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Corporate Climate Responsibility Monitor 2025

AUTOMOTIVE MANUFACTURERS SECTOR DEEP DIVE

ASSESSING THE TRANSPARENCY, INTEGRITY AND PROGRESS OF CORPORATE CLIMATE STRATEGIES

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Automotive manufacturers sector deep-dive (Chapter 6) of the Corporate Climate Responsibility Monitor 2025.

The full report or other sector-specific deep dives can be downloaded *here*.

About the Corporate Climate Responsibility Monitor

The *Corporate Climate Responsibility Monitor* evaluates the transparency and integrity of companies' climate strategies, with the objectives of **identifying good practices** and **highlighting areas for improvement in the corporate climate accountability system**.

Our guidance and assessment criteria focus on four main areas of corporate climate action: (1) tracking and disclosure of emissions; (2) setting emission reduction targets; (3) strategies for key transitions; and (4) taking responsibility for unabated and residual emissions.

This chapter of the 2025 *Corporate Climate Responsibility Monitor* focuses on the fasion sector. We focus on companies' GHG emission reduction targets and the key transitions that are necessary for decarbonising the food and agriculture sector, to understand the latest dynamics of climate strategy in the sector.

The full 2025 *Corporate Climate Responsibility Monitor* report analyses 20 companies from the automotive, tech, fashion and food and agriculture sectors, including a cross-sector analysis on the status quo of corporate climate responsibility.

This chapter on the tech sector features analysis based on detailed case studies of **Ford**, **General Motors**, **Stellantis**, **Toyota** and **Volkswagen** *(see section 6.2 for detailed company case studies).* These companies were selected as the largest five automotive manufacturers of light-duty vehicles by revenue and vehicle sales in 2023.

→ *See the full 2025 Corporate Climate Responsibility Monitor (June 2025)*
→ *See also the assessment methodology for the Corporate Climate Responsibility Monitor. Guidance and assessment criteria for good practice corporate emission reduction and net-zero targets: Version 5.0 (NewClimate Institute, 2025).*

Automotive manufacturers stall on climate transitions.

6.1 Sector highlights

This section presents a selection of key insights from the detailed analysis of the climate strategies of five major automobile companies: **Ford**, **General Motors**, **Stellantis**, **Toyota** and **Volkswagen** *(see Section 6.2 for detailed company case studies)*. For this analysis, we focus on companies' GHG emission reduction targets and the key transitions necessary for achieving deep emission reductions in the automotive sector.

We evaluate automotive manufacturers' transition targets based on the sector-specific transition framework set out in *Figure 6.1*. Since the majority of this sector's emissions footprint derives from the use of sold vehicles (so-called downstream scope 3 category 11 emissions), we identify **the phase-out of internal combustion engine (ICE) light-duty vehicles (LDVs)** and **heavy-duty vehicles (HDVs)** as key transitions for the sector (NewClimate Institute, 2025b). The **procurement of near-zero emissions steel and near-zero emissions aluminium** are also important measures to reduce upstream emissions. As internal combustion engines (ICEs) are phased out, **the efficiency of battery electric vehicles (BEVs)** and **low-carbon production of batteries** will become key measures to address new emissions sources.

We find that the companies assessed – the five largest incumbent manufacturers of light-duty vehicles – are making inadequate progress in accelerating the long-overdue transition to electric mobility.

- The 2030 emission reduction targets of the companies assessed remain critically insufficient. With one notable exception in Stellantis, we find little to no progress in improving the ambition of these targets despite the urgent need for decarbonisation in the passenger transport sector.
- Beyond 2030, four out of five automakers' longer-term carbon neutrality and net-zero pledges lack integrity due to the absence of concrete emission reduction commitments substantiating these pledges and an overall lack of specificity.
- On their key sectoral transition, four out of five automotive companies have only made insufficient commitments to phase out internal combustion engines. Existing commitments remain vague and fall short of aligning with 1.5°C-compatible pathways, despite the urgent need to transition their business models towards electric vehicles.
- Progress in increasing the shares of battery electric vehicle sales over the past five years has been mixed among the five manufacturers, casting doubt on their ability to meet their 2030 sales targets – let alone achieve sales shares in line with a 1.5°C-compatible pathway.
- Apart from some commitments to purchase near-zero steel and aluminium, other key transitions – such as reducing emissions from battery production and improving electric vehicle efficiency – remain mostly neglected by companies and standard setters.

Companies, standards setters and regulators alike need to urgently improve their approach to setting credible climate strategies for automakers, putting a spotlight on key sector transitions and creating incentives for promising action.

- Automakers should set transition-specific alignment targets for the phase-out of internal combustion engines and other key transitions such as the procurement of near-zero steel and aluminium. These targets are metrics that directly reflect a company's progress on critical decarbonisation milestones within its sector and can meaningfully guide its climate strategy alongside substantiated emission reduction targets for 2030 and beyond.
- Major standard setters like the Science Based Targets initiative (SBTi), crucial in guiding corporate climate strategies, have a critical opportunity to further develop their accounting and target setting approaches to guide automakers more effectively along the sector's key transitions. For example, the SBTi's latest draft standard for the automobile sector – released for public consultation in June 2025 – already builds around geographically differentiated sales targets for low-emission vehicles. The draft could go beyond introducing this single transition-specific alignment target by piloting similar targets for other key transitions. This could enhance the integrity of automakers' target setting and address existing issues with current target validations.
- With a long history of scattered and inconclusive regulations across jurisdictions, regulators need to double down on reliable, science-informed and comprehensive regulation to incentivise the largest incumbent manufacturers to effectively transition their business models, foster innovation of incumbents and new entrants alike, and guide a holistic shift towards low-emission mobility. For this purpose, they can lean on emerging good practice from automakers and standard setters alike, for example on science-aligned phase-out commitments for internal combustion engines.

