, despite being the top-ranking company in the fossil-free and environmentally sustainable supply chain section, lags behind other top performing companies in the battery subsection. However, the company did make some notable progress in the past year, in particular by issuing the world's first EV battery passport for its EX90 SUV, ahead of new EU rules, and disclosing the disaggregated emissions for Li-ion battery modules in the LCAs of new EV models launched and 2024.

Ford was another automaker that improved its score against several indicators in the battery subsections. Particularly notable was its performance against the indicator on lithium sourcing, where the company provided extensive details about its supply agreement with Albemarle for lithium from Australia, including the specific measures it had taken to reduce environmental impacts. These include requiring an IRMA audit a condition of the agreement and including other conditions in the contract related to "water conservation, decarbonization through further clean energy agreements, and promoting waste recycling and recovery practices."

The three Japanese companies, Toyota, Nissan and Honda, sat at the bottom of the rankings of the battery sustainability subsection. Honda did at least manage to improve its 0% score from last year, but only by 1 percentage point, due to disclosing a new partnership for battery repurposing.

GM was the only Western automaker to score less than 10% in the battery subsection of the Leaderboard. However, the company was far from alone in receiving such a low score: half of the 18 companies scored less than 10% of the available points in the battery subsection, which indicates ample room for improvement across the sector.

On the positive side, concrete progress is being made in some areas. Most companies disclosed that they have established some form of closed-loop process for battery repurposing (16 out of 18) and recycling (15 out of 18). Out of these, Stellantis

stands out for disclosing the most comprehensive data on the implementation of these processes, stating that "In 2023, 3,318 of the batteries used in Stellantis' vehicles had a life cycle management solution (versus 2,261 in 2022): 262 (versus 149 in 2022) were repaired, 1,265 (versus 1,032) were remanufactured, 350 (versus 426) were used in second-life projects, and 1,441 (versus 654) were recycled." The company is also the only company to disclose the recovery rates currently achieved at commercial scale for its battery recycling processes (73.1% for Lithium-lon batteries).

Further, compared to the other subsections, more companies have joined multi-stakeholder initiatives and partnerships related to battery supply chain sustainability. For example, 5 out of 18 automakers have joined the Global Battery Alliance (GBA), a larger number than participate in similar multi-stakeholder initiatives for the steel and aluminum industries. A number of companies have also joined or chaired working groups focused on sustainability issues related to cobalt, lithium and nickel sourcing, such as the Responsible Lithium Partnership, the Fair Cobalt Alliance, Cobalt for Development and RMI's working groups on lithium, nickel and cobalt.

InfluenceMap weighting

Public policy plays an important role in the transition to truly clean cars. To ensure that a company is supporting climate-positive regulation and policy, the scorecard includes a weighting for a company's approach to policy advocacy. This weighting is based on the work that InfluenceMap undertakes to assess corporations' and industry groups' influence on policy needed to address climate change. Companies can receive a positive or negative score depending on whether they are positively advocating for climate change policies or judged to be doing the reverse. Companies' lobbying practices were evaluated by InfluenceMap up until May 2024.

Across the companies included within the scorecard, Tesla has the most positive record on climate lobbying, rated as "B." Tesla is followed by Volvo with a "B-". 5 out of 18 companies had a downwards adjusted score as a result of their obstructive climate lobbying practices (BMW, Honda, Renault, Stellantis and Toyota). Hyundai, with a 'C-' rating, was the only company that improved its rating from the previous year ("D+").

Human Rights and Responsible Sourcing

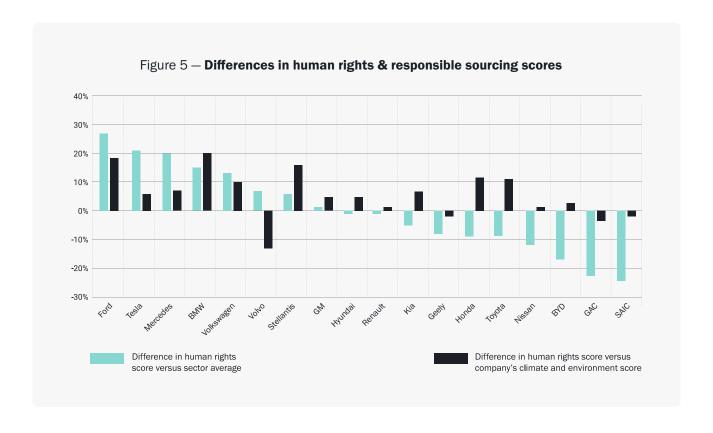
There is today greater awareness about the harms to individuals and communities resulting from auto supply chains, and increasing action by automakers to prevent and address these harms. However, there still are way too many human rights abuses that go undetected, unaddressed, or unpunished in the process of mining and processing the raw materials that are needed to build automobiles, and in the manufacturing processes themselves.

To be truly just, equitable, and sustainable, the transition to EVs must go hand in hand with effective measures to prevent, address, and remedy these abuses. It must represent a real departure from the past, not only in relation to the end product, but also in the way it is made.

This section of the Leaderboard examines the policies, processes, and practices of automakers to address human rights risks and impacts in their supply chains. The indicators in this section are structured around the UN Guiding Principles on Business and Human Rights to evaluate automakers' human rights commitments and efforts to identify,

prevent, monitor, and remedy human rights abuses in their supply chains. Expressing commitments and putting policies in place are fundamental first steps, but they are also the easiest to accomplish. Operationalising them through effective processes and practices, measuring their effectiveness, and demonstrating results through qualitative and quantitative data are a lot more challenging. However, these are the stages of the human rights due diligence process that really matter, and where companies show that they truly walk the talk.

With this in mind, this year's assessment includes a few new indicators seeking evidence of practical action to implement commitments and policies. Some existing indicators have also been modified to be able to better differentiate between good and bad practices, and to encourage companies to disclose greater levels of detail about their implementation efforts and results. The scope of the scorecard will continue to be expanded in future editions to move automakers from policies and commitments to proactive and meaningful action, and from action to demonstrable results.



Overall Results: Human Rights and Responsible Sourcing

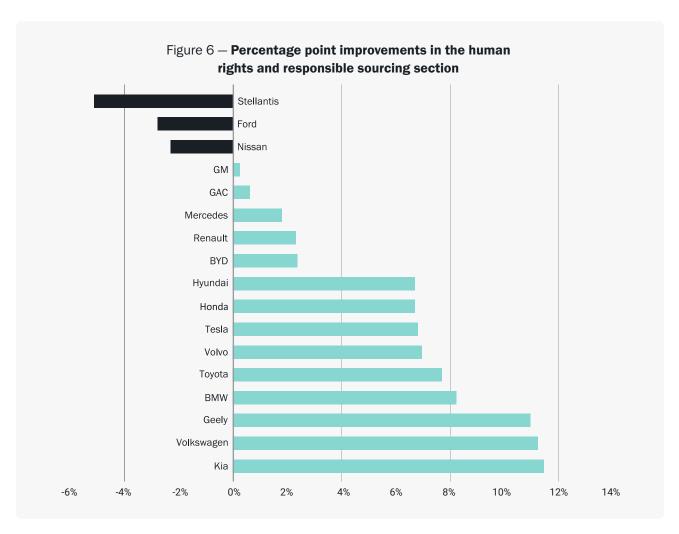
Ford continues to lead the industry in the human rights section of the 2025 edition of the Leaderboard, with a total score that is more than double the average industry score. However, Ford only scored 52% of the total points available for the human rights section, showing how much there still is to be done for the industry to ensure human rights are respected across auto supply chains.

The distance between Ford and the next top scorers has also narrowed. Mercedes and Tesla now virtually share second place with scores of 46% and 45% respectively, followed by BMW (39%) and Volkswagen (38%).

The average total score for the human rights section is 25%. This is four percentage points more than 2024 (21%). However, this is still disappointing for two reasons. Firstly, the starting point was extremely low – only a fifth of the total available points,

suggesting that greater progress should not have been such a challenge. Secondly, an increase of four percentage points by all companies collectively within the span of a full year is unacceptably low given the scale and rate of progress that is needed to combat the climate emergency and transition to a just, equitable, and sustainable automotive industry. Scores in this section are brought down by a particularly poor performance on Indigenous Peoples' rights and workers' rights, and the failure by all companies to provide information and evidence of actual implementation across the board.

Kia, Volkswagen and Geely were the biggest improvers in the human rights section this year, and were the only companies to improve their scores by over 10 percentage points. However, six additional companies also improved their scores by between 7 and 8 percentage points. Ford, Nissan and Stellantis were the only companies that regressed over their 2024 overall human rights scores.



General human rights due diligence indicators

The general human rights section of the Leaderboard provides a baseline assessment of how automakers are addressing human rights risks and impacts across their supply chains. Like last year, scores were higher on average for the general human rights indicators compared with other human rights subsections. On average, companies achieved 43%, and the average overall score increase in this subsection was over seven percentage points (7.6%) - the result of 14 automakers improving their general human rights due diligence score this year.

The highest ranked automaker for this subsection is Ford, with a 69% achievement score, followed by Volkswagen by less than a percentage point. Stellantis is in third place with 68%, again followed by Mercedes by less than a percentage point. With a gap of less than one percentage point between Ford and Mercedes, these companies all virtually share the top spot. With a 64% achievement score, BMW came in fifth place.

Geely was by far the best improver this year, increasing by a remarkable 24 percentage points, the highest score increase of all companies not only in the general human rights due diligence subsection but across all human rights categories. With a seven percentage point drop in its score, Nissan was the worst performer.

Top five companies for general human rights indicators

GEI	NERAL RANK	OVERALL RANK	HUMAN RIGHTS SCORE
1	Ford	2	69%
2	Volkswagen	5	69%
3	Stellantis	9	68%
4	Mercedes	3	68%
5	BMW	6	64%

Most companies in the Leaderboard cover the basics. Most have a standalone policy statement committing to respecting human rights, and most require suppliers to respect human rights through supplier codes of conduct. However, there still are

exceptions and some supplier codes of conduct, where they exist, are limited in what they require.

BYD has published its first human rights policy this year. This is a critical first step toward developing robust human rights due diligence processes and practices, and laying down strong requirements on suppliers to respect human rights. This action can serve as an example for other Chinese automakers to emulate. Both GAC and Geely understand the importance of publicly committing to human rights, as they both make statements to this effect in their public documents. However, these are still limited in scope, qualified, or not supported by an unambiguous policy statement clearly expressing a commitment towards all human rights. While not perfect, BYD's new policy statement can show its peers the way.

Renault has also published a first standalone human rights policy this year. While welcome, this action is in fact a lost opportunity as the company does not actually commit to respecting the key international human rights instruments, and does not even mention these instruments. As a result, Renault continues to be the only European (and western) company to not have an explicit public commitment to respecting all human rights.

The record is poorer in relation to human rights requirements on suppliers. While having supplier codes of conduct, and requiring or expecting compliance with some human rights, Honda, Hyundai, Kia, Nissan, Toyota, Geely, Renault, and Volkswagen do not clearly require suppliers to respect human rights across the board. In so doing, they risk undermining the effectiveness of their own supply chain due diligence processes. BYD, GAC, and SAIC do not publish or reference an easily accessible supplier code of conduct, although they all make reference to some form of supplier management or procurement policy. These could provide the basis for the companies to start introducing human rights-specific requirements on suppliers.

Disclosure of human rights due diligence processes, particularly in relation to risk identification and assessment systems, remains high among European and US automakers. BMW, Ford, Mercedes, Stellantis, and Volkswagen stand out for the level of detail provided in relation to their human rights risk identification processes. Of the East Asian

companies, only Geely and Hyundai describe their risk identification processes in sufficient level of detail. Surprisingly, very few companies specify if and how human rights experts are involved in their risk identification and assessment processes. Of the few that do, only Mercedes provides a level of detail that is sufficient to gain a basic understanding of who is involved, and how.

It is still rare for companies to provide a meaningful description of the salient human rights risks that they have identified in their supply chains. While many list them, they generally still fail to describe them in any level of detail. The majority also fails to disclose what specific supply chain is involved, and where in the supply chain the risks are located. As a result, these lists become repetitive and meaningless with most companies just naming the human rights risks typical of the sector. However, a few leading companies show that greater levels of transparency are possible. Mercedes stands out for its level of disclosure and transparency in this area. Volkswagen, Tesla and Toyota have all also provided greater and more precise descriptions of their salient human rights risks.

As explained earlier, some indicators have been expanded this year to elicit quantitative data on companies' supplier assessment and monitoring activities, as well as the results of these activities. These relate to the number of potential new suppliers and existing suppliers assessed, supplier audits, number of non-conformities found through these assessments and audits, and number of corrective action plans issued.

Companies' level of disclosure on these issues is generally poor. Only Geely, Mercedes, and Volkswagen have disclosed the number of potential new suppliers assessed. Of these, only Geely has disclosed the number of non-conformances found. Many companies describe the number of suppliers assessed, but do not specify how many were potential new suppliers. This specification is important to be able to understand the weight that companies place on human rights considerations relative to other factors in their supplier selection processes, and to assess procedures and safeguards before a relationship is established.

More companies have disclosed statistical information regarding assessments and audits of existing suppliers, but only Volvo has disclosed quantitative data on all required fields, i.e. desk-top assessments, field audits, and non-conformances found. Only Ford, Hyundai, Kia, and Stellantis have disclosed the number of corrective action plans issued during the year. Many companies disclose the number of suppliers assessed or audited, but fail to specify the percentage of total suppliers these numbers represent, or the total number of suppliers the company has. Some also fail to clarify the year in which the assessments or audits were carried out. These specifications are necessary to enable a proper understanding of the scale and rate of automakers' efforts in assessing and monitoring suppliers year on year.

Going forward, companies should seek to collect and publish statistical data not only to allow them to track their due diligence measures and assess their effectiveness, but also to help them demonstrate publicly the extent and effectiveness of their monitoring and enforcement efforts.

European and US companies are far ahead of their East Asian competitors regarding grievance mechanisms. With the exception of Mercedes and Renault, all other European and US companies have in place independent grievance mechanisms that are available to supply chain workers and other stakeholders to address supply chain human rights grievances.

One of the reasons why most East Asian automakers are lagging behind is because their grievance mechanisms tend to focus on issues within their own operations, be available only to their own workforce, or not address human rights concerns. For example, some of these mechanisms only address corruption and other integrity issues within the company's own operations and subsidiaries.