Box 6.1 – Terminology and abbreviations in the Corporate Climate Responsibility Monitor 2025 automotive manufacturers sector deep dive

Our analysis of automobile manufacturers' climate strategies uses various sector-specific terms and abbreviations listed below. For consistency with our previous analysis, we continue to use the term **zero-emission vehicles (ZEV)** to refer to vehicles that are capable 'to operate without emitting tailpipe emissions of any air pollutant (or precursor pollutant) or greenhouse gas emissions from the onboard source of power' (SBTi, 2025a, p. 50), such as battery-electric vehicles (BEV) and fuel cell electric vehicles (FCEV).

Most recently, the Science Based Targets initiative's draft standard for the automotive sector, which was launched for public consultation in June 2025, proposed moving away from using the term ZEV as used in its previous guidance. Instead it favours the term **low-emission vehicles (LEVs)** which are defined as vehicles that meet 'a minimum life-cycle emission intensity (in g CO_2e/km) reduction of 65% with respect to an Internal Combustion Engine Vehicle (ICEV) of the same type using gasoline, diesel or natural gas fuels of fossil origin' (SBTi, 2025a, p. 49).

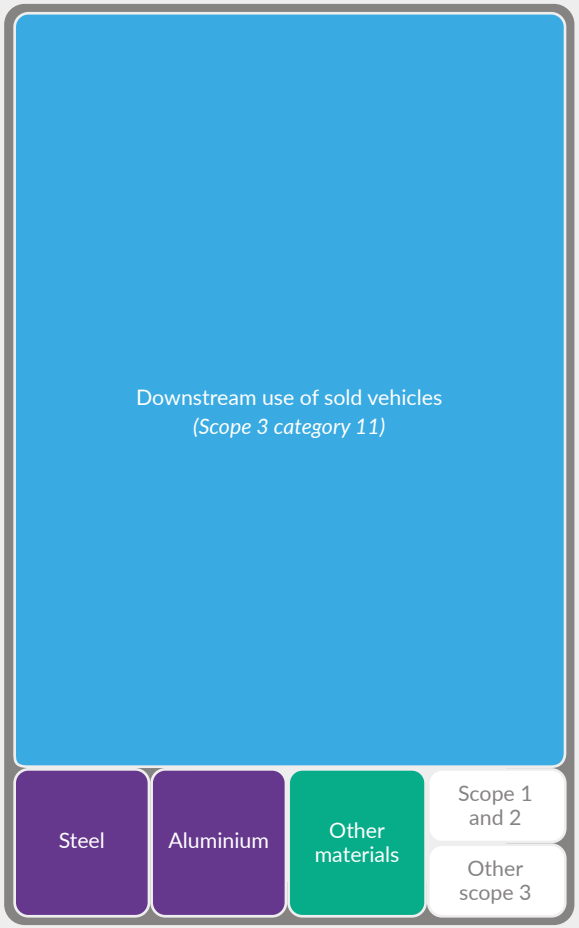
Our decision to continue using the term ZEV at this stage is no statement on the validity and suitability of the LEV terminology and our use of terminology may evolve following the public consultation.

BEV	Battery Electric Vehicle
EV	Electric Vehicle
FCEV	Fuel Cell Electric Vehicle
HDV	Heavy-Duty Vehicle
ICE	Internal Combustion Engine
LDV	Light-Duty Vehicle
LEV	Low-Emission Vehicle
ZEV	Zero-Emission Vehicle

Figure 6.1: Key transition framework for an automotive company (NewClimate Institute, 2025b)

GHG EMISSIONS FOOTPRINT

Indicative distribution of emission sources for average vehicle manufacturer



5 KEY TRANSITIONS

Most relevant transitions to address major emission sources

1. **Phase-out of internal combustion engine light-duty vehicles** *(Scope 3: Category 11)*
2. **Phase-out of internal combustion engine heavy-duty vehicles** *(Scope 3: Category 11)*

The use of sold vehicles (downstream scope 3 category 11 emissions) usually accounts for around 80–90% of the emission footprint of a conventional vehicle manufacturer. The phase-out of internal combustion engines (ICEs) while simultaneously transitioning to electric and low-emission vehicles is the most important decarbonisation lever. Electric vehicles powered by decarbonised electricity have a large potential to reduce land-based transport greenhouse gas emissions on a life cycle basis (IPCC 2022).

3. **Efficiency of electric vehicles** *(Scope 3: Category 11)*

Downstream electricity consumption will become a major emissions source as electric vehicles are phased in. Efficiency targets can influence the size and types of electric vehicles being produced (Agora Verkehrswende, 2019).

4. **Procurement of near-zero emission steel** *(Scope 3: Category 1)*
5. **Procurement of near-zero emission aluminium** *(Scope 3: Category 1)*

The sourcing of low-carbon steel, aluminium and other upstream materials is highly relevant for the decarbonisation of an automotive manufacturer's value chain as the production of these materials is currently an emissions-intensive process (W. Liu, Hao, and Kong 2023; WEF 2020, 15).

6. **Low-carbon batteries** *(Scope 3: Category 1)*

The manufacture of electric-vehicle batteries can account for up to 60% of the embedded greenhouse-gas emissions in electric vehicle production (Linder *et al.* 2023, 2). Reducing emissions during the battery manufacturing stage is essential to fully harness the emissions mitigation potential of electric vehicles (Shukla *et al.* 2022, 98).

→ *See Evolution of corporate climate targets (NewClimate Institute, 2025) for further details on this sector transition framework and potential alignment target indicators.*

Figure 6.2: Summary of CCRM 2025 ratings for automotive manufacturers

	FORD	GM	STELLANTIS	TOYOTA	VOLKSWAGEN
OVERALL CLIMATE STRATEGY INTEGRITY	Poor	Poor	Moderate	Very poor	Poor
Tracking and disclosure of emissions	◐	◐	◐	◐	◐
GHG emission reduction targets	◌	◌	◐	◌	◔
Key transition targets	◐	◐	◐	◌	◔
Phase-out of internal combustion engine light-duty vehicles	◔	◐	◐	◌	◔
Phase-out of internal combustion engine heavy-duty vehicles	N/A	N/A	N/A	◌	◐
Efficiency of electric vehicles	◌	◌	◌	◌	◌
Procurement of near-zero emission steel	◐	◐	◌	◌	◔
Procurement of near-zero emission aluminium	◐	◐	◌	◌	◌
Low-carbon batteries	◌	◌	◌	◌	◔
Climate contributions and durable CDR	◌	◌	◔	◌	◌

Integrity : 5-point rating scale:

High | Reasonable | Moderate | Poor | Very poor

Integrity refers to the quality and credibility of the approach.