Surprisingly, none of the 18 assessed companies explain how they proactively communicate the existence of their grievance mechanisms to suppliers' workers and other stakeholders, even though this should be a priority for any company that genuinely means to address and remedy supply chain grievances. If potentially affected rightsholders along supply chains do not know about the existence

of these mechanisms, they will hardly be in a position to access and benefit from them.

When it comes to reporting on the practical operation of their grievance mechanisms, corporate practices plummet across the board. Only eight automakers disclose the number of total grievances received during the year, but only BMW discloses how they were resolved, and only Volkswagen provides a breakdown by type, tier, and geographical location.

Only six companies (BMW, Ford, Mercedes, Renault, Stellantis, and Volkswagen) are transparent about both the investigation process and the way in which they determine remedy. Shockingly, Tesla was the only company to provide details on specific measures of reparation provided to affected rightsholders through its grievance mechanism, in both cases related to workers' rights and the payment of recruitment fees. This is a serious gap given the importance that honoring the human right to remedy has for a complete understanding of a company's performance on human rights.

The level of disclosure on the practical operation of grievance mechanisms is so far utterly insufficient to allow for an adequate understanding of the effectiveness of automakers' remedial processes in addressing and remedying supply chain issues. In this critical area of human rights due diligence, all automakers are failing to back up their words with evidence.

Responsible sourcing of transition minerals

Large quantities of certain critical minerals such as cobalt, nickel, lithium, copper, manganese, and zinc are needed to manufacture EV batteries. The mining and processing of many of these minerals has been associated with a plethora of human rights abuses because of where, or how these activities are conducted. The rapid expansion of mining these minerals that is now required to support the transition to EVs risks perpetuating, or even increasing, these abuses. For this reason, the Leaderboard assesses automakers' transition mineral sourcing policies and practices as a distinct human rights category.

In addition to using the UN Guiding Principles on Business and Human Rights as reference, this subsection also aligns performance expectations with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (the OECD Guidance).

The average achievement score in this subsection was 29%, a notable drop from the level of achievement of the general human rights due diligence subsection. The highest ranked automaker for this subsection is Ford, with an impressive 89% achievement score. In second place, but far behind Ford is Tesla, with a 67% achievement score. Volkswagen, BMW, and Mercedes follow in third, fourth, and fifth place.

These results show a vast difference in the level of achievement between top scorers. Tesla is 22 percentage points behind Ford, and there is a shocking 49 percentage points difference between Ford and fifth best scorer Mercedes.

Top five companies for responsible sourcing of transition minerals

	ANSITION NERALS RANK	OVERALL RANK	TRANSITION MINERALS SCORE
1	Ford	2	89%
2	Tesla	1	69%
3	BMW	6	42%
4	Volkswagen	5	42%
5	Mercedes	3	40%

The average score increase for this subsection was just over 4.5 percentage points, also distinctively lower than the general human rights due diligence subsection. However, a large number of automakers did improve their performance on transition minerals sourcing this year. Particularly noteworthy are Hyundai, with a score increase of 17 percentage points, Toyota, with a score increase of 16 percentage points, and Kia, increasing its score by 14 percentage points.

Offsetting this progress are six automakers that did not progress at all - five of these (Renault, Mercedes, GM, Stellantis, and Nissan) actually regressed on their scores from last year. With a drop in score of six percentage points, GM was the worst performer. This year, GM stopped disclosing a list of smelters and refiners in its supply chain, a significant step back in transparency.

Overall, the rate of improvement in this category remains alarmingly slow, and out of sync with the scale of progress that is needed to ensure a just and equitable transition to EVs. Indeed, the increasing demand for transition minerals and the pressure that this is putting on workers and communities call for much faster and more ambitious improvements from the auto industry.

With the exception of BYD, SAIC, and Stellantis, all automakers have standalone responsible minerals sourcing policies or include commitments towards responsible sourcing in other policy documents. With the exception of BYD, GAC, Honda, Nissan, SAIC, and Toyota, all companies require suppliers to have a due diligence process in place to identify the source of their raw materials, including Stellantis. However, the nature, scope, and contents of policies and requirements vary significantly among automakers.

Nine automakers extend their responsible sourcing commitments to all minerals and metals regardless of country of origin, four companies do so for "conflict minerals" and at least one other mineral (e.g. cobalt), and one company limits their policy commitment to "conflict minerals" only. Only Tesla appears to require all suppliers to conduct due diligence in line with the OECD Guidance, regardless of sourcing location. Ford is only one step down, requiring due diligence in line with the OECD Guidance of all suppliers sourcing from Conflict-Affected and High-Risk Areas (CAHRAs). All other automakers that lay out express obligations on suppliers either limit their requirements to act in line with the OECD Guidance in relation to "conflict minerals" from CAHRAs only, or do not refer to the OECD Guidance at all.

Going forward, automakers must strive to extend their responsible sourcing commitments to all minerals and metals regardless of country of origin, and to require all suppliers to conduct due diligence in line with the OECD Guidance, also regardless of sourcing location.

Full traceability of transition minerals to the point of extraction is critical for automakers to be able to identify risks, and take measures to prevent human rights abuses at mining sites, or in the early stages of production. Ten automakers disclosed that they were pursuing transition minerals mapping to the point of extraction, which is encouraging, but only Mercedes, Ford, Stellantis, and Tesla disclosed detailed information about the results of these mapping efforts.

Renault has announced plans for tracking the country of origin of 18 critical battery materials, and for fully mapping its cobalt supply chain. To keep on par with the best performers in the Leaderboard, Renault should look to disclose detailed information from these mapping efforts once available. Future iterations of the Leaderboard will expect greater and more precise information from mapping activities, including not only country of origin of raw materials, but also major or critical suppliers and mine sites, and their location.

A large number of automakers discuss the risk of sourcing from CAHRAs, but very few disclose information about transition minerals risks more broadly. On this, Mercedes and Tesla stand out for the level of specificity they offer, indicating the raw material, tier, and geographical location where the risks they have identified occur. BMW, Toyota, and Volkswagen also provide additional descriptions about transition minerals risks in their supply chains, but do not consistently specify tier and geographical location across all raw materials. This level of detail is necessary to make the companies' disclosure meaningful, allowing a complete understanding of where the greatest risks are, who is creating them, and the rightsholders potentially affected.

Disclosure of smelters or refiners (SoR) in transition minerals supply chains remains poor. Only Ford, Tesla and Volkswagen disclose a complete list of SoR for their conflict minerals supply chains. Honda, Stellantis and Toyota disclose partial lists. This means that the majority of automakers in the Leaderboard fail to disclose any list at all. Most disappointingly, GM and Mercedes have both

discontinued their practice of disclosing a list of SoR, and Renault is failing to update a list which is now five years old. Ford, Honda, Toyota, and Volkswagen also disclose information on RMI conformance for all identified SoR and, while not disclosing a list of SoR, Volvo does disclose information on RMI conformance for its conflict minerals supply chain.

The picture these results are painting is one of misalignment between mapping efforts, identification of risks, and disclosure. While many companies are undertaking important mapping activities, they do not all identify, or are prepared to disclose, risks along their minerals supply chains. Similarly, they do not all identify or disclose SoR, even though these are key nodes in their transition minerals supply chains, and should be emerging from their mapping efforts. Ford is the only automaker that is consistently achieving high results across most of these indicators, demonstrating that strong mapping of both actors and risks along the supply chain and transparency can go hand in hand.

Eleven companies now participate in the Responsible Minerals Initiative (RMI), but only three of these, Ford, GM, and Mercedes engage with SoR directly to build their due diligence capacity in line with the OECD Guidance. Of these, only Ford provides details on the actual activities the company undertakes to build SoR capacity.

As far as information on direct sourcing agreements with mining companies is concerned, only BMW,

Ford, and Tesla disclose a level of detail sufficient to meet the relevant indicators. Some companies, like GM, Renault, Stellantis, and Volkswagen, disclose some agreements, but do not specify if they include human rights clauses. Other companies disclose that they are actively pursuing vertical integration (e.g. GAC), or expanding direct purchasing agreements as a way of addressing sustainability risks (e.g. Hyundai). However, they do not disclose any information, or sufficient information, about specific direct sourcing agreements.

Future editions of the Leaderboard will expect higher levels of specificity, by requiring the name of extractive companies the automakers have entered into direct agreement with, as well as the relevant transition minerals and mine or mines involved. The current level of disclosure of many companies will prove insufficient.

Only BMW, Ford, GM, Mercedes, Tesla, and Volkswagen are members of the Initiative for Responsible Mining Assurance (IRMA). Except for GM, they all describe activities to encourage that their mining suppliers undergo IRMA audits, a practice that Volvo also implements (despite not being a member of IRMA).

As far as grievance mechanisms to raise concerns about SoR are concerned, only Ford and Tesla appear to use specially designed platforms, such as the RMI Grievance Mechanism.

Indigenous Peoples' rights and Free, Prior and Informed Consent (FPIC)

Indigenous Peoples are particularly affected by transition minerals mining. This is because a large proportion of these minerals is located in, or near, Indigenous Peoples' lands. 11 Mining projects often go ahead without consulting them and obtaining their FPIC, and in fact frequently depend on displacing them from their lands and devastating their natural resources. When Indigenous Peoples resist these projects, they often come under further attack.

An auto supply chain that relies on violence, land dispossession, and abuse of Indigenous Peoples' rights is not only unjust but also poses considerable financial risks to automakers. 12 For this reason, the Leaderboard evaluates automakers' due diligence policies, processes, and practices regarding Indigenous Peoples' rights specifically.

After two years of near industry-wide inaction, this year saw some initial glimmers of momentum with regards to action on Indigenous Peoples rights, with 5 automakers either making new commitments or improving their existing performance in this area.

However, beyond these discrete improvements, there is very little to celebrate in this area. On average, companies achieved an abysmal 6% score. That means that there still remains 94% of the expected standard to achieve - an awful record.

Tesla is the top scorer, with a 26% achievement score, followed by Mercedes, Ford, BMW and then GM. As these results demonstrate, scores remain unacceptably low across all companies. The average score increase is under two percentage points, the

lowest of all the human rights subsections. Ford is the only company that progressed significantly, managing to increase its score by 12 percentage points. 12 companies achieved zero progress.

Top five companies for Indigenous Peoples' rights and Free, Prior and Informed Consent

	IGENOUS HTS RANK	OVERALL RANK	INDIGENOUS RIGHTS SCORE
1	Tesla	1	26%
2	Mercedes	3	21%
3	Ford	2	20%
4	BMW	6	12%
5	GM	7	11%

Very few companies have incorporated a commitment to respecting the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and FPIC in their human rights policies. Most of those that do appear hesitant in their approach, expressing only limited or qualified commitments. Ford, GM, and Renault all commit expressly to the UNDRIP in their human rights policies with Ford and Renault also including full commitments towards FPIC. Tesla makes an explicit commitment towards FPIC, but does not make any reference to UNDRIP, whilst the reverse is true for GM.

As far as requirements on suppliers are concerned, only BMW, Ford, and GM lay out express obligations on suppliers to respect both the UNDRIP and FPIC. Mercedes' Responsible Sourcing Standard explicitly



CASE STUDY

Guaranteeing the Sámi People's right to Free, Prior and Informed Consent in Norway

Written by the Securing Indigenous Peoples' Rights in the Green Economy Coalition

Norwegian mining company Nussir ASA is pursuing a copper mine on Sámi Indigenous land in northern Norway. If constructed, the mine would destroy reindeer grazing areas and disrupt Sámi traditional way of life. Additionally, Nussir's plans to dump an estimated 2 million tonnes of mine waste into the Repparfjord each year threaten to decimate fishing grounds Sámi sea fishermen depend on by smothering habitat critical to salmon, cod, and other marine life.

Repparfjord is a <u>protected salmon fjord</u> that has only just recently begun to recover, economically and ecologically, from the mine waste that was dumped during a short bout of copper mining in the 1970s. Nussir's project will be 20 times larger than the previous operation, meaning an even more devastating impact.

The representative body of the Sámi People, the <u>Sámi Parliament of Norway</u>, and the directly impacted Sámi rights holders, including the impacted reindeer herders, has steadfastly opposed the project, refusing to grant free, prior, and informed consent (FPIC) during the government-led consultation process.

Arguing that the copper mine at Repparfjord is essential for the country's 'green shift', the Norwegian government still granted Nussir its final operating permits in 2019.

However, despite having a license to mine, the project has not advanced. Nussir has been unable to finance the copper mine, demonstrating the risk companies face when Indigenous Peoples' rights are not respected. An example of the setbacks Nussir has faced was the 2021 announcement by Aurubis AG, Europe's largest copper producer, that it was terminating its offtake agreement with Nussir over sustainability issues.

Sámi Parliament President, Silje Karine Muotka, reflects, "It isn't a question of economics, it's a values question, a moral question about what we want to leave future generations. In Norway we talk about the 'green shift' which says that environmental aspects should be taken into consideration and that we must move toward more environmentally friendly industries. I do recognize that we need materials for new technologies – so we should look for better projects that don't harm the environment and destroy our culture."



requires suppliers to respect FPIC but does not reference the UNDRIP, whilst Geely's Supplier Code of Conduct references the UNDRIP only in relation to "non-discrimination and equal opportunities", implying a qualified application of UNDRIP.

Of this mixed bag, GM and Ford emerge clearly as the leaders, although Ford is the only automaker to commit to both UNDRIP and FPIC in its own policy, and to require respect for both UNDRIP and FPIC of suppliers.

No company has its commitments translated into the languages of impacted Indigenous Peoples, explains how they engage with mining companies directly on FPIC risks, discloses how they are prepared to respond to FPIC breaches, or has a process in place for investigating and remedying these breaches. Ford and Tesla are the only companies to provide some detail about the way in which suppliers are expected to obtain FPIC.

Mercedes is the only company to disclose a process to assess risks to Indigenous Peoples' rights in the supply chain. Except for Mercedes and Tesla, no other company discloses where in the supply chain these risks occur. However, Tesla is the only automaker to provide specific examples to illustrate the way in which they seek to guarantee Indigenous Peoples' rights in practice. The company explains how, in response to risks to Indigenous Peoples' rights in Indonesia, it has "engaged with NGOs, government and suppliers to explore the need for the establishment of a no-go zone for mining to protect indigenous and human rights, particularly those of uncontacted communities, in addition to supplier engagement to reinforce our commitment to protect the right of Indigenous People to grant or withhold Free, Prior and Informed Consent (FPIC)."