? *Integrity assessment is unclear.*

→ *See Annex 6B and Annex 6C for further details on our integrity assessments for companies' targets and key transitions.*

Automotive companies' greenhouse gas emission reduction targets lack ambition and specificity, with few notable exceptions.

Halfway into the critical decade for action, automakers' near-term emission reduction targets for 2030 remain critically insufficient, with only marginal progress made to improve them.

The companies assessed – the five largest incumbent manufacturers of light-duty vehicles – lack the ambition needed to align with a 1.5°C pathway by 2030. Four out of the five manufacturers either have no meaningful 2030 emissions targets (**GM**, **Ford**) or have set targets that fall short of the ambition required (**Volkswagen**, **Toyota**) as outlined in *Table 6.1*. This conclusion is aligned with the findings of other assessments, such as the Transition Pathway Initiative *(see Annex 6A)*.

Among the companies assessed, only **Stellantis** has committed to an absolute emissions reduction of 30% for all emissions by 2030 compared to 2021 levels (Stellantis, 2024, p. 178). While this target, announced in 2024, is not fully aligned with 1.5°C-compatible pathways, it marks a step towards substantiating previously announced scope-specific and intensity targets for 2030. Stellantis – alongside other manufacturers in the field like BMW (BMW, 2025, p. 121, not assessed in-depth in this analysis) – demonstrates that it is possible for automakers to set more transparent and ambitious *absolute* reduction targets for 2030.

All companies assessed show limited progress in reducing emissions over the last five years, with Stellantis as the only notable exception, claiming to have reduced around 20% of its emissions compared to 2021 levels and thus likely to be on track to meet its 2030 target (Stellantis, 2025, p. 43). Given the urgent global decarbonisation needs of the passenger transport sector and the widespread availability of mature technologies, such as EVs eliminating tailpipe emissions, continued emissions growth within the sector is especially concerning.

Automakers' long-term pledges for carbon neutrality and net zero remain critically insufficient due to the absence of specific emission reduction commitments.

All major automobile manufacturers have announced longer-term carbon neutrality or net-zero pledges, **Volkswagen** (net zero by 2050), **Ford** and **Toyota** (carbon neutral by 2050), **GM** (carbon neutral by 2040) and **Stellantis** (net carbon neutrality by 2038). However, none of the companies provide long term *absolute* emission reduction commitments to substantiate these targets *(see Table 6.1)*. A lack of specific emission reduction targets undermines carbon neutrality or net zero pledges as companies may heavily rely on offsetting to meet these longer-term pledges instead of implementing deep emission reductions. This requirement for target credibility is laid out in recent guidance and voluntary standards (ISO, 2022; UN HLEG, 2022; SBTi, 2024c; Net Zero Tracker, 2025). Companies in other sectors have already begun to better substantiate their net-zero pledges in line with this guidance *(see Chapter 1.1 in NewClimate Institute, 2024)*.

Notably, **Volkswagen** indicated for the first time in 2025 that it intends to rely on less than 10% offsetting to reach its carbon neutrality target (Volkswagen, 2025, p. 297), six years after the pledge's initial announcement in 2019. While this improves the transparency on its meaning, the emissions reductions required to meet this target remain unquantifiable, as Volkswagen has yet to disclose the base year for its target. Similarly, **GM** and **Ford** have not set quantifiable emissions reduction goals alongside their carbon neutrality pledges despite their commitments to phase out ICE vehicles. If fully implemented, this move would contribute significantly to achieving their climate goals *(see further explanations on this key transition below)*.

As with its 2030 target, **Stellantis** stands out among the five companies by supporting its 2038 carbon net neutrality target with a target to reduce emission intensity across the entire value chain by at least 90%, compared to 2021 levels (Stellantis, 2025, p. 47). Although this is an intensity target, not an absolute emissions reduction target, we rate this target as having 'reasonable' integrity, as it would address a large share of Stellantis emissions and thereby align with 1.5°C-compatible decarbonisation benchmarks. This target serves as an example for other automakers on how to set ambitious medium- and long-term emissions targets. However, Stellantis could further strengthen it by publishing a strategy to support durable carbon dioxide removal (CDR) and by committing to a global phase-out of ICE vehicles – complementing its existing regional pledges for the European Union and the United States.

Table 6.1: GHG emission reduction targets of automotive manufacturers

	Ford	General Motors	Stellantis	Toyota	Volkswagen
Overall integrity of GHG targets	**Very poor** Insufficient targets for all time frames.	**Very poor** Insufficient targets for all time frames.	**Moderate** Targets partially aligned with 1.5°C	**Very poor** Insufficient targets for all time frames.	**Poor** Insufficient targets for all time frames.
Near-term targets	2023 target to reduce scope 1 by 18% below 2017. No scope 3 target.	Regional scope 2 target 100% renewable electricity for US sites by the end of 2025.	30% absolute reduction by 2030 (below 2021) for all scopes. Falls slightly short of 1.5°C	2030 target to reduce intensity of LDVs by 33.3% and HDVs by 11.6% below 2019. Not aligned with 1.5°C.	2030 target to reduce LDV emissions intensity by 30% below 2018. No target for upstream scope 3 emissions.
Medium-term targets	2035 target to reduce scope 3 category 11 by 50% below 2019. Not aligned with 1.5°C	2040 carbon neutrality target is not substantiated with emission reduction targets. 2035 target to reduce scope 3 category 11 by 51% per vehicle km vs 2018. Not aligned with 1.5°C	>90% intensity reduction across all scopes by 2038 (below 2021). Aligned with 1.5°C.	2035 target to reduce LDV emissions intensity targets by 50% vs 2019. Not aligned with 1.5°C.	2040 target to reduce scope 1 and 2 emissions by 90% below 2018 and reach carbon neutrality. Not aligned with 1.5°C.
Long-term targets	2050 carbon neutrality pledge. Not substantiated with emission reduction.	No target identified.	No target identified.	2050 carbon neutrality pledge. Not substantiated with emission reduction.	Unclear 2050 carbon neutrality pledge. Supported with a commitment to keep offsetting <10%.
Changes from previous assessments in 2023 and 2024	*Not previously assessed.*		= Rated moderate in 2024	= Rated very poor in 2024	↗ Rated very poor in 2024
What are actual emission trends in recent years?	12% emission increase between 2021 and 2023. Not aligned with 1.5°C.	21% emission increase between 2021 to 2023. Not aligned with 1.5°C.	21% emission reduction between 2021 and 2024. Not yet 1.5°C aligned.	33% emission increase between 2021 and 2023. Not aligned with 1.5°C.	Total emissions change unclear due to missing HDV data. LDV emissions between 2021 and 2024 have fluctuated, without clear downward trend. Not aligned with 1.5°C.

Integrity : 5-point rating scale:

High | Reasonable | Moderate | Poor | Very poor

Integrity refers to the quality and credibility of the approach.

? *Integrity assessment is unclear.*

Progress:
- ✔ Right direction, on track
- + Right direction, off track
- ✖ Well off track
- ⮌ Wrong direction, critically off track
- ? No progress identified or insufficient data
- ? No benchmarking possible.

Opaque use-phase emissions accounting creates uncertainty on the assumptions underpinning vehicles' use-phase emissions and underscores the case for transition-specific targets.

Emissions from the use of light-duty vehicles, classified under scope 3 category 11, represent by far the largest share of value chain emissions *(see Figure 6.1)*, accounting for up to 90% for some manufacturers. Yet, the lack of consistent reporting on how these emissions are calculated decreases our ability to compare their assumptions.

For example, while **Toyota** cites SBTi guidance and the IEA Mobility Model as the basis for its scope 3 emissions calculations, it does not publicly disclose key input data, such as annual driving distance or average well-to-wheel (WtW) emissions intensity across its vehicle portfolio (Toyota, 2024, p. 50). **Volkswagen** discloses that is assumes a lifetime mileage of 200,000km for LDVs in its scope 3 calculation (Volkswagen, 2025, p. 275). However, it does not specify the emissions factors used for fuel and electricity, limiting the ability to independently evaluate its emissions estimates. **GM** mentions that it uses 'the well-to-wheel method (from fuel production to vehicle driving) for calculating vehicle intensity, consistent with SBTi's requirements' but to our understanding does not provide further information on what this means in practice (General Motors, 2023b, p. 29). **Ford** discloses that it assumes 241,000 km for LDVs and 298,000 km for HDVs (Ford, 2024b, p. 60). **Stellantis** presents additional information, disclosing differentiated regional mileage assumptions (Stellantis, 2024, p. 210).

The lack of transparency on how companies calculate scope 3 emissions decreases comparability and increases the risk of underreporting (Bonaccorsi, Ferraro and Massuama, 2022; Bonaccorsi, Ferraro and Scott, 2024). Limitations of emissions accounting undermine the credibility of companies' GHG emission reduction targets and highlight the need to adopt clear, transition-specific alignment targets for key sectoral transitions, supported by transparent data and consistent assumptions.

Commitments and progress to transition toward electric mobility fall critically short of the sector's decarbonisation needs

The automotive companies assessed have made only insufficient commitments to phasing out internal combustion engines. Most commitments remain vague and fail to align with 1.5°C-compatible pathways, putting critical near-term emission reductions in the passenger transport sector at risk.

The transition from internal combustion engines to battery electric vehicles is the key transition for incumbent automakers to meaningfully reduce emissions from the use of vehicles *(see Figure 6.1)*. While all automotive manufacturers assessed in this study acknowledge the need for the transition, the transparency, scope and timeline of their commitments vary significantly *(see Figure 6.3)*.

None of the companies assessed currently sets 1.5°C-aligned transition targets for a full phase-out of internal combustion engines. **Stellantis**, headquartered in the Netherlands, remains the only one to commit to a *regional* 1.5°C-aligned target for the European Union by 2030 (Stellantis, 2025, p. 43), a key market that represented around half of its annual sales in 2024. The company has not extended comparable 1.5°C-compatible commitments to the US or globally. The world's two largest automobile manufacturers, **Toyota** and **Volkswagen**, have not committed to any regional or global ICE phase-out targets. However, Volkswagen communicates intended sales shares for BEVs in Europe (70% by 2030), the US and China (both 50% by 2030) (Volkswagen, 2025, p. 239), signalling an intention to transition despite the absence of a full phase-out commitment. In contrast, Toyota lacks any specific commitments beyond meeting legislative requirements (Toyota Europe, 2021, 2023), such as the European Union's 2035 ICE phase-out target.

The two US-headquartered carmakers, **GM** and **Ford**, are the only manufacturers among the assessed to have committed to a global ICE phase-out by 2035 and 2040, respectively. These commitments were made as part of the Accelerating to Zero Coalition in 2021, alongside 12 other manufacturers (A2Z Coalition, 2025, as of May 2025). However, these commitments received little attention in their latest sustainability or annual reports, raising uncertainty about their status and meaning. Ford had already delayed its initial commitment made in 2021 – from achieving 100% ZEV sales globally by 2035 to a revised target of 2040 (Accelerating to Zero Coalition, 2021b; Ford, 2024b, p. 52).

Progress in increasing the shares of battery electric vehicle sales over the past five years has been mixed among the five manufacturers, casting doubt on their ability to meet their 2030 sales targets – let alone achieve sales shares in line with a 1.5°C-compatible pathway.