The general lack of information across all companies shows that despite some commitments, no company is yet demonstrating with concrete and complete evidence whether and if so, how, they are operationalising their commitments on Indigenous Peoples' rights throughout their supply chains.

Respect for workers' rights

Auto supply chains are vast, complex, and often obscure. They involve tens of thousands of workers all over the globe, from mining sites to retail points. All too often, these workers are made to work under

unsafe and poor working conditions. Child and forced labour is rife in many parts of the auto supply chain. Trade unions are often banned in factories and other parts of the supply chain, or their activities limited, leaving workers vulnerable to exploitation and denying them a voice in key decisions and processes. Upholding workers' rights throughout the auto supply chain is therefore critical to ensure a just and equitable transition to EVs.

Respect for workers' rights across auto supply chains is the final subsection of the human right and responsible sourcing part of the Leaderboard. Workers' rights indicators were shaped around the International Labour Organisation's Declaration of Fundamental Principles and Rights at work (ILO Declaration), as well as international best practices.

FUNDAMENTAL RIGHTS AT WORK

The ILO Declaration on Fundamental Principles and Rights at Work identifies five fundamental principles and rights:

- freedom of association and the effective recognition of the right to collective bargaining;
- 2. the elimination of all forms of forced or compulsory labour;
- 3. the effective abolition of child labour;
- 4. the elimination of discrimination in respect of employment and occupation; and
- 5. a safe and healthy working environment.

The average achievement score in this subsection is just over 20%. The highest ranked automaker is Mercedes, with a 50% score achievement. In second place, but considerably behind, is BMW, with a 39% score achievement. Volkswagen, Ford, and Tesla follow in third, fourth, and fifth place.

Top five companies for respect for workers' rights

WO	RKERS' RIGHTS NK	OVERALL RANK	WORKERS' RIGHTS SCORE
1	Mercedes	3	50%
2	BMW	6	39%
3	Volkswagen	5	33%
4	Ford	2	28%
5	Tesla	1	27%

The average overall score increase in this category is just two percentage points, the second worst of all the human rights subsections and barely better than the Indigenous Peoples' rights subsection. This section of the Leaderboard is split almost in half. Seven companies improved significantly, with score increases of between 9 and 17 percentage points compared to last year. However, ten automakers made no progress at all, either stagnating on their 2024 scores or regressing.

14 of the 18 automakers evaluated explicitly commit to the ILO Declaration and/or each of the ILO fundamental principles and rights at work in their human rights policies. Toyota, BYD, GAC and SAIC are the only automakers that do not. However, several companies (Geely, Hyundai, Kia and Nissan) explicitly commit to the ILO Declaration but then, when referencing the individual ILO fundamental principles and rights at work, qualify or limit their commitments in a way that does not allow them to meet the relevant indicators. For example, in committing to freedom of association and collective bargaining, some of these companies defer to national laws and regulations, when it is widely known that these laws and regulations often fall short of international standards. Otherwise, they refer to some, but not all of the fundamental principles and rights at work, or they only commit to a highly qualified or limited version of these rights.

Moving onto requirements for suppliers, All European and US companies require suppliers to respect the ILO fundamental principles and rights at work. Of the East Asian companies, only Hyundai and Kia do. Here, again, a number of companies (Geely, Honda, Nissan and Toyota) include requirements to comply with the ILO fundamental principles and rights at work, but these requirements are limited or qualified to an extent that does not allow them to meet the relevant indicators.

As far as commitments towards a living wage are concerned, practices across the board are still highly disappointing. Only Ford, Stellantis, and Volvo expressly commit to a living wage, and Stellantis is the only company to explain how they calculate the living wage. However, shockingly, BMW is the only company to expressly require suppliers to pay a living wage. This is particularly surprising in relation to Ford, Stellantis, and Volvo, all of whom commit to a living wage in their own human rights policies. This shows a serious limitation in the extent of their commitment.

Practices improve a little in relation to the prohibition of recruitment fees, as eight companies explicitly ban them in their supply chains.

Very few companies disclose the salient workers' rights risks that they have identified in their supply chains. BMW, Mercedes, Tesla, Toyota, and Volkswagen all do describe identified workers' rights risks in their supply chains, adding detail as to relevant raw materials and locations. However, the level of specificity or consistency in their reporting fluctuates. Other companies, such as Ford, GM, Hyundai, Renault, Stellantis, and Volvo name some risks, but fail to specify the relevant raw material supply chain and location. Others, such as Kia and Nissan, limit their description to risks affecting their own employees and are therefore unable to score points.

Future iterations of the Leaderboard will expect more precise disclosures on workers' rights risks by reference to relevant raw material supply chain and geographical location. Unless automakers enhance their descriptions, current reporting practices are likely to be insufficient.

Except for BYD, GAC, SAIC, Tesla, Toyota, and Volvo, all other companies have collective agreements in place with their workers at headquarter level. Of these, only BMW, Ford, Mercedes, and Renault have signed Global Framework Agreements with IndustriAll, and disclose formal mechanisms for consulting unions on workers' rights principles and policies. Stellantis continues to announce a future agreement with IndustriAll, but this has not yet materialised.

Participation of labour unions or worker representatives in key decision-making and other processes concerning workers' rights risks in the supply chain continues to be extremely poor across all companies. Mercedes and Volvo are the only two companies that disclose details about engagement with supply chain workers and/or unions in their assessment of workers' rights risks in the supply chain.

No company discloses participation of unions or workers' representatives in the verification of corrective action plans, or in remedy processes. As more and more due diligence laws explicitly require consultation with, or participation of labour unions in risk assessment and monitoring processes concerning human rights, automakers will need to overhaul their due diligence approach to give workers and unions a seat and voice in these processes.

CASE STUDY

Public procurement driving a Just Transition

By Electronics Watch

Electric vehicles are a solution to combat climate change, but for the green energy transition to be a just transition it must not come at the price of exploiting workers and their communities.

Using public authorities' purchasing power to hold companies accountable, Electronics Watch's Low Emission Vehicle Programme (LEVP) works to uphold the rights of workers in vehicle supply chains. The LEVP equips public buyers with the resources and knowledge to drive their suppliers to produce and mine key components and minerals in a just way.

Worker-driven approach

Electronics Watch puts workers, and their rights and needs, at the centre of its monitoring and remediation activities. Its monitoring partners are civil society organisations located in production and extraction regions, who provide monitoring, awareness-raising and training for workers on fundamental labour rights and occupational health and safety. Wherever possible Electronics Watch

works together with democratic trade unions at factory, regional, national and international levels. They are a central stakeholder in the worker-driven remediation processes that Electronics Watch facilitates.

LEVP monitoring focuses on cobalt, tin and nickel mines in DRC, Bolivia, Indonesia and the Philippines, as well as semiconductor factories in Taiwan, Malaysia and China, and battery manufacturing facilities in Hungary and Poland.

Public procurement leverage driving change 10

public bodies from six countries are participating in the LEVP: Advanced Procurement for Universities and Colleges (APUC) and Transport for London, UK; Amsterdam City Council, The Netherlands; Barcelona City Council and Metropolitan Transport of Barcelona, Spain; the City of Oslo, Norway; the Flemish Agency for Facility Operations, Belgium; Berliner Verkehrsbetriebe (BVG), Hamburg Police, and Hamburger Hochbahn AG, Germany.





Established in 2022, the LEVP is a forum for learning and exchange on responsible procurement of electric vehicles. Participants meet regularly and receive quarterly reports on risks and violations in their supply chains. LEVP participants have already held 25 individual dialogue meetings with 10 vehicle manufacturers as part of an engagement process to establish supply chain transparency. These meetings help public buyers to understand human rights due diligence (HRDD) and introduce social sustainability practices in the supply chains of their electric vehicle suppliers.

For example, Electronics Watch helped Hamburg Police design the social criteria, contract performance conditions, and a communications plan for a recent passenger vehicle tender. The tender set clear expectations regarding how suppliers would be expected to comply. This has allowed them to establish an ongoing dialogue with suppliers that has built trust and an increasingly open exchange of information.

Another participant is BVG, the Berlin public transport agency. With almost 1600 buses, 1258 trains, 381 streetcars and 6 ferries, it is Germany's biggest public transport company. BVG put out a tender with human rights due diligence included in the award criteria and a comprehensive catalogue of questions covering both the environment and human rights. The requirements and evaluation criteria were based on a risk assessment developed together with Electronics Watch.

BVG was pleasantly surprised by the positive reaction of the market towards its new human rights criteria, and received a similar number of offers to this innovative tender as it had to previous tenders without these challenging requirements. Dialogue between BVG and its chosen supplier has developed positively, with regular meetings on HRDD.

Impact for workers

One compelling example of the LEVP's impact for workers comes from the high-altitude mines of Oruro, Bolivia, which provide tin for vehicle batteries and electronic components. Thanks to health and safety training Electronics Watch monitors provided, cooperative miners were able to avert tragedy when fire broke out near an explosives storage area. A member of the mine's new safety committee established as a result of the training - spotted smoke, and the miners were able to address the electrical fault, extinguish the fire, and avert a potentially catastrophic explosion. This incident illustrates the dangerous conditions workers face, and the life-saving impact of equipping them with the knowledge and tools they need to protect themselves.

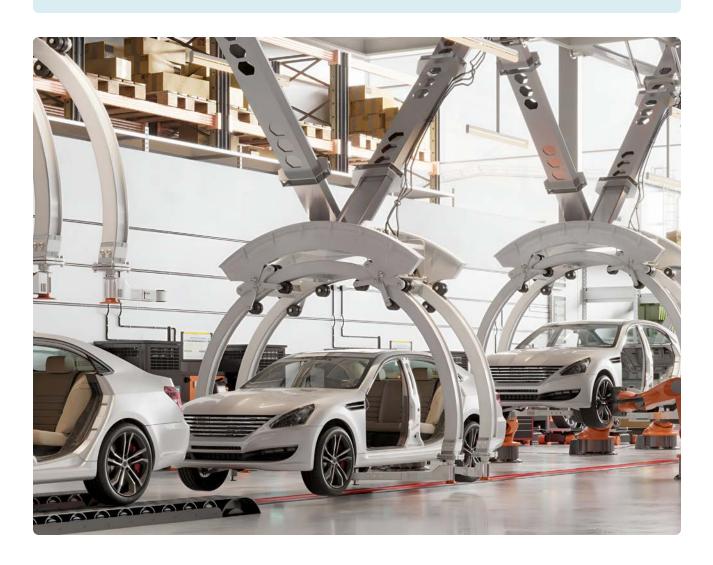
Public procurement can have real leverage in the market, and can set the standard when it comes to HRDD with workers as a driving force. Electronics Watch calls on public authorities to use their influence to ensure that the pursuit of environmental goals does not come at the expense of workers and their rights.

Where is there room for improvement?

There are two main ways for automakers to improve their performance. Automakers can make significant gains simply by matching the best practice of their higher performing peers across different issue areas. Over half indicators in the Leaderboard have been fully met by at least one company, while adding up the highest scores achieved by any company for each indicator results in a score of over 70% (called the "best in class" score).

This means that automakers can take inspiration from what industry leaders are doing across different issues to dramatically improve their performance. This is an especially important strategy for low-performing companies, but also a viable one for industry leaders. Tesla, for example, was this year's top-ranking automaker but only achieved an overall score of 43%. The EV maker could therefore improve its score by at least 30 percentage points by matching the best practices of its competitors that outperformed Tesla across different indicators.

On the other hand, 30% of the indicators are still not currently being met by any automaker. Closing this gap will require bold leadership from automakers that are willing to innovate and raise the bar for their competitors. This section highlights key areas of opportunities for progress across the different sections of the Leaderboard.



Fossil-free and Environmentally Sustainable Supply Chains performance

Overall, companies scored higher in the General subsection (32%) in comparison with other subsections. On the other hand, the gaps between the average and the best-in-class scores continued to be prominent for the steel, aluminum and battery subsections, ranging from 53 to 65 percentage points.

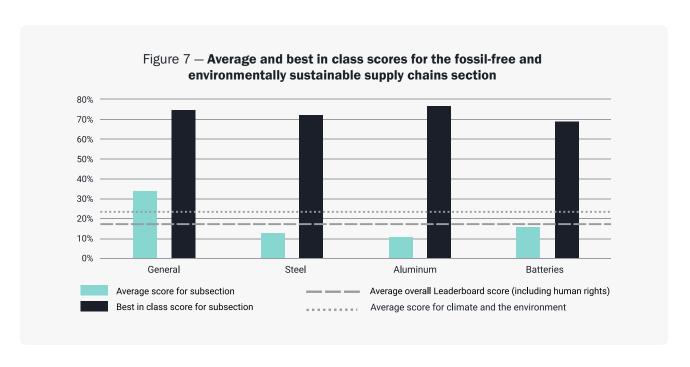
These results point to a double opportunity for automakers: on the one hand they can build on the more substantial progress they have made on overall supply chain sustainability and decarbonization (evaluated in the General subsection) to take more targeted action on their steel, aluminum and battery supply chains. At the same time, they have the opportunity to look to the performance of industry leaders for inspiration when taking these more targeted actions on individual supply chains, with the possibility of improving their scores to over 70% across each of the three subsections by emulating existing best practices...

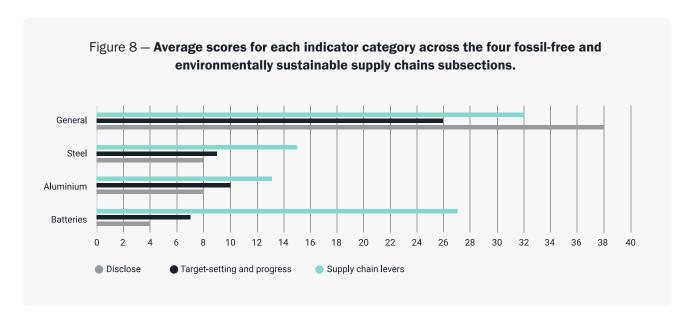
Encouragingly, the best in class scores have risen for 3 out of the 4 subsections this year, albeit marginally. The General subsection had the largest increase in its best in class score, rising from 67% to 74%. The scores for the steel and batteries subsections rose by smaller margins (3 and 5 percentage points respectively). This shows that some automakers

are continuing to raise the bar for others to follow, although this practice is not nearly as widespread as it needs to be.

Looking at the average scores of companies at the level of the individual indicator categories continues to reveal very patchy performance. The General subsection is the only subsection where scores are similar across the disclose, target-setting and supply chain levers indicators, suggesting automakers are taking a more systemic approach for their overall supply chain sustainability and due diligence strategies.

For the steel, aluminum and, especially, batteries subsections average scores are much higher for the supply chain levers indicators than for disclose and target-setting indicators. This indicates that automakers are still implementing ad-hoc approaches to decarbonizing their steel, aluminum and battery supply chains: taking individual actions without linking them to ambitious targets and a comprehensive mapping of the emissions in these supply chains. In fact, Volvo is the only company to achieve similar scores across these three indicator categories and the company only achieves this for both the steel and aluminum subsections. No automaker achieves similar scores across the three indicator categories for the battery subsection.





There are a number of areas in the fossil-free and environmentally sustainable supply chains section where company performance continues to be unacceptably poor. Lowest scorers are yet to take the first steps. Only a small number of automakers have yet to disclose scope 3 emissions for purchased goods and services (BYD, GAC and SAIC) or to have made any progress towards setting a science-based target to reduce their supply chain emissions (BYD, SAIC and Tesla).

In the General subsection, performance on the new indicators on deforestation is notably lower than the performance of automakers on the equivalent indicators on GHG emissions and water impacts. None of the companies have disclosed any quantitative data regarding deforestation and conversion-free commodity volumes from any key high-risk commodity. Further, no company has disclosed a target to eliminate deforestation for any other supply chain beyond rubber. Overall performance on the supply chain levers indicator on deforestation is also low, although all of the scoring criteria have been met by at least one company for this indicator.

Two other indicators in the General subsection also received extremely low average scores. Only Honda provided disclosure on water usage by tier-1 suppliers, although this data was limited to suppliers in Japan. Similarly, although half of the automakers evaluated disclosed commitments or requirements for suppliers to provide science-based targets for GHG emissions reduction, only four companies

disclosed the current percentage of suppliers providing science-based targets.

In the steel, aluminum and batteries subsections, automakers continue to perform extremely poorly on the disclosure indicators, for which only Tesla and Volvo are awarded points. Similarly, only a very small number of automakers have set targets to increase the use of recycled steel and aluminum in their vehicles or disclose the current percentages of recycled steel and aluminum used in their annual production cycles. With regards to battery sustainability, automakers perform poorly across all the target setting indicators, with a few notable exceptions from companies like Renault.

Finally, there are some indicators and scoring criteria across each of these subsections where all automakers continue to score 0%. In the General subsection, in addition to the indicator on disclosing data on deforestation and conversion-free commodity volumes, none of the automakers disclosed other significant supply chain emissions (GRI 305-7).

With regards to steel and aluminum, no automakers disclose the percentage of low-carbon steel or aluminum that is used in their production cycles. While some automakers have disclosed quantitative information regarding the use of recycled steel and aluminum in their production cycles, none of the companies have differentiated pre- and post-consumer scrap materials in their disclosure.

Human Rights and Responsible Sourcing performance

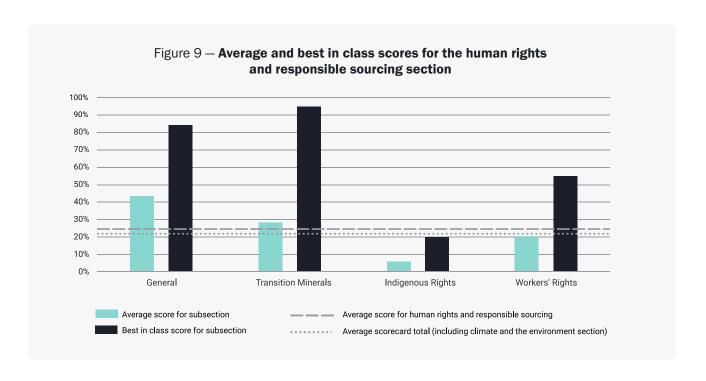
The average score against the general human rights due diligence indicators (43%) was the highest across all the indicator subsections of the Leaderboard. The best-in-class score - summing the highest indicator scores by any company - was 84%.

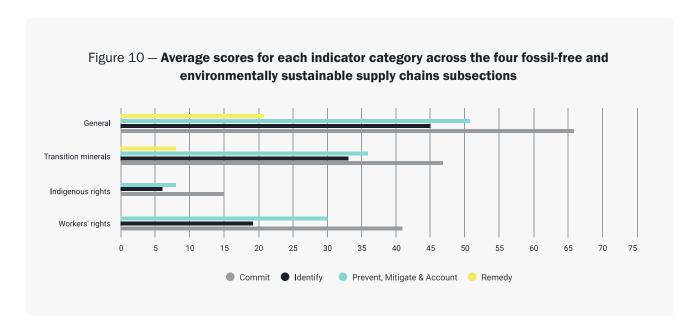
Company performance across these two issue areas is dramatically different to their performance on Indigenous Peoples' rights and workers' rights, which together represent the lowest best in class scores across all the subsections of the Leaderboard (35% and 55% respectively). Indigenous Peoples' rights was the only subsection to register an increase in its best-in-class score, which rose by a meagre 3 percentage points this year.

The differences in the average and best-in-class scores for human rights and responsible sourcing show that different strategies are needed to strengthen company performance across the four issue areas of this section. Only two subindicators have not been met by any automakers in the General subsection, concerning communication about grievance mechanisms and disclosing quantitative data on measures of reparation provided for confirmed human rights grievances in the supply chain. All other general human rights due diligence sub-indicators have been met by at least one company.

Similarly, with the exception of setting targets for mining suppliers to undergo IRMA audits, there is no transition minerals sub-indicator that has not been met by at least one automaker. The vast majority of sub-indicators on workers' rights have also been met by at least one automaker, with the exception of two indicators where all automakers score 0%: one on the participation of unions and/or worker representatives in the verification of corrective actions and another on remedy processes for confirmed breaches of workers' rights in the supply chain (coincidentally, these are the same indicators that achieved no scores in 2024 either).

These results show that, simply based on corporate practices, almost full compliance with indicators in the general human rights due diligence, transition minerals, and workers' rights categories, is possible and should be expected. With a 89% score achievement on transition minerals, Ford is in fact setting the bar for the level of achievement all companies, including Ford, should be striving for across all the human rights subsections. The rate of year-on-year improvement to get there must accelerate markedly if the industry is to be taken seriously on its human rights commitments.





The level of accomplishment on Indigenous Peoples' rights is more dire, with many sub-indicators not being met by any company. However, this is not the result of any real difficulty in achieving the Leaderboard expectations, which are in line with international human rights standards, but of a lack of determination and ambition on the part of the automakers to protect the most vulnerable of their impacted stakeholders. Filling these gaps requires automakers who have already made commitments on Indigenous Peoples' rights to implement these commitments in practice, and then disclose concrete evidence of this implementation. For others, it requires emulating their better performing peers.

As the graph above shows, there are clear priorities for improving industry performance on both overall human rights due diligence and the responsible sourcing of transition minerals. Improvements are still needed on some of the basics: some companies are still failing to unequivocally commit to respecting all human rights, whilst a significant number of companies still do not require suppliers to comply with all human rights, as their requirements are often qualified or limited.

A relatively small number of companies lack responsible transition mineral sourcing policies (BYD, GAC, SAIC and Stellantis) or fail to lay out express requirements on suppliers in this area (BYD, GAC, Honda, Nissan, SAIC and Toyota). However, even among those who do, the ambition of their commitments and requirements varies considerably.

There are some consistent failures across the board. Very few companies describe the risks to human rights they have identified in their supply chains in sufficient levels of detail. The same is true of risks to Indigenous Peoples' rights and workers' rights in particular.

Another recurrent failure across all human rights subsections is the lack of evidence or insufficient information on actual implementation of commitments, and on the outcome of supply chain due diligence and mapping efforts. For example, most companies claim to have supply chain monitoring programs, and some describe what these programs consist of in some level of detail. However, very few disclose practical data to demonstrate the scale of their monitoring activities such as the number or percentage of suppliers assessed and audited, or the outcome of such activities such as the number or percentage of suppliers found to be non-compliant, etc. Similarly, while some companies claim to carry out supply chain mapping to the point of extraction, very few disclose key actors (such as SoR and mining sites) identified as a result of these mapping efforts.

Remedy is another area of poor performance that needs significant improvement going forward. Many companies still lack an independent grievance mechanism for their supply chains, and most fail to disclose data on the practical operation of the grievance systems they do have.

When it comes to Indigenous Peoples' rights, performance is poor across the board. Companies have a long way to go before they can claim to be respecting Indigenous Peoples' rights. Most companies are still failing to articulate an express commitment to respecting the UNDRIP and/or FPIC in their human rights policies, and to require this same standard of suppliers. Many of those that do, still qualify their requirements or only lay out limited expectations. Disclosures relating to procedures designed to operationalise commitments and remedial processes are next to nil. Unfortunately, these are the same failures noted in 2024, showing that little has been done to address gaps.

On workers' rights, there still are many companies that do not commit to the ILO Declaration, or the five fundamental principles and rights at work, or do not require the same standards of suppliers. Some companies limit or qualify their commitments and requirements in ways that do not allow them to meet the relevant indicators. Commitment to a living wage,

or requirements on suppliers to pay a living wage are still rare. A relatively large number of companies do not have a collective agreement with their workers, and an even larger number has not signed a Global Framework Agreement with IndustriAll. Participation of labour unions or worker representatives in key standard-setting processes (e.g. those concerning the elaboration of labour rights policies and principles) and other processes concerning workers' rights (e.g. risks assessments, corrective action, and remedial processes) continues to be extremely poor across all companies.

Ongoing misconceptions

There are two enduring misconceptions or limitations on the nature and scope of human rights due diligence efforts, especially among the East Asian automakers. Many still overwhelmingly or exclusively focus on risks and abuses within their own operations, neglecting or ignoring what happens in the supply chain. This is reflected, for example, in the scope of risk assessments, or the focus of grievance mechanisms. Some companies also still focus on risks to the company and its bottom line. This reveals an enduring misunderstanding of the nature and purpose of human rights due diligence, which is focused on the risks and impacts that companies pose or inflict on individuals' and communities' human rights.

Differences between markets

US automakers remain the top scorers of the Leaderboard this year, with an average overall score of 36%. The US companies maintain this leadership across both sections of the Leaderboard, achieving average scores of 31% and 45% respectively for the fossil-free and environmentally sustainable supply chains and the human rights and responsible sourcing sections.

European automakers achieved the second-highest average score, both overall (31%) and for the Leader-board's two sections (28% for fossil-free and environmentally sustainable supply chains and 35% human rights and responsible sourcing).

European automakers are followed by South Korean companies, which achieved an overall average score of 19% and average scores of 16% and 22% across the two sections. Japanese companies are next with an average overall score of 11%, followed by the Chinese companies with an average score of 7%. However, whilst the Japanese automakers continue to outperform their Chinese counterparts on the human rights indicators (with an average score of 15% versus 6%), the Chinese companies have now overtaken their Japanese competitors in the climate

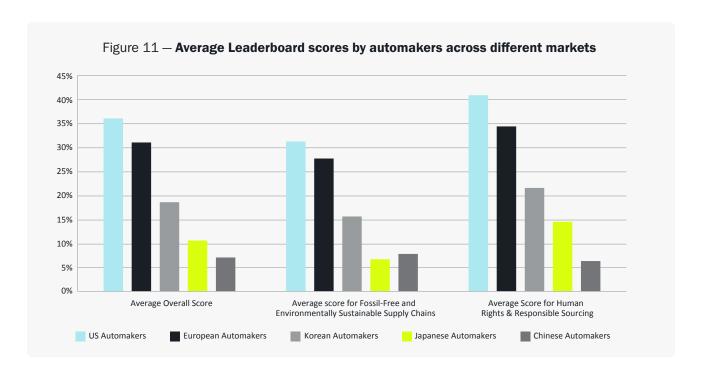
and environment section, with an average score of 8% versus 7% for the Japanese automakers.

Looking deeper into the data at the level of the individual subsections of the Leaderboard reveals some noteworthy divergences from these trends. European automakers are the highest scorers in both of the General subsections, as well as the battery subsection. However, US automakers achieved much higher scores on the responsible mineral sourcing indicators – almost double the European companies.

The better performance of European companies on overall supply chain sustainability and due diligence practices may be explained by the progress that has been made in Europe with regards to mandatory due diligence regulations in countries like Germany and France, and now at the regional level with the approval of the Corporate Sustainability Due Diligence Directive. Similarly, the European automakers' stronger performance on battery sustainability could be explained by the recently approved EU Batteries Regulations.

US companies' better performance on transition minerals, on the other hand, could be explained by





mandatory conflict minerals reporting requirements under the US Dodd-Frank Act. While this focuses on conflict minerals, it may have helped US companies develop general supply chain tracing expertise. However, this does not guarantee a good score on all occasions, as five European companies are ahead of GM on transition minerals.

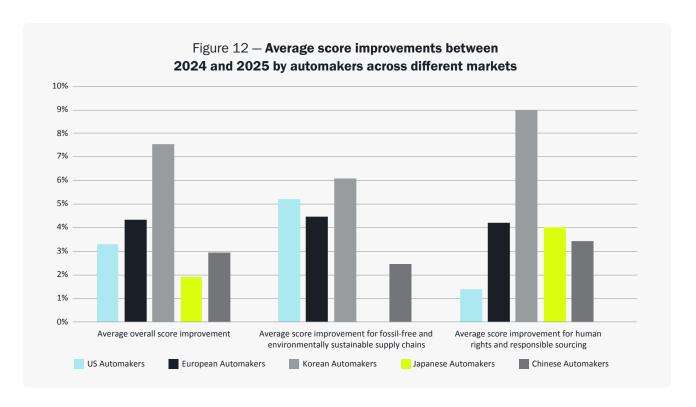
With regards to the subsections on Indigenous Peoples' rights and workers' rights, while US companies were the top performers on Indigenous Peoples' rights, the European companies took the first place on workers' rights. Within the East Asian companies, South Korean companies are distinctively ahead of others on workers' rights.