Among the five manufacturers, **GM**, **Stellantis** and **Volkswagen** have reached annual ZEV sales shares ranging between 6–10% globally or in key markets *(see Figure 6.3)*. Despite this progress to date, uncertainties remain on how these companies will be able to scale their sales of BEVs over the next five years to meet their 2030 commitments – let alone align with 1.5°C-compatible pathways. Nevertheless, it is encouraging that some manufacturers like Stellantis (in December 2024; Stellantis, 2025, p. 43) or Volkswagen (in April 2025; Volkswagen, 2025, p. 239) have recently reconfirmed their 2030 sales targets despite recent geopolitical developments and their impact on global supply chains and trade for the automotive sector as a whole. In contrast, **Ford** and **Toyota** both continue to lag behind, with Toyota recording less than <1% of BEVs in global sales in 2023 (Toyota, 2024, p. 51).

Figure 6.3: Plans to transition away from internal combustion engines (ICEs) in light-duty vehicles' sales

	FORD	GM	STELLANTIS	TOYOTA	VOLKSWAGEN
LIGHT-DUTY VEHICLES' SHARE OF REPORTED EMISSIONS FOOTPRINT *[scope 3 category 11]*	**~86%** (2023)	**~69%** (2023)	**~87%** (2024)	**~66%** (2023)	**~36%** (2024)
EXISTING TRANSITION TARGETS	**EU:** 100% BEV passenger car sales by 2035 (previously by 2030 under A2Z in 2021) **Global:** 100% BEV passenger car sales by 2040 (previously 2035 under A2Z in 2021)	**EU:** 50% BEV passenger car sales in US by 2030, 100% by 2035 **Global:** 100% BEV passenger car sales by 2035	**EU:** 100% BEV passenger car sales by 2030 **Global:** 50% BEV passenger car sales by 2030, 100% by 2038	**EU:** 100% BEV passenger car sales by 2035 No ICE phase-out targets for LDVs in other key markets like the US or Japan.	No global ICE phase-out target. Ambition for electric LDV sales to reach 70% in Europe by 2030 and at least 50% in China and the US.
TRANSITION TARGETS' INTEGRITY	Poor	Moderate	Moderate	Very poor	Poor
PROGRESS ACHIEVED GLOBALLY AND REGIONALLY *[self-reported]*	✖ Well off track. 2023 ZEV sales remain at 3% and not increasing compared to 2022.	+ Right direction, but off track. 2023 ZEV sales at 10% up from 9% in 2022.	+ Right direction, but off track. 2024 ZEV sales at 6%. BEV sales at 11% in Europe and LEV sales at 11% in the US.	⮌ Critically off track. 2023 LDV BEV sales <1% of total global sales.	+ Right direction, but off track. 2024 BEV sales at 8% globally and not increasing compared to 2023.

LEADING THE CHARGE: STELLANTIS AND GM

Stellantis sets a *regional* 1.5°C-aligned target for 100% BEV sales in the European Union by 2030

Stellantis is the only company assessed that sets a regional target to sell only battery electric passenger cars in the European Union by 2030 (Stellantis, 2025, p. 43). This target, covering a market that accounts for roughly half of its annual sales, fully aligns with 1.5°C-compatible pathways and milestones identified in the literature (CAT, 2020, p. 27; UNFCCC, 2021, pp. 10–11; Teske *et al.*, 2022, p. 4; Boehm *et al.*, 2023, pp. 77–78; IEA, 2023b, pp. 88, 93). For the US, its other key market representing around a quarter of its annual sales, Stellantis commits to sell 50% BEV passenger cars and light-duty trucks by 2030 while reaching 100% only by 2038 (Stellantis, 2025, p. 43). This commitment falls short of region-specific milestones calling for 95-100% BEV sales by 2030. We could not identify updated information on how Stellantis has been progressing on its aspirational targets for Brazil, India, and China, as outlined in its 2022 strategic blueprint (Stellantis, 2022).

General Motors previously announced an ambitious global commitment for 100% BEV sales by 2035 in 2021, but provides limited updates

In 2021, GM pledged to achieve 100% battery electric vehicle sales globally by 2035 (Accelerating to Zero Coalition, 2021a). This pledge, if implemented, represents a significant effort to stay below the Paris Agreement's 1.5°C temperature limit (CAT, 2020, p. 27; UNFCCC, 2021, pp. 10–11; Teske *et al.*, 2022, p. 4; Boehm *et al.*, 2023, pp. 77–78; IEA, 2023b, pp. 88, 93), However, GM's latest sustainability report of 2023 makes no reference to this global EV sales target (General Motors, 2023a, p. 43). GM has made progress in electrification, with ZEV sales rising to 10% in 2023, up from 9% in 2022 (General Motors, 2023b, p. 28). However, the pace of electrification must accelerate significantly to meet its 2035 target and align with a 1.5°C pathway.

Integrity : 5-point rating scale:
High | Reasonable | Moderate | Poor | Very poor
Integrity refers to the quality and credibility of the approach.
? *Integrity assessment is unclear.*

Progress:
✔ Right direction, on track
+ Right direction, off track
✖ Well off track
⮌ Wrong direction, critically off track
? No progress identified or insufficient data
? No benchmarking possible.

BEV – Battery electric vehicle; EV –Electric vehicle, ICE – Internal combustion engine, LDV – Light-duty vehicle (e.g., passenger cars, small vans), LEV – Low-emission vehicle; ZEV – Zero-emission vehicle

BOX 6.2 – Transition towards ZEVs for heavy-duty vehicle manufacturers

	TOYOTA	VOLKSWAGEN
HEAVY DUTY VEHICLES' SHARE OF REPORTED EMISSIONS FOOTPRINT *[scope 3 category 11]*	**~7%** (2023)	**~43%** (2023)
EXISTING TRANSITION TARGETS	No ICE phase-out target for HDVs globally or in key markets	No global target identified. **EU27+3, US, and Canada** ~50% ZEV by 2030 aligned with regional 1.5°C benchmarks.
TRANSITION TARGET INTEGRITY	◌ Very poor	◐ Moderate
PROGRESS ACHIEVED GLOBALLY *[self-reported]*	? No progress data for HDV electrification identified.	↩ Critically off track. In 2024 battery electric HDV sales made up only 0.5% of total Traton sales (excl. MAN TGE) decreasing from 0.6% in the year prior.