On the other hand, although the Korean companies scored higher overall than their Chinese counterparts in the fossil-free and environmentally sustainable supply chain section, the Chinese automakers achieved a higher average score for the battery sustainability subsection. This reflects the greater progress that Chinese automakers have made in areas such as battery innovation, with technologies such as BYD's Blade Battery representing important steps forward for battery sustainability.13

Looking at the average score improvements between the 2024 and 2025 Leaderboard tells a different story. This year, the US automakers made less progress overall than both their European and Korean counterparts, and were virtually tied with the performance of the Chinese OEMs. The Japanese automakers made the least progress overall, improving their average scores by a paltry 2 percentage points.

These differences were particularly pronounced in the human rights and responsible sourcing section, where the US automakers are the worst improvers this year by a large margin. On the other hand, it is striking that the Japanese OEMs did not improve their average scores at all in the fossil-free and environmentally sustainable supply chains section. The Korean companies, meanwhile, achieved the strongest improvement in performance across both sections of the Leaderboard, although this is mostly due to Kia's improvements.

There were diverging performances within, as well as between, markets. This means that better performance between markets is often the result of one, two, or just a small number of companies driving the regions' overall achievement. For example, Volvo significantly outperforms its European peers in the steel and aluminum subsections: without Volvo's score, the average score of the European automakers in these subsections would fall from 20% to 12% and 14% to 8% respectively.



Particularly notable is Stellantis' poor performance in this area, scoring more than six times less the European average on steel and more than three times less the European average on aluminum.

Similarly, Geely and Nissan are the only automakers out of their national peers to score above 0% in the steel and aluminum subsections. Out of the two, Geely achieves the higher score: achieving 16% for both subsections, a score that is higher than the scores of all the European automakers except Volvo and Mercedes.

In the US, GM continues to trail Ford and Tesla: scoring 12 percentage points less than Ford and 19 percentage points less than Tesla in the climate and environment section. In the human rights section the difference is even more pronounced, with GM trailing its two national peers by 27 and 21 percentage points respectively.

In Europe, Stellantis scores 30 percentage points less than Volvo in the fossil-free and environmentally sustainable supply chains section, whilst Renault is 22 percentage points behind Mercedes in the human rights and responsible sourcing section. In fact, the German companies outperform their European competitors across the different responsible sourcing subsections.

In China, Geely is far ahead of its peers when it comes to the responsible sourcing section. However, this is not the case across all the indicators in this section. Whilst Geely is the only Chinese OEM to make its Supplier Code of Conduct publicly available on its website, this year BYD became the first company out of its national peers to publish a standalone human rights policy. These are both steps that SAIC and GAC should look to replicate.

Overall, transparency and disclosure continues to be much higher among European and US automakers than other regions, although this is not the case across the board and there are notable differences within markets. In the climate and environment section, Hyundai and Kia are two of only three automakers (the other being Volvo) that disclose the quantities of recycled steel and aluminum used in their annual production cycles. In the human rights and responsible sourcing section, Geely discloses significantly more information on its due diligence efforts than its national peers.

The difference in scores not only between geographies but also among fellow nationals demonstrates that there is ample room for improvement between specific markets as well as within nations.

CONCLUSION

Lead the Charge's annual Leaderboard is a benchmark of an automaker's competitive edge to build an equitable, sustainable and fossil-free supply chain. The Leaderboard is a tool that can be used by automakers, investors, policymakers and consumers to identify who is leading, who is lagging, and how and where to drive positive change across the automotive supply chain.

The 2025 edition of the Leaderboard demonstrates that important progress has been made across several areas. In some cases, these improvements have been significant, demonstrating that rapid progress can be achieved in a relatively short period and that automakers can be pressured to step up their performance or risk losing their competitive edge.

However, despite these positive changes, the auto industry still has an unacceptably long way to go. Almost no company scored more than half of the points available. In the human rights section, only Ford did, but only by two percentage points. In the climate and environment section, only Volvo and Tesla have crossed the 40% mark.





Some automakers perform poorly across the board, while the performance of others is frequently patchy. There are also areas where improvement was extremely limited. This year, it was worrying to see widespread stagnation on both steel and aluminum decarbonization, especially after seeing greater progress in the previous edition of the Leaderboard. Despite some initial signs of progress this year, company performance on Indigenous Peoples' rights, the subsection with the lowest average score, continues to be a major concern.

As the rapidly accelerating transition to electric vehicles addresses the dirty tailpipe emissions of the auto industry, it is essential that automakers also look towards their supply chains with the aim of manufacturing EVs that are truly clean across their lifecycle. This applies not only to reducing supply chain emissions, but also to addressing other harmful environmental and human rights impacts, from mining through to manufacturing and reuse and recycling.

Company Performance Summaries

Automotive sales data from Marklines. All figures are cumulative annual values for the year 2024. The data covers passenger vehicles only. Marklines groups sales of Hyundai-Kia and Renault-Nissan. They have been evaluated separately in the Leaderboard and, for ease, their 2024 sales were evenly split between them. Volvo Cars' and Geely Autos' sales are also combined in Marklines under Geely Holding Group, however Volvo Cars publishes BEV sales data and so this data was used for Volvo and subtracted from Geely's sales figures.







Bev Sales #	364,001
Bev Sales %	16%
Total Score	29%
Climate and environment	20%
Human rights	39%

BMW has been making strong progress on the EV transition, taking the top spot in European EV sales in mid-2024. BMW only made modest improvements in the Leaderboard this year, however, achieving a 6 percentage point score increase overall and rising in the rankings by one position: from seventh to sixth place.

For the Climate and Environment section, BMW only improved its score in the General subsection, mainly due to the company's above average performance on the new deforestation indicators.

BMW's progress in the Human Rights section has been more substantial, with the company making consistent progress across all human rights areas since the 2024 Leaderboard, achieving an 8 percentage point increase in its total Human rights compared to last year. The company's most significant improvements are on transition minerals and workers' rights. This has made the company move up from fifth to fourth position in the human rights ranking, although it is still behind Ford, Mercedes, and Tesla.

- Top scoring company in the General subsection of the Climate and Environment section, achieving a total score of 60% against these indicators.
- Lags behind industry leaders in the specific areas of steel, aluminium and battery supply chain decarbonization, achieving no score improvements at all in the steel and aluminum subsections and only improving its score against one indicator in the battery subsection.
- One of the few automakers that have published a vehicle level lifecycle carbon footprint, with a breakdown of material use and carbon emissions for its i5 model. However, does not disclose disaggregated emissions for the steel, aluminum or battery used in this vehicle, unlike some competitors such as Volvo.
- Maintains a leadership position on human rights, with strong human rights commitments, policies and systems in place for its supply chain, with improved transparency this year regarding the level of detail provided about its human rights due diligence process, supply chain grievances, and remedial processes.
- Discloses a good level of detail in relation to the results of its minerals supply chain mapping efforts, its direct sourcing agreements, and identified conflict and transition mineral risks.
- Continues to fare poorly on Indigenous Peoples' rights: is one of the few companies to expressly require suppliers to respect Indigenous Peoples' rights but does not disclose any information to demonstrate implementation or enforcement of this requirement.
- Generally strong commitments and policies on workers' rights, despite some concerning comments made by BMW's CEO last year with regards to the rights of workers to unionize and bargain collectively. This year, the company improved its disclosure in relation to salient workers' rights risks and mechanisms to consult trade unions on workers' rights policies.
- The only automaker to require suppliers to pay a living wage, although the company does not disclose how it defines a living wage or any measures it has taken to ensure compliance by suppliers with this requirement.





Bev Sales #	1,937,574	
Bev Sales %	43%	
Total Score	6%	
Climate and environment	4%	
Human rights	7%	

BYD continues its leadership on the transition to electric vehicles. However, BYD is not yet demonstrating the same level of leadership as some of its peers on clean and responsible supply chains, improving its total score this year by just 2 percentage points. This has resulted in the company remaining near the bottom of the 2025 Leaderboard rankings.

BYD made minimal progress on supply chain decarbonization and sustainability, which stands in stark contrast to its leadership in electrification. However, BYD did make some progress in the General and Battery subsections. The company has a significant opportunity to improve its performance on steel and aluminum decarbonization, for which it still scores 0%.

BYD's performance on supply chain due diligence continues to lag behind most automakers in the Leaderboard. However, it is notable that BYD published a human rights policy last year and also made additional progress on some human rights areas, enabling BYD to improve its score in the General subsection. Nonetheless, with a 2 percentage point score improvement in the responsible sourcing section overall, BYD is falling further behind key competitor, Geely, who achieved a commendable 11 percentage point score improvement in the human rights and responsible sourcing section this year.

It is notable that BYD's battery production subsidiary, FinDreams Battery, has disclosed more comprehensive supply chain sustainability and due diligence policies than its parent company. BYD should leverage its subsidiary's greater progress in these areas to strengthen its group-wide supply chain policies and targets.

- Has set up a Carbon Emission Control Committee in response to national policies in China, and now discloses requirements for suppliers to implement continuous improvement programs to minimize environmental impacts, including by reducing carbon emissions. However, continues to be one the few companies evaluated that does not disclose its scope 3 emissions and has not set science-based targets for supply chain emissions reductions.
- Continues to strengthen its leadership on battery technology innovation, including through the further development and the commercialization of its Blade Battery technology that improves the energy density, safety and recyclability of LFP batteries, which are free of nickel and cobalt.
- Made important progress this year by publishing its first Human Rights Policy Statement expressly recognizing the Universal Declaration of Human Rights, the UN Guiding Principles, and other international human rights instruments. This was complemented by disclosing additional details about its supplier assessment and monitoring processes.
- Still fails to disclose information on formal supplier requirements or any overall system for identifying, assessing, and monitoring ESG risks in its supply chain. Nonetheless, the initial steps taken this year can provide important foundations for the company to improve its performance across each of the responsible sourcing subsections next year.





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Bev Sales #	148,336	
Bev Sales %	4%	
Total Score	42%	
Climate and environment	33%	
Human rights	52%	

Ford continues to be one of the strongest performers of the Leaderboard, coming in second place overall and scoring less than one percentage point less than Tesla, the top performer of the 2025 edition. However, Ford's overall score improved by less than 1 percentage point this year. This has caused the company to lose its number one ranking from last year.

Ford remains among the top five performers in the fossil-free and environmentally sustainable supply chains section. However, in comparison to other top performers, it has not made significant progress in the past year, improving its score against 7 indicators across all four subsections.

While remaining at the top of the ranking on human rights, Ford's overall performance in this area has been disappointing this year. The company lost points against several indicators for disclosing less information from its latest salient human rights risk assessment compared to previous years. Because of this, Ford's overall performance on human rights dropped by 3 percentage points compared to 2024. The company is one of only three to regress on their human rights performance overall.

On the other hand, Ford has made significant, if nascent, progress on Indigenous Peoples' rights, an area that was dragging the company's score down in previous years. As a result, Ford achieved the largest score increase out of all 18 companies in this subsection.

- Despite some initial improvements on steel and aluminum decarbonization last year, only improved its score against two indicators (on steel recycling and purchase agreements for low carbon aluminum) across both of these subsections in the 2025 edition.
- Scored lower than many industry peers on the deforestation indicators, illustrating ample room for improvement in preparation for enhanced regulatory requirements.
- Continues to be the top scoring automaker on human rights, with a high level of disclosure on human rights due diligence policies and practices.
- Now includes an express commitment to the UN Declaration on the Rights of Indigenous Peoples and Free, Prior and Informed Consent in its Human Rights policy, with a new requirement for suppliers to respect these rights also incorporated into the company's supplier code of conduct.
- Remains an industry leader on responsible mineral sourcing, achieving the highest percentage score of all Human rightss, across all companies, and outpacing Tesla, the second best achiever in this area, by more than 20 percentage points.
- After having achieved the highest score on workers' rights in 2024, received a lower score for this subsection this year due to its failure to disclose information regarding participation of workers and their representatives in its latest workers' rights risks assessment, and more limited disclosure on the findings of this assessment compared to previous years.





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Bev Sales #	380,251	
Bev Sales %	47%	
Total Score	4%	
Climate and environment	6%	
Human rights	2%	

GAC continues to be one of the industry leaders on the EV transition, with its BEVs representing over 47% of its total vehicle sales in 2024. However, lack of disclosure, commitments and actions on clean and equitable supply chains leaves GAC near the bottom of the Leaderboard rankings.

However, GAC did make some improvements on fossil-free and sustainable supply chains, causing the company to improve its ranking by a few places in this section, overtaking Toyota and Honda.

On responsible sourcing, GAC minimally improved its performance against several indicators related to supply chain due diligence and transition minerals, achieving an overall score improvement of 1 percentage point for this section. Moving ahead, GAC could look to some of its national peers for inspiration: BYD's total score is three times higher, whilst Geely's is eight times higher than GAC's.

- Has a 2050 net zero target, but with no interim target for its supply chain or related requirements for suppliers to set their own targets.
- Has made initial commitments to prioritize the selection of low-carbon materials in its procurement process, but provides no detail of specific requirements or actions taken to decarbonize its steel, aluminum or battery supply chains.
- Despite having invested in in-house battery R&D and production, does not disclose any actions taken to improve the recyclability of its batteries. However, has signed an agreement with battery recycling and reuse company GEM for the lifecycle management of EV batteries and waste materials.
- Has marginally improved the level of information it provides regarding monitoring of suppliers for ESG impacts, but continues to be one of the worst performing automakers when it comes to transparency and disclosure of its responsible sourcing practices, failing to disclose commitments, requirements or processes for identifying and addressing human rights risks in its supply chain.





Bev Sales #	682,018
Bev Sales %	27%
Total Score	18%
Climate and environment	19%
Human rights	17%

For the second year running, Geely achieved one of the largest score increases in the Leaderboard. This enabled Geely to rise in the rankings by one position: it is now the second highest scoring East Asian automaker overall, behind Hyundai Motors by just 3 percentage points.

Geely continues to be the strongest performing East Asian automaker for the fossil free and environmentally sustainable supply chains section. The company improved its score by 5 percentage points in 2025, causing the company to rise from 10th to 9th position.

In the Human Rights and Responsible Sourcing section, Geely achieved the largest score increase for a single subsection across all 18 automakers, improving its score by 24 percentage points on general human rights due diligence. This has made the company the best improver on human rights overall, jointly with Kia and Volkswagen. It has also enabled the company to move up the human rights ranking from 15th to 12th place, above most of its East Asia competitors. Nonetheless, a total score of 17% in this section shows that Geely, along with many other automakers, still has a long way to go.

Geely should therefore double down on its efforts to build cleaner and more equitable supply chains with the aim of improving its performance by an even larger margin next year.

- Has set an ambitious goal of requiring tier-1 key suppliers to use 100% renewable electricity by 2025. VREMT, Geely's battery subsidiary, has also established new requirements for suppliers to use 100% green electricity for all new projects and for the production of aluminum ingots by 2025.
- One of the few companies to have set targets to increase the use of recycled steel and aluminum, setting an action route to have tier-1 suppliers use 20% recycled steel and 30% recycled aluminium by 2025. However, still lacks targets for steel, aluminum and battery decarbonization specifically.
- Has now established a human rights assessment system and discloses a good amount of information regarding its supply chain risk identification and monitoring processes and practices, including statistical data that many other companies fail to disclose.
- Has taken some steps towards strengthening responsible minerals sourcing practices, particularly in relation to conflict minerals. The company can significantly step up its efforts in this area by ensuring traceability to the point of extraction, disclosing the results of its supply chain mapping efforts and the salient transition minerals risks it has identified, and requiring mining suppliers to undergo IRMA audits.
- Strong performance overall tempered by slower to non-existent progress in other areas: did not improve its score at all in the steel subsection and only improved its score by 3 and 2 percentage points respectively for the aluminum and Indigenous Peoples' rights subsections.





Bev Sales #	821,270	
Bev Sales %	15%	
Total Score	23%	
Climate and environment	21%	
Human rights	25%	

GM only marginally improved its performance in this year's Leaderboard, increasing its overall score by just one percentage point and moving up the rankings from 8th to 7th place.

GM's performance in the Climate and Environment section was especially lackluster, where the company improved its score against just one indicator across all four subsections. This stands in stark contrast to its performance last year, when GM improved its score by 13 percentage points.

GM's performance on human rights was a mixed bag but also disappointing overall. While the company has made progress on the General human rights indicators, this has been offset by a marked drop on transition minerals, and no progress at all on Indigenous Peoples' rights or workers' rights. GM's human rights ranking has improved by one place, but the company continues to be the worst performing US company on human rights: scoring half of Ford's overall Human rights, 21 percentage points less than Tesla and 6 percentage points less than Stellantis.

- Has set a commitment for its rubber supply chain to be free of sourcing from HCS and HCV forests, but does not disclose any information regarding its progress towards achieving this commitment.
- Despite joining the First Movers Coalition's groups on steel and aluminum in 2022, has not disclosed any evidence of progress towards decarbonizing its steel and aluminum supply chains.
- Did not improve its score against any of the indicators in the fossil-free and environmentally sustainable batteries subsection.
- Maintained and, in some areas, increased its level of transparency regarding its human rights due diligence policies and processes, achieving an important score increase of 8 percentage points in the General subsection.
- Score on responsible transition minerals sourcing dropped by 7 percentage points, primarily due to disclosing less information on smelters and refiners, including a decision to no longer publish a list of SoRs in its supply chain.
- Despite commitments for suppliers to respect Indigenous Peoples' and workers' rights, fails to disclose sufficient information or, in some cases, any information at all to demonstrate that these commitments are effectively operationalized and enforced in practice.





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65,659	
2%	
10%	
4%	
16%	
	2%

Honda's stronger performance this year across the Human Rights and Responsible Sourcing indicators has been offset by its poor performance across all of the Fossil-free and Environmentally Sustainable Supply Chains subsections, further cementing its position as one of the biggest climate laggards of the industry.

Honda partially improved its performance against just two indicators across all four climate and environment subsections. Particularly notable is the fact that Honda continues to be one of the very few automakers that scores 0% in both the steel and aluminium decarbonization subsections. Given Japan's important role in the global steelmaking industry, Honda should start taking action on this critical sustainability issue.

Regarding human rights and responsible sourcing, having performed very poorly last year, Honda has now taken some important strides forward on general human rights due diligence and responsible transition mineral sourcing, achieving score increases of 13 and 11 percentage points respectively in these areas. However, these advancements are counterbalanced by no progress whatsoever on Indigenous Peoples' rights, and only modest progress on workers' rights. Key East Asian competitors, Geely and Kia, have now overtaken Honda on human rights.

- One of the few automakers that fails to disclose Scope 3 emissions for purchased goods and services or to have set a science-based target to reduce its supply chain emissions.
- The poorest performing company across all 18 automakers evaluated for the steel, aluminum and battery subsections, scoring 0% in the first two and just 1% against the battery sustainability indicators.
- Dreadful track record on climate lobbying continues to further drag down its already low score for the fossil-free and environmentally sustainable supply chains section.
- Has now disclosed slightly more information regarding its supplier human rights risk assessment process and monitoring activities, including some valuable statistical information. However, fundamentally undermines its chance to make more progress in this area by not expressly requiring suppliers to respect human rights across the board.
- Beyond stating a commitment to the responsible sourcing of certain transition minerals, and marginally improving on conflict minerals reporting, does not provide sufficient evidence of actual implementation and enforcement of responsible mineral sourcing practices.
- Performance on Indigenous Peoples' Rights remains dire, with a score of 0%.
- Made marginal improvements on workers' rights, although only scores above Nissan, BYD, GAC, and SAIC.





Bev Sales #	190,326	
Bev Sales %	6%	
Total Score	21%	
Climate and environment	19%	
Human rights	24%	

Hyundai continues to make steady but inadequate progress on sustainable and equitable supply chains. Due to marginal improvements across several of the subsections of the Leaderboard, Hyundai has been able to maintain its position as the highest scoring East Asian automaker overall. However, the competition has become more intense, with Geely closely following behind and even surpassing Hyundai in the climate and environment section.

In the climate and environment section, Hyundai achieved a notable score increase in the General subsection. However, Hyundai is one of the very few automakers evaluated that, for two years running, has not improved its score at all with regards to steel and aluminum decarbonization. The lack of progress on steel decarbonization is particularly disappointing, given the company's unique position as an automaker with its own steel subsidiary, which provides Hyundai with a clear opportunity to become an industry leader on clean steel. Joining the SteelZero and First Movers Coalition initiatives would be a logical first step towards this goal.

On human rights, Hyundai's progress has been mixed, with considerable improvements on general human rights due diligence and transition minerals standing in contrast to no progress at all on Indigenous Peoples' rights, and a severe drop in performance on workers' rights.

- Improved its score in the General Fossil Free and Environmentally Sustainably Supply Chains subsection due to releasing a more detailed carbon neutrality roadmap, providing additional details with regards to how the company manages environmental risks and impacts in its supply chain and above average scores against the new deforestation indicators.
- Scores points for investing in the use of scrap aluminium and steel and continues to be one of just two automakers that disclose the total quantity of recycled steel and aluminum used in its annual production cycle.
- Has increased the amount of information it discloses regarding its human rights due diligence process, including the results of monitoring activities, and is one of only a few companies to provide statistical data on the number of suppliers assessed and audited, and on corrective action plans. Notably, however, the company still does not have a grievance and remedy mechanism for its supply chain.
- Now provides more detail on its transition minerals risk assessment and due diligence processes, including its mapping efforts, but does not disclose the results of these efforts, the salient transition mineral risks it has identified or information on smelters and refiners in its supply chain.
- Has still made no progress whatsoever on Indigenous Peoples' rights, remaining at the bottom of the rankings jointly with many other laggards.
- Workers' rights score has dropped by 7 percentage points, due to watering down its commitments in this area and regressing on the level of disclosure of salient workers' rights risks it has identified in its supply chain. This is particularly troublesome in light of recent allegations of workers' rights abuses in Hyundai's supply chain.

^{*}Sales figures are for Hyundai Motor OEM which includes both Hyundai and Kia.





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Bev Sales #	190,326	
Bev Sales %	6%	
Total Score	16%	
Climate and environment	12%	
Human rights	20%	

Together with Volkswagen, Tesla and Geely, Kia achieved the second largest overall score increase this year, primarily due to the company's substantial improvements in the Human Rights and Responsible Sourcing section. This has enabled the company to climb up in the rankings by one position.

Nonetheless, Kia continues to be among the industry laggards on fossil free and environmentally sustainable supply chains, scoring just 12% for this section, marginally improving its score in the General, Steel and Batteries subsections. Across the steel, aluminum and battery subsections, Kia scores an abysmal 5%. Kia has the opportunity to work with Hyundai Motor Group, and key subsidiaries such as Hyundai Steel, to make significant progress on decarbonizing its steel and aluminum supply chains - which should be a priority for the company.

On the other hand, Kia's progress on human rights has been significant this year, especially when compared to the company's performance in previous editions. The company achieved the second largest score increase on overall human rights due diligence and the third largest score increase on responsible transition mineral sourcing. Together with Geely and Volkswagen, it has achieved the largest score increase on human rights overall.

Given the significant progress on human rights in general, it is disappointing to see no strides on Indigenous Peoples' rights, where the company once again scores 0%.

- Improved its score against just one indicator across all the steel and aluminum subsections, for disclosing the quantity of steel scrap used in part of its annual production cycle. Its overall score across these two subsections is just 4%.
- Has a no deforestation policy with a target to achieve a deforestation free value chain by 2050, but discloses no evidence of actions taken to operationalize this policy.
- Achieved a 22 percentage point score increase in the General human rights subsection, the second largest score increase for this subsection, behind Geely, and also across all the other human rights subsections. This is due to disclosing more detailed information about its human rights due diligence process, including risk identification and monitoring systems.
- Improved its score on responsible transition mineral sourcing by 14 percentage points, due to disclosing slightly more information about its transition minerals risk assessment and due diligence processes. However, has yet to demonstrate supply chain mapping efforts, disclose salient transitional minerals risks, or adequate engagement with smelters and refiners in its supply chain.
- Performance on Indigenous Peoples' rights remains dire, with not one single commitment or action in this area.

^{*}Sales figures are for Hyundai Motor OEM which includes both Hyundai and Kia.

Mercedes-Benz



Bev Sales #	190,326
Bev Sales %	12%
Total Score	41%
Climate and environment	38%
Human rights	45%

SUMMARY

Mercedes remains among the top performers of this year's Leaderboard, although the company has dropped from second to third place, narrowly trailing Ford by less than 1 percentage point. Crucially, Mercedes performs strongly across all of the Leaderboard's sections: it is the only automaker evaluated that ranks among the top five highest scorers across each of the eight subsections, demonstrating that it is possible for automakers to achieve a robust performance across all of the issue areas evaluated by the Leaderboard.

Nonetheless, Mercedes' overall performance was lackluster this year, increasing its total score by less than 2 percentage points. The company continues to be among the top three performers in the fossil-free and environmentally sustainable supply chain section, performing above average on the new deforestation indicators and making some notable improvements in the batteries subsection, where it has overtaken Tesla.

On human rights, Mercedes has not demonstrated major improvements in any of the human rights areas this year. Although the company achieved moderate improvements on general human rights due diligence and Indigenous Peoples' rights, the company has remained stagnant on workers' rights and transition minerals.

- Has set net zero targets across its supply chain, with the commitment that all procured production materials are net carbon-neutral by 2039.
- Has established a general commitment to Deforestation Free Supply Chains and contractually obligates its suppliers to take due diligence measures to support the protection of natural forests, illustrating implementation by providing evidence of engagement with suppliers on deforestation risks.
- The industry leader on low-carbon and near-zero emissions steel and aluminum procurement, having entered into multiple contracts and agreements with suppliers to support greater investment in and production of fossil-free steel and aluminum. However, demonstrates comparatively little progress on enhancing the use of secondary steel and aluminum.
- The top scorer in the fossil-free and environmentally sustainable batteries subsection, due to progress on sustainable battery mineral procurement and battery recycling, opening a new battery recycling factory in Kuppenheim in 2024 that uses a mechanical-hydrometallurgical process that can recover up to 96% of critical raw materials.
- Has strong human rights commitments, policies, and processes, and remains generally transparent on its supply chain due diligence activities, including by being the only company to explain in detail how it involves external human rights experts in its human rights risk assessment process.
- Maintains a generally high level of transparency on transition mineral sourcing, disclosing a good level of information about the results of its mineral supply chain mapping efforts and requiring suppliers to only use cobalt, lithium, nickel and natural graphite from IRMA-audited mines.
- Slightly improved performance on Indigenous Peoples' rights due to greater disclosure on risks to Indigenous Peoples' rights in its supply chain, including detail as to where in the supply chain they occur.
- Top performer on workers' rights, demonstrating some of the best practices in this area, with strong policies and mechanisms to consult workers and unions on the assessment of workers' rights risks.





Bev Sales #	252,840
Bev Sales %	5%
Total Score	12%
Climate and environment	12%
Human rights	12%

Initially the top scoring East Asian automaker of the Leaderboard, Nissan has continued its descent down the rankings this year. Last year it was surpassed by Hyundai and, in this year's edition, Nissan was one of the worst performers: only improving its score against 7 indicators across the entire scorecard. This has caused the company to fall from 11th to 13th place in the rankings, being overtaken by Kia and Geely.

Notably, Nissan scored just 4% in the battery sustainability subsection, the second lowest score of all 18 automakers. The company scores marginally better in the steel and aluminum subsections, scoring 11% for each, primarily due to making some limited progress on low-carbon steel and aluminum procurement. The company should build on this progress by setting ambitious targets to decarbonize its steel and aluminum supply chains, and then taking concrete actions to make progress towards these targets. Joining multi-stakeholder initiatives like ResponsibleSteel, SteelZero and the First Movers' Coalition would help Nissan to achieve these goals.

Nissan's performance on human rights was inexcusably poor, improving its score against just two indicators across all four subsections. The company has actually regressed in certain areas, causing its score to be downgraded from an already very low level of achievement. This has caused the company to backslide from 11th to 15th place in the human rights ranking: it is now the fourth worst performing company on human rights overall, after SAIC, GAC, and BYD.