Integrity : 5-point rating scale:

● High ◕ Reasonable ◐ Moderate ◔ Poor ◌ Very poor

Integrity refers to the quality and credibility of the approach.

? *Integrity assessment is unclear.*

Progress:
- ✔ Right direction, on track
- \+ Right direction, off track
- ✖ Well off track
- ↩ Wrong direction, critically off track
- ? No progress identified or insufficient data
- ? No benchmarking possible.

Two out of the five companies assessed, **Toyota** and **Volkswagen**, produce heavy-duty vehicles (HDVs) alongside light-duty vehicles. Compared to our previous analysis (NewClimate Institute, 2024), **Volkswagen** has improved the transparency around its HDV-related emissions disclosing its scope 3 use-phase emissions for HDVs for the first time for the year 2024 (Volkswagen, 2025, p. 292), coinciding with reporting under the Corporate Sustainability Reporting Directive (CSRD). **Toyota** includes its subsidiary Hino in its emissions reporting *(Toyota, 2024, see footnote 4 of Table D)*.

Both companies show gaps in their HDV electrification strategies. **Toyota** has yet to communicate any targets for phasing out ICEs in its HDV segment, further weakening the credibility and comprehensiveness of its overall climate strategy across all vehicle types. **Volkswagen** HDV subsidiary Traton, aims for 50% of all new HDV sales to be ZEV by 2030 in the EU27+3, the US, and Canada (Traton, 2024, p. 117). This commitment would align with the 1.5°C-compatible milestones for downstream scope 3 emissions of HDV manufacturers (UNFCCC, 2021, pp. 10–11; Mission Possible Partnership, 2022, p. 40; Boehm *et al.*, 2023, pp. 77–78; IEA, 2023b, pp. 88, 93). Accordingly, global 1.5°C-compatible shares for heavy-duty trucks should reach 30–37% of BEVs and fuel cell electric vehicles (FCEVs) by 2030. However, the lack of clarity on how Traton's target is being implemented across its multiple brands raises concerns about its robustness *(see Volkswagen analysis below)*.

Regarding progress on increasing the sales share of ZEVs, **Toyota** presents no data for assessment, while **Traton**'s progress remains negligible at 0.5% of total sales in 2024. This lack of progress underscores the urgent need for concrete action on HDV electrification to align with a 1.5°C trajectory.

Apart from initial steps on purchasing near-zero steel and aluminium, companies and standards setters mostly neglect other key transitions

Apart from phasing out ICEs, achieving full decarbonisation of the automotive manufacturing sector requires progress across multiple key transitions such as the **procurement of near-zero emissions steel and aluminium, low-carbon batteries** and **improving BEV efficiency** *(see key transition framework in Figure 6.1)*.

Our findings indicate that automotive companies are not sufficiently addressing these transitions *(see Table 6.2)*. Furthermore, there is currently no widely adopted framework or guidance against which companies are developing robust strategies in these areas.

While some automotive manufacturers have begun targeting the procurement of near-zero steel and aluminium, there is a lack of clear and transparent planning across the companies assessed.

Of the five manufacturers, only **GM** and **Ford** have set specific targets to procure 10% near-zero steel and aluminium by 2030 as part of their participation in the First Mover Coalition (First Movers Coalition, 2025b), alongside three other automobile manufacturers for steel (Mahindra, Scania, Volvo Group) and two for aluminium (Volvo Cars, Volvo Group). These commitments are likely in line with the International Energy Agency's Net Zero pathway for decarbonisation of the steel and aluminium sectors. Accordingly, the sectors should reach at least 8% near-zero steel by 2030 and 7% near-zero aluminium to be aligned with 1.5°C (IEA, 2023b, p. 95). These commitments signal a commendable intention to address the industry's second-largest source of emissions, if they are implemented.

Alongside their 2030 commitments, both **Ford** and **GM** have entered non-binding Memorandums of Understanding (MoU) with steel makers to purchase near-zero steel (Ford, 2022, 2024b; General Motors, 2023a). **Volkswagen** has entered similar MoUs despite not publicly committing to any specific procurement target for near-zero steel by 2030 or thereafter (Volkswagen, 2023b, 2024a, 2024b). While these forward-looking purchase agreements set leading examples for other companies, our analysis of the latest sustainability reports reveals a lack of transparency regarding progress updates or any further implementation steps. To date, we could not identify any MoUs related to near-zero aluminium, raising concerns about whether this critical transition is being meaningfully pursued. **Ford** announced a partnership with Rio Tinto to procure low carbon aluminium; however, neither company has disclosed the current status of this partnership (Rio Tinto, 2022).

Low-carbon battery procurement and in-house production remain largely overlooked in manufacturers' decarbonisation strategies to date.

None of the assessed manufacturers communicates specific targets or comprehensive measures to reduce the carbon footprint of batteries – whether produced in-house or procured from suppliers. Only **Volkswagen** communicates some early actions to address these emissions. The company directly targets emissions from battery production through its subsidiary PowerCo and plans to set binding CO_2 targets for battery suppliers (Volkswagen, 2025, pp. 281–282). While these measures set an important precedent, the lack of detailed information hinders an independent assessment of their ambition and implementation status.

Given that battery manufacturing can account for up to 60% of emissions from EV production (Linder *et al.*, 2023, p. 2), there is an urgent need to proactively and systematically lower the CO_2 footprint of batteries alongside the accelerated rollout of EVs towards 2030 and beyond. Regulations in selected jurisdictions like the European Union address the climate impact of battery production by mandating the need for transparency and sustainability standards (European Union, 2023). This underlines the importance for automakers to take this transition seriously and actively reduce battery-related emissions. Greater transparency on the current climate impact of battery production is essential.

The efficiency of electric vehicles sold is a key transition absent from manufacturer strategies.