- Has now added an interim 2030 target to its 2050 carbon neutrality commitment but lacks disaggregated emissions reductions targets for its steel, aluminium and battery supply chains.
- Together with GAC, was the only company evaluated that did not improve its score at all this year across the steel, aluminum and batteries subsections.
- One of the industry laggards in the battery sustainability subsections, scoring 0 across all of the indicators on battery recycling. The company should enhance its own efforts on closed-loop battery recycling, following the common scheme established by the Japan Automobile Manufacturers Association (JAMA).
- Extremely poor level of disclosure on human rights due diligence processes and systems, with regressions in certain areas, such as in relation to its risk identification methodology. Has also not disclosed any evidence of having conducted a salient human rights risk assessment since 2017.
- Has established a responsible minerals sourcing policy that applies to all minerals and metals from CAHRAS, but does not translate this commitment into actual requirements on suppliers, and demonstrates very little in the way of actual operationalisation along the supply chain.
- Continues an abysmal record on Indigenous Peoples' rights, with no action whatsoever to move its performance forward from 0%.
- Commits to the ILO Declaration on Fundamental Principles and Rights at Work and has a collective agreement with workers at headquarter level, but fails on every other workers' rights indicator.

^{*}Sales figures are for the R-N-M Alliance OEM which includes Renault, Nissan and Mitsubishi.

RENAULT



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Bev Sales #	134,572	
Bev Sales %	5%	
Total Score	23%	
Climate and environment	22%	
Human rights	23%	

SUMMARY

Renault made modest improvements this year, increasing its overall score by four percentage points and climbing up the rankings from ninth to eighth position.

Renault performed better in the fossil free and environmentally sustainable supply chains section. Notably, the company achieved the second largest score increase in both the General and Battery subsections, primarily due to disclosing additional requirements and incentives for its suppliers to reduce their GHG emissions and for making further progress on battery recycling. Renault should build on this progress by demonstrating similar leadership on steel and aluminum circularity.

On human rights, Renault performed mediocrely this year, with some discrete improvements rights standing in contrast to no progress on transition minerals or workers' rights. With an overall achievement on human rights of only 23%, Renault remains the worst performing European company in this area.

Despite an overall poor performance, it is important to recognise Renault's score improvement of 6 percentage points on Indigenous Peoples' rights. While not substantial, the poor record on Indigenous Peoples' rights means that this improvement is still the second largest in this area across all 18 companies.

- Has a target of achieving carbon neutrality in Europe by 2040 and worldwide by 2050. Has also set a carbon emission reduction target for its parts and materials supply chain (30% reduction by 2030 compared with 2019) and a specific target for its batteries (35% reduction by 2030 compared with 2019). However, has not set similarly disaggregated targets for its steel and aluminium supply chains.
- Has risen from fourth to second place in the fossil free and environmentally sustainable batteries subsection. Has set a 2030 goal to recycle and reuse 80% of cobalt, lithium and nickel from end-of-life batteries and has established multiple partnerships to source low-carbon and more sustainable battery minerals.
- Continues to score poorly in the steel and aluminum subsections, although does disclose the quantity of recycled steel and aluminum used for some specific elements in its production cycle.
- Has now issued a standalone human rights policy and has improved the level of detail it provides on certain aspects of its human rights due diligence process, such as risk identification and monitoring practices, but fails to provide statistical information to demonstrate the scale of these efforts.
- Has established a standalone responsible minerals sourcing policy, but discloses limited information on processes to operationalise this policy and little to no evidence of actual implementation.
- Became one of the few companies to commit to respecting the UN Declaration on the Rights of Indigenous Peoples and their right to Free, Prior and Informed Consent in its human rights policy, although these commitments have not yet been translated into express requirements on suppliers.
- Robust commitments and practices on workers' rights overall, but has yet to commit to a living wage for its supply chain and must improve participation of workers in key due diligence processes.

^{*}Sales figures are for the R-N-M Alliance OEM which includes Renault, Nissan and Mitsubishi.





261,795	
18%	
1%	
2%	
0%	
	18%

Despite continuing to make strong progress on the transition to electric vehicles, with BEVs making up approximately 18% of SAIC's total vehicle sales in 2024, SAIC remains the lowest-scoring automaker in the Leaderboard due to its lack of disclosure and public commitments towards building a clean and equitable supply chain.

This is in contrast to SAIC's national peers, with GAC and BYD each improving their overall scores by 2 percentage points and Geely improving its overall score by 8 percentage points. The company is now 5 percentage points behind BYD and 17 percentage points behind Geely.

Score differences in the General supply chain due diligence subsection are especially pronounced, with SAIC scoring 17 percentage points less than BYD and 40 percentage points less than Geely. SAIC should work to significantly improve its performance in this area, in order to comply with incoming EU due diligence regulations.

- One of the few remaining automakers that does not disclose any of its Scope 3 emissions.
- Has set carbon emission reduction targets in response to the "carbon peaking" target of the Chinese government, but does specify if these are science-based and does not take upstream/purchased goods into consideration in its targets.
- Has established basic supplier evaluation and management systems, with regular performance evaluations that include considerations around environmental impacts. The company can improve its performance through more transparent disclosure on the specific environmental requirements for its steel, aluminium and battery suppliers.
- Has made minor progress on its battery supply chain, scoring some points for investing in the development of new battery technologies, enhanced battery recycling and collaborations for battery repurposing in China.
- Has not disclosed any public commitment on human rights or responsible sourcing, or information regarding its efforts in these areas, resulting in the lowest score for this section.





Bev Sales #	216,195
Bev Sales %	4%
Total Score	23%
Climate and environment	15%
Human rights	31%

In the light of Stellantis' notable improvement in performance between the first and the second editions of the Leaderboard, it is disappointing to see that, in contrast to many of its industry peers, this progress has not been maintained this year. This has caused Stellantis to drop considerably in the 2025 Leaderboard rankings, from 5th to 9th place.

In the fossil free and environmentally sustainably supply chains section, Stellantis improved its performance against just two indicators across all four subsections: on systems for monitoring suppliers for compliance with GHG emissions targets and for disclosing limited information regarding the company's use of scrap steel. Stellantis has now been surpassed by Geely and Hyundai in this section.

Stellantis did not improve on any human rights indicator and regressed slightly on its minerals sourcing practices, causing the company to move from 4th to 7th place in the human rights ranking.

On a positive note, the company has now elaborated a standalone policy on Indigenous Peoples' rights, although this did not make the cut-off date for this year's analysis. This is an important step forward for the company in this area and should lay the foundations for additional improvements on Indigenous Peoples' rights going forward.

- Discloses Scope 3 emissions for its supply chain and has set targets to reduce its supply chain emissions by 40% per BEV by 2030 and to be net zero across the whole value chain by 2038.
- Continues to score the lowest among the European and U.S. automakers on fossil free and environmentally sustainable steel and aluminium, with an average score of just 3% across these two subsections.
- Continues to rank amongst the top five automakers on fossil-free and environmentally sustainable batteries due to its continued efforts on battery circularity, the development of new battery chemistries, and the procurement of low-carbon lithium and nickel.
- Together with BMW and Renault, receives the lowest ranking out of the European and U.S. automakers with regards to climate lobbying, which further drags down the company's score.
- Continues to disclose a good amount of information on its human rights due diligence process and systems, including statistical data about its monitoring activities. However, fails to disclose sufficient information about its salient human rights risks and supply chain grievances.
- Uneven performance on responsible transition mineral sourcing: maintaining some strong practices, for example, on supply chain mapping and disclosure, but continuing to lag behind many industry peers in other areas, such as having a standalone responsible minerals policy, engaging SoRs in its supply chain and requiring mining suppliers to undergo IRMA audits.
- Maintains strong workers' rights policies, being one of only three companies to commit to a living wage, and the only company to explain how it calculates the living wage. However, has yet to translate this commitment into an express requirement on suppliers and has regressed on the level of information it discloses on the salient workers' rights risks in its supply chain.

TESLA



Bev Sales #	1,977,734
Bev Sales %	100%
Total Score	43%
Climate and environment	40%
Human rights	46%

SUMMARY

Tesla continues to make strong progress in this year's Leaderboard, improving its overall score by 8 percentage points and obtaining the number one spot in the 2025 rankings, albeit with a score difference of less than 1 percentage point with Ford, now in second place.

This year Tesla made important improvements across several areas of the Leaderboard. Particularly noteworthy is the company's improved performance in the General climate and environment subsection, due to disclosing additional measures to drive emissions reductions by suppliers and for scoring above average on the deforestation indicators, a new addition to the 2025 Leaderboard.

Tesla also improved its score on most human rights areas this year. However, the company is still relatively far behind fellow U.S. automaker and top performer Ford. On transition minerals, where the gap is the largest, Tesla is 20 percentage points behind Ford.

Nonetheless, Tesla's position as 2025's top ranking automaker is precarious as it depends on its strong climate lobbying score. If climate lobbying performance was not taken into account for the Leaderboard scores, Tesla would continue in third place. Given reports that the company has been supporting the elimination of EV tax credits in the United States, Tesla could easily fall from the top spot in next year's edition and should mitigate this risk by ensuring it maintains its robust track record of lobbying in favour of stronger climate policies.

- Still the only automaker that discloses disaggregated scope 3 emissions from its steel, aluminum and battery supply chains but improved its score against just one indicator across both the steel and aluminum subsections.
- One of the top performers in the sustainable batteries subsection, disclosing additional efforts this year to support more sustainable lithium and nickel extraction. However, scores less than many industry peers on battery circularity.
- Increased its level of disclosure in many areas of human rights due diligence, such as risk identification, actions to address forced labour risks in the supply chain, and the operation of its grievance mechanism.
- Has a strong responsible mineral sourcing policy, is one of very few companies to require all its transition minerals suppliers to comply with OECD Guidance regardless of sourcing location, and provides a good level of detail about the results of its supply chain mapping efforts, as well as direct sourcing agreements.
- Remains the strongest performer on Indigenous Peoples' rights, but did not improve its score at all in this area this year, despite scoring just 26% in total.
- Achieved a considerable score increase on workers' rights as a result of improved disclosures on how it identifies and mitigates risks to workers' rights in its supply chain, particularly in relation to forced labour. However, the company falls short in many other areas: it does not commit to a living wage, is the only western company to not have a collective agreement with its workers, and provides no information on any formal consultation process with workers on supply chain due diligence. Further, reports of ongoing anti-union actions in countries such as Sweden, Germany and the U.S. are concerning.





Bev Sales #	133,796	
Bev Sales %	1%	
Total Score	10%	
Climate and environment	5%	
Human rights	16%	

Toyota's performance in this year's Leaderboard is a mixed bag. The company achieved some notable improvements to its Human rights, improving its performance on most human rights areas. Particularly noteworthy is its score improvement of 16 percentage points on responsible mineral sourcing, the second largest score increase for this subsection. All in all, the company has increased its overall human rights performance by 8 percentage points, allowing it to move from 15th to 14th place in the human rights ranking.

In stark contrast, for the second year running, Toyota did not improve its climate and environment score at all. In fact, Toyota is the only automaker evaluated since 2023 that has not improved its climate and environment performance in the slightest. Taken together with its lack of progress on the transition to electric vehicles and its abysmal rating from InfluenceMap on anti-climate lobbying, the company's continued poor performance on supply chain decarbonization further cements Toyota's reputation as the biggest climate laggard of the automotive industry.

- Has set a 2050 target to eliminate all lifecycle emissions, but lacks interim targets for its supply chain and discloses practically nothing in the way of efforts to reduce GHG emissions in its supply chain.
- One of the few automakers that continues to score 0% on the subsections focused on aluminum and steel decarbonization.
- Has still not improved its climate lobbying performance, continuing to be rated by InfluenceMap as one of the most obstructive automakers when it comes to climate policy.
- Discloses slightly more information on some aspects of its human rights due diligence process, although its overall level of transparency in this area is still poor, particularly in relation to its risk identification and assessment processes, as well as the statistical data it provides to demonstrate supplier monitoring activities.
- Has now published a standalone responsible mineral sourcing policy that applies across all minerals and metals, and has significantly improved conflict minerals mapping efforts and disclosures, including in relation to smelters and refiners.
- Performance on Indigenous Peoples' rights remains abysmal, continuing to score 0% due to a lack of commitments, processes, or actions in this area.
- Improved its score on workers' rights due to greater disclosure of workers' rights risks in its supply chain, particularly in relation to child labour and forced labour. However, still fails to cover the basics, such as clearly committing to all ILO fundamental principles and rights at work, and unequivocally requiring suppliers to respect these rights.





Bev Sales #	707,516
Bev Sales %	8%
Total Score	32%
Climate and environment	27%
Human rights	37%

Volkswagen was one of the strongest performers of this year's Leaderboard, increasing its overall score by 8 percentage points on the back of noteworthy improvements across both the climate and environment and human rights sections. This has enabled VW to rise up in the rankings from 6th to 5th position.

In the climate and environment section, Volkswagen made progress in the General and Batteries subsections due to disclosing additional requirements and systems to improve supplier performance on emissions reductions and environmental management, as well as specific actions the company has taken to reduce the environmental impacts of lithium, cobalt and nickel sourcing.

Volkswagen also performed strongly on human rights this year, improving its score in three of the four subsections. Particularly noteworthy is the company's score improvements 21 percentage points on general human rights due diligence, primarily due to greater levels of disclosure on risk identification processes, salient human rights risks, and on supply chain monitoring and grievances. This has made the company the top improver on human rights overall, jointly with Kia and Geely, and has allowed it to advance from 6th to 5th place in the human rights ranking.

However, Volkswagen's significant improvements in these areas this year make its lack of progress on Indigenous Peoples' rights all the more noticeable.

- Has set 2030 and 2050 targets to reduce its upstream scope 3 emissions, and now discloses additional supply chain requirements and processes to accelerate progress towards these targets.
- One of the better scoring automakers when it comes to disclosing how the company addresses and mitigates water and deforestation risks in its supply chain.
- Did not improve its score at all across the steel and aluminum subsections, maintaining a poor score of 9% across these two issue areas.
- Made several improvements on battery supply chain sustainability, including making R&D investments to develop more sustainable cell chemistries without cobalt or nickel, contractually requiring the use of certified power from renewable sources for new suppliers of high-voltage batteries, and disclosing several initiatives to advance more sustainable nickel, lithium and cobalt sourcing.
- Discloses more information on transition and conflict mineral risks, though its progress in this area overall has been more limited.
- Made no progress on Indigenous Peoples' rights for the second year running: its score is now more than four times smaller than Tesla's, and more than three times smaller than that of Mercedes and Ford.
- Has strong policies on workers' rights and now discloses more detailed information on workers' rights risks in its supply chain. However, does not commit to a living wage, or require suppliers to pay a living wage, and does not disclose how workers' participate in its due diligence processes.