None of the assessed manufacturers have communicated specific targets or plans to increase BEV efficiency. Such targets, for example, can guide companies' innovation to optimise the technical efficiency of electric vehicles and measures to influence consumer preferences through marketing strategies and incentives on the benefits of smaller, efficient and cheaper vehicles *(see Chapter 5.3 in NewClimate Institute, 2025b)*. For these reasons, climate strategies should include specific targets and increasing transparency around the energy consumption, size and weight of EV models for stakeholders to understand and compare efficiency performance across manufacturers.

Definitions of key transitions and related terminologies remain inconsistent across standards and climate strategies, potentially increasing the risk of misleading claims or loopholes.

We observe a lack of consistent terminology across the key transitions examined in this report, increasing the risk that companies' statements are often ambiguous and potentially misleading. For example, steel procurement is at times described as either 'lower-emissions', 'green' or 'near-zero', often without clear definitions and terms used interchangeably, leaving room for different interpretations. Similarly, it is not clear whether corporate climate strategies use terms like 'electric vehicles', 'battery-electric vehicles' and 'low-emissions vehicles' consistently with the same definition *(see Box 6.1 for definitions in this report)*. This ambiguity undermines the comparability of transitions across different companies and might obscure the credibility of company claims. To support integrity and ensure alignment of transitions with science-based benchmarks, standard setters should introduce clearer definitions *(see Recommendations below)*.

Box 6.3 – The Science Based Targets initiative's (SBTi) automotive sector net-zero standard consultation draft released for public consultation in June 2025

In June 2025, the SBTi released its Draft Automotive Sector Net-Zero Standard for public consultation (SBTi, 2025a), which is set to replace the former Land Transport Guidance of 2024 (SBTi, 2024b). Four of the five automobile companies in our analysis still have validated 2030 targets under the initial first methodology of 2018, although SBTi paused its use in 2022 due to its 1.5°C-incompatibility (SBTi, 2022). This points to the urgency for an updated standard. The new draft sector standard aligns with SBTi's Draft Corporate Net-Zero Standard v2.0 release for public consultation in March 2025 and introduces sector-specific pathways, criteria and calculation rules for automakers and auto parts manufacturers (SBTi, 2025a, p. 6).

Summary of the Draft Automotive Standard for automobile manufacturers

The new draft sector standard requires automakers to set three distinct types of targets:

- An **aggregated emission intensity target** covering emissions from all direct and relevant indirect emissions. This includes scope 1, 2, scope 3 category 1 (emissions from purchased goods and services), category 11 (well-to-wheel emissions) and category 12 (emissions from end-of-life treatment of sold products). Benchmarks are regionally differentiated and based on IEA scenarios (SBTi, 2025a, pp. 18, 28).
- A target to **increase the sales share of low-emission vehicles**. The newly introduced pathways mandate a 100% LEV phase-in by 2030 for advanced economies, by 2040 for China, and by 2040 globally (SBTi, 2025a, pp. 74–76). The choice of regional benchmark depends on the location of sales. The SBTi previously recommended a phase-out of new ICE cars and vans by 2035 in leading markets and by 2040 globally (SBTi, 2024b, pp. 10, 16).
- An intensity target to **reduce emissions from purchased goods and services** (scope 3 category 1). Car manufacturers will have to reduce the emission intensity of their purchased steel, aluminium and other purchased materials in line with the pace of the IEA Net Zero Scenario (SBTi, 2025a, p. 83).

The draft standard also uses new terminology: it promotes a transition to low-emission vehicles, defined as having a life-cycle emission intensity at least 65% lower than internal combustion engine vehicles (SBTi, 2025a, pp. 18, 28). The former Land Transport Guidance of 2024 instead previously used zero-emission vehicles (SBTi, 2024b), defined as those with no tailpipe emissions, such as electric vehicles.

The opportunity to pilot sector-specific alignment targets

In line with our recommendations in the CCRM24 (NewClimate Institute, 2024, p. 29), the new draft standard aims to incentivise decarbonisation along the *entire* value chain and puts particular emphasis on emissions from purchased steel and aluminium. Even if the new draft standard does not mention the phase-out of ICE explicitly, its regionally differentiated 100% LEV target requirements align with the latest scientific research (CAT, 2020, p. 27; UNFCCC, 2021, pp. 10–11; Teske *et al.*, 2022, p. 4; Boehm *et al.*, 2023, pp. 77–78; IEA, 2023b, pp. 88, 93). Such a target incentivises companies to accelerate the phase-in of electric vehicles and provides clarity on what constitutes ambitious, 1.5°C-compatible climate action in the sector *(see Chapter 5 in NewClimate Institute, 2025b).*

In this context, we propose that the SBTi **pilots the use of transition-specific alignment targets more comprehensively** as part of its standard revision, not just for the phase-in of LDVs, but also for other key transitions. Instead of the currently proposed intensity target to reduce emissions from purchased goods and services, for example, the SBTi could introduce specific alignment targets for procuring near-zero emissions steel, aluminium and batteries and for improving vehicles' energy efficiency. These targets could complement an overarching emissions reduction target.

In its scope 3 discussion paper, ahead of its Corporate Net Zero Standard revision (SBTi, 2024a), the SBTi had already introduced the concept of transition-specific alignment targets. The technological readiness and pioneering work by initiatives such as the First Movers Coalition on 2030 procurement targets for near-zero steel and aluminium (FMC, 2022b, 2022a) make the automotive sector a particularly well-suited space to introduce more such targets. An alternative to the SBTi's current proposal for automotive companies could thus consist of complementing the newly introduced aggregate emissions intensity target with specific alignment targets for the aforementioned key transitions.