VOLVO



Bev Sales #	175,194
Bev Sales %	23%
Total Score	38%
Climate and environment	45%
Human rights	32%

SUMMARY

Volvo was the strongest performer in this year's Leaderboard, increasing its overall score by an impressive 9 percentage points. Most notably Volvo achieved the largest score increase, of ten percentage points, in the climate and environment section, where the company was already the top scorer. As a result, Volvo has extended its lead in this section to 5 percentage points, providing a clear example of how industry leaders can continue to raise the bar for others to follow.

Notably, Volvo was one of the few automakers this year that continued to make strong progress in the steel and aluminum subsections, due to disclosing disaggregated emissions from steel and aluminum in the LCAs for new electric vehicle models and for setting new targets for sustainable and low-carbon steel and aluminum procurement.

Volvo also progressed steadily in most human rights areas, with the exception of Indigenous Peoples' rights. The company improved its score on general human rights due diligence and workers' rights by 11 and 12 percentage points respectively, and also achieved a modest score increase of 5 percentage points on transition minerals.

However, Volvo remains one of the worst performers on Indigenous Peoples' rights among European and U.S. automakers, with a meagre score of 6%.

- Has disclosed life cycle assessments (LCA) for every new EV model since 2019, with disaggregated data on the emissions from the steel, aluminum and batteries used in these vehicles. Notably, the LCA for its EX30 model shows the lowest carbon footprint of any fully electric Volvo car to date, providing further evidence of the company's leadership on supply chain decarbonization.
- Issued the world's first EV battery passport in 2024 for its EX90 SUV, ahead of new EU rules but, beyond this important milestone, disclosed comparatively little progress on battery supply chain sustainability.
- Maintains a high degree of transparency on human rights due diligence policies and processes, and has increased its level of disclosure in key areas, such as risk assessment processes, remedy mechanisms, providing more complete statistical data on supplier monitoring activities.
- Modest rate of progress on transition minerals, increasing its level of disclosure in certain areas, particularly around smelters and refiners in its supply chain, but remaining stagnant in other areas such as disclosing more precise information about transition mineral risks and the results of its supply chain mapping efforts, among others.
- Little progress on Indigenous Peoples' rights, remaining a poor performer in this area. The company still lacks specific commitments and supplier requirements on Indigenous Peoples rights, including their right to Free, Prior and Informed Consent.
- Achieved a 12 percentage point score increase on workers' rights, due to greater disclosure on consultations with workers and their representatives. Particularly noteworthy is the fact that the company consults supply chain workers on workers' rights risks, a best practice in this field and one of only two companies to do so.
- Despite its own commitment to paying a living wage, the company has yet to require suppliers to pay a living wage.

Appendix 1: Table of indicators by Leaderboard sections



Fossil-free and Environmentally Sustainable supply chains (climate and environment):

THEME	INDICATOR CATEGORY	INDICATORS
Fossil Free and Environmentally Sustainable Supply Chains (General)	Disclosure of emissions, water and deforestation management	 The company discloses total scope 3 GHG emissions due to purchased goods and services. The company discloses "significant emissions" in its supply chain. The company discloses water usage by key suppliers in its supply chain. The company discloses deforestation and conversion-free commodity volumes from its supply chain
	Target-setting and progress towards fossil free and environmentally sustainable supply chains	 The company has set and disclosed a scope 3 SBT (must include reference to upstream/purchased goods & not only 'Well to Wheel') The company commits to having suppliers provide science-based targets for GHG emissions. The company discloses the current percentage of suppliers providing science-based targets. The company requires all significant suppliers to disclose their water management plan and water usage. The company has programs in place to monitor suppliers for compliance with GHG emissions targets and other environmental impacts. The company commits to eliminate deforestation and the conversion of all natural ecosystems from their supply chains.
	Use of supply chain levers to achieve fossil free and environmentally sustainable supply chains	 The company incentivises suppliers to reduce GHG and other significant air emissions. The company incentivises suppliers to improve water management The company implements incentives and control systems to eliminate deforestation from its supply chain
	Disclosure of scope 3 GHG emissions due to steel supply chains	The company discloses disaggregated GHG emissions for their steel supply chains.
Fossil Free and Environmentally Sustainable Steel	Target setting and progress towards fossil free and environmentally sustainable steel supply chains	 The company has set targets for the use of fossil free and environmentally sustainable steel. The company publishes progress towards their target by disclosing the current percentage of low-CO2 steel in their annual production cycle. The company has a target for the use of secondary/scrap steel by 2030. The company publishes progress towards their target by disclosing the current percentage of recycled steel used in its annual production cycle.

	Use of supply chain levers to achieve fossil free and environmentally sustainable steel supply chains	 The company participates in multi-stakeholder procurement initiatives to collaborate with other buyers to incentivise investment in and production of fossil-free steel at scale. The company participates in multi-stakeholder standard / certification initiatives to drive investment in and production of socially and environmentally sustainable steel at scale. Company has entered into formal arrangements with suppliers to incentivise investment in and greater production of fossil-free steel. The company integrates improved recyclability of steel into automobile design and manufacture.
	Disclosure of scope 3 GHG emissions due to aluminium	The company discloses disaggregated GHG emissions for their aluminium supply chains.
Fossil Free and Environmentally Sustainable Aluminium	Target setting and progress towards fossil free and environmentally sustainable aluminium supply chains	 The company has set targets for the use of fossil free and environmentally sustainable aluminium The company publishes progress towards their target by disclosing the current percentage of low-CO2 aluminium in their annual production cycle. The company has a target to increase use of secondary/scrap aluminium by 2030. The company publishes progress towards their target by disclosing the current percentage of recycled aluminium used in its annual production cycle.
	Use of supply chain levers to achieve fossil free and environmentally sustainable aluminium supply chains	 The company participates in multi-stakeholder procurement initiatives to collaborate with other buyers to incentivise investment in and production of fossil free aluminium at scale. The company participates in multi-stakeholder standard / certification initiatives to drive investment in and production of socially and environmentally sustainable aluminium The company has entered into formal arrangements with suppliers to incentivise investment in and greater production of fossil free aluminium The company integrates improved recyclability of aluminium into automobile design and manufacturing process.

Fossil Free and Environmentally	Disclosure of scope 3 GHG emissions due to battery supply chains Target setting and progress towards fossil free and environmentally	 The company discloses disaggregated scope 3 emissions for their battery supply chains, including a total for the whole battery and disaggregated emissions for high intensity minerals, including Nickel and Lithium at a minimum. The company has set a target to produce fossil free and environmentally sustainable batteries. The company has set a target to reduce reliance on
Sustainable Batteries	sustainable battery supply chains	 energy intensive minerals in battery production. The company has set collection and/or recovery targets for high intensity battery metals.
	Use of supply chain levers to achieve fossil free and environmentally sustainable battery supply chains	 The company requires all battery manufacturers to use 100% renewable electricity Company enters into formal agreements (inclusive of joint ventures and investments) with extractives and other value chain companies to reduce the environmental impact of lithium sourcing. Company enters into formal agreements (inclusive of joint ventures and investments) with extractives and other value chain companies to reduce the environmental impact of nickel sourcing. Company enters into formal agreements (inclusive of joint ventures and investments) with extractives and other value chain companies to reduce the environmental impact of cobalt sourcing. The company participates in multi-stakeholder initiatives to collaborate with other buyers to incentivise investment in and production of fossil free and environmentally sustainable batteries at scale. The company invests in R&D to reduce the use of high emissions minerals (e.g. nickel, cobalt) in their batteries. R&D could be done in house or via formal partnerships with battery manufacturers. The company invests in R&D to increase the recyclability of their batteries. The company has established processes for battery repair, reuse and repurposing in order to maximize the usable lifespan of its EV batteries. The company has established closed loop processes to increase the % of batteries being recycled at end of life.

Human rights and responsible sourcing indicators

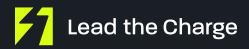
THEME	INDICATOR CATEGORY	INDICATORS
Responsible Sourcing: General HR indicators	Commit	 The company has a public commitment to human rights. The company extends their human rights commitments to their Tier 1 suppliers and beyond.
	Identify	 The company has a process in place to assess salient human rights risks in their supply chain. The company discloses the salient human rights risks in their supply chain and where they are located. The company has a process for identifying high risk supplier categories in their supply chain.
	Prevent, Mitigate and Account	 The company assesses the risk of adverse human rights impacts with suppliers prior to entering into any contracts. The company discloses how it monitors/audits suppliers for compliance with the supplier code of conduct during the contract period. The company reports on how it is prepared to respond if it finds non-conformances with the Supplier Code of Conduct in its supply chains. The company discloses how they verify the implementation of corrective actions.
	Remedy	 The company has put in place a formal mechanism whereby workers, suppliers, suppliers' workers (in any tier) and other external stakeholders can raise grievances regarding adverse human rights impacts in their supply chain to an impartial entity. The company discloses data about the practical operation of their due diligence mechanism, such as the number of grievances filed, addressed, and resolved, or an evaluation of the effectiveness of the mechanism. The company has put in place a remedy process.
Responsible Sourcing of Transition Minerals	Commit	 The company has a commitment to responsible metals and minerals sourcing. The company requires its suppliers to undertake due diligence in accordance with the OECD Due Diligence for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk Areas

	Identify	 The company has a process in place to assess transition minerals risks in their supply chain to the point of extraction. The company discloses transition minerals risks in their supply chain and where they are located. The company publishes a smelter or refiner (SoR) list and indicates which SoRs are conformant with the Responsible Minerals Initiative (RMI).
	Prevent, Mitigate and Account	 The company discloses how it monitors/audits suppliers for compliance with the transition minerals due diligence requirements. The company formally engages SoRs to build their capacity to conduct due diligence of their own supply chains. The company formally engages extractives companies and includes human rights clauses in any contractual arrangements. The company is a member of IRMA and actively engages their suppliers with regards to IRMA mining audits. The company reports on how it is prepared to respond if it finds non-conformances associated with its responsible minerals sourcing policy occurring in its operations or supply chains. The company discloses how they verify the implementation of corrective actions.
	Remedy	The company has put in place a formal mechanism whereby grievances can be raised about SoR facilities.
Indigenous Rights and Free Prior and Informed Consent	Commit	 The company explicitly commits to respecting the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The company has a public commitment to free, prior and informed consent. The company extends their indigenous commitments to their Tier 1 suppliers and beyond. These commitments are translated into the Indigenous languages used by impacted communities.
	Identify	■ The company has a process in place to assess Indigenous rights risks in their supply chain to the point of extraction.

	Prevent, Mitigate and Account	 The company provides additional discussion regarding the practices by which suppliers must obtain FPIC, and explicitly states that the process must reach and engage with impacted Indigenous Peoples. The company is a member of a multi-stakeholder group (e.g. IRMA) that include the participation of Indigenous and frontline communities to promote and ensure the rights of communities at the point of extraction. The auto manufacturer has a formal process in place to engage critical upstream suppliers on FPIC (e.g. extractives companies) The company reports on how it is prepared to respond if it finds FPIC breaches in its supply chain.
	Remedy	The company has a process for investigating and remedying breaches of FPIC that includes a formal role for impacted Indigenous groups.
Respect for Workers' Rights	Commit	 The company has a commitment to workers' rights The company extends their workers' rights commitments to their Tier 1 suppliers and beyond.
	Identify	 The company consults trade unions in their assessment of salient workers' rights risks in their supply chain. The company discloses the salient workers' rights risks in their supply chain and where they are located.
	Prevent, Mitigate and Account	 The company actively collaborates with workers' and the representative organisation(s) of workers' own choosing to promote workers' rights and prevent abuses in the supply chain. The company reports on how it is prepared to respond if it finds non-conformances associated with its workers' rights policy occurring in its operations or supply chains. The company works with the relevant trade union and/or worker representative organisation to verify the implementation of corrective actions pertaining to workers' rights.
	Remedy	Workers and the representative organisations of workers' own choosing are formally included in the remedy process.

Endnotes

- See: Science-based Target Initiative (2018), Value Chain in the Value Chain: Best Practices in Scope 3 Greenhouse Gas Management, https://sciencebasedtargets.org/resources/files/SBT_Value_Chain_Report-1.pdf
- 2 See: UN OHCHR (2011), Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf
- 3 See: Germanwatch (2022), An Examination Of Industry Standards In The Raw Materials Sector, https://www.germanwatch_abstract_an_examination_of_industry_standards_in_the_raw_materials_sector_2022-09.pdf
- 4 See: InfluenceMap, Automotive Climate Tool: https://automotive.influencemap.org/
- 5 Major projects include Sinopec's 260MW PEM facility and a planned \$4.5 billion green hydrogen project using domestic technology.
- 6 https://www.spglobal.com/commodity-insights/en/news-research/latest-news/energy-transition/032922-chinas-first-hydrogen-plan-focused-on-lowering-costs-building-capabilities
- 7 Inner Mongolia is utilising its superior renewable resources, with 2.2 GW of infrastructure dedicated to green hydrogen electrolysers, while China Baowu Steel plans 1.5 GW of electrolysers in the province.
- 8 https://www.scmp.com/economy/china-economy/article/3168796/china-aims-fundamental-ly-solve-iron-ore-shortages-cornerstone
- 9 https://www.cnstock.com/image/202012/31/20201231155427129.pdf
- 10 Hasanbeigi, Ali; Zuo, Bonnie; Kim, Daseul; Springer, Cecilia; Jackson, Alastair; Heo, Esther Haerim. 2024. Green Steel Economics. Global Efficiency Intelligence, TransitionAsia, Solutions for Our Climate
- 11 John R. Owen and others, "Energy transition minerals and their intersection with land-connected peoples", Nature Sustainability, vol. 6 (February 2023).
- 12 See: Lead the Charge (2024), Why investors should engage automotive companies on the impacts of their supply chains: Risks and Opportunities, p16. Available at: https://leadthecharge.org/wp-content/up-loads/2024/09/LTC_InvestorBriefing_10012024-1.pdf
- 13 See: Earthworks & UTS (2024), Minimizing Mining Impacts on the Road to Zero Emissions Transport, p32. Available at: https://earthworks.org/wp-content/uploads/2024/07/ISF-UTS-Earthworks_Minimizing-mining-impacts.pdf



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