Table 6.2: Integrity of automotive manufacturers' strategies for key transitions *(see section 6.2 for further details in company case studies)*

KEY TRANSITION	FORD	GENERAL MOTORS	STELLANTIS	TOYOTA	VOLKSWAGEN
PHASE-IN OF ZEV LDVS	Poor **EU:** 100% BEV by 2035 (previously by 2030 under A2Z in 2021); **Global:** 100% BEV by 2040 (previously 2035 under A2Z in 2021)	Moderate **US:** 50% BEV by 2030, 100% by 2035; **Global:** 100% BEV by 2035	Moderate **EU:** 100% EVs by 2030; 1.5°C aligned. **US:** 50% by 2020, 100% by 2038; not 1.5°C-aligned.	Very poor No targets in US and Japan. EU targets fall short of 1.5°C	Poor No global target identified. 70% BEV in EU by 2030, 50% in China and US. Targets fall short of 1.5°C
PHASE-IN OF ZEV HDVS	N/A	N/A	N/A	Very poor No target or measures identified.	Moderate No global target identified. EU27+3, US, and Canada ~50% ZEV by 2030 aligned with regional 1.5°C benchmarks.
EFFICIENCY OF BEVS	Very poor No target or measures identified. Partial recognition of its necessity.	Very poor No targets or measures identified.	Very poor No target or measures identified.	Very poor No target or measures identified.	Very poor No target or measures identified.
PROCUREMENT OF NEAR-ZERO STEEL	Moderate 10% by 2030, with non-binding MoUs signed.	Moderate 10% in US, Canada and Mexico by 2030, with non-binding MoUs signed.	Very poor No target or measures identified.	Very poor No target or measures identified.	Poor No group-level target identified, but non-binding MoUs signed. Subsidiary SCANIA targets 10% of low-carbon steel globally by 2030.
PROCUREMENT OF NEAR-ZERO ALUMINIUM	Moderate 10% by 2030.	Moderate 10% in US, Canada and Mexico by 2030.	Very poor No target or measures identified.	Very poor No target or measures identified.	Very poor No target identified. No measures, besides small-scale pilots.
LOW-CARBON BATTERY PROCUREMENT AND PRODUCTION	Very poor No target or measures identified. Partial recognition of its necessity.	Very poor No target or measures identified. Partial recognition of its necessity.	Very poor No target or measures identified	Very poor No target or measures identified. Small measures (battery recycling) mentioned.	Poor No target identified. Some measures to reduce emissions of its battery subsidiary PowerCo and binding supplier targets.

→ *See Annex 6B for further details on our integrity assessments for companies' key transitions.*

Recommendations

Automotive companies should strengthen their commitment to the sector's key transitions – especially the phase-out of internal combustion engines (ICEs) – and improve transparency on key indicators of transition progress. Voluntary standards and regulators play a key role in supporting the transition.

Recommendations for companies

- **Set credible phase-out dates for internal combustion engines:** Companies should set regionally differentiated and transparent phase-out dates for internal combustion engines, including interim targets, for both light-duty vehicles and, if applicable, heavy-duty vehicles. Such targets provide the greatest clarity about a company's climate impact and incentivise companies to accelerate their transition away from internal combustion engines. Companies should also transparently communicate any updates or adjustments to these targets and report annually on progress, such as sales shares of electric vehicles by region and globally.
- **Substantiate emission reduction targets:** Companies should set absolute emission reduction targets for 2030 across the *entire* value chain and substantiate any other scope-specific (intensity) reduction targets companies might have. Automobile manufacturers like **Stellantis** and **BMW** demonstrated early leadership by setting such targets for the first time in 2025 (Stellantis, 2024, p. 178; BMW, 2025, p. 121). Beyond 2030, companies should rethink longer-term net-zero and carbon neutrality targets by setting specific emission reduction targets alongside them and aligning them with 1.5°C-compatible emission pathways for the transport sector, in line with the latest standards and guidelines *(see ISO, 2022; UN HLEG, 2022)*.
- **Plan for procuring near-zero steel and aluminium:** Companies should set credible and transparent targets for procuring near-zero steel and aluminium by 2030 and beyond. In the absence of specific requirements under voluntary standards to date, companies can join initiatives like the First Mover Coalition or SteelZero to guide their commitments. As of June 2025, **Ford**, **GM** and **Volvo Group** have joined the First Mover Coalition's steel commitment (First Movers Coalition, 2025b) while **Volvo Cars** is a signatory of the SteelZero initiative (Climate Group, 2025). Companies should also enter into longer-term near-zero steel offtake and pre-purchase agreements with steel makers or join buyer clubs like the Sustainable Steel Buyers Platform (RMI, 2024). Such agreements send long-term demand signals to steel makers, especially when accompanied by transparent reporting on procurement volumes, intended timelines and overall progress towards achieving their procurement targets.
- **Tackle the emissions footprint of batteries:** Companies should set specific targets and measures to reduce the emission footprint of batteries used in electric vehicles (EVs), representing up to 40–60% of total carbon emissions associated with manufacturing electric vehicles (Linder *et al.*, 2023). These targets and measures are equally important for batteries purchased from external suppliers and those produced in-house.
- **Adopt a holistic transition approach:** Companies, especially incumbent manufacturers, should adopt a holistic transition approach that includes improving the efficiency of their battery electric vehicles and advancing innovative solutions for inclusive and sustainable mobility.

Urgent priorities for ISO, GHG Protocol and SBTi standard development processes

- **Spotlight key transitions:** The limited progress on key transitions in the sector underscores the need for target-setting frameworks, such as the SBTi Corporate Net Zero Standard and the ISO Net Zero standard, to specifically focus and incentivise these transitions. This can be achieved by requiring companies to set transition-specific targets, complementary to emission reduction targets across the value chain. For example, the SBTi's latest draft standard for the automobile sector – released for public consultation in June 2025 – already builds around geographically differentiated sales targets for low-emission vehicles. The draft could go beyond this single transition-specific alignment target by piloting similar targets for other key transitions such as procuring near-zero steel and aluminium. This could enhance the integrity of automakers' target setting and address existing issues with current target validations. This points to the critical opportunity for major standard setters to further develop their accounting and target setting approaches to more effectively guide automakers' climate strategies.
- **Address outdated SBTi validations:** The SBTi currently continues to list outdated validations on its website, which are subsequently and continuously used by companies in their sustainability reporting. In addition, the SBTi still lists 'well-below 2°C' validations for the scope 3 emissions intensity targets for light-duty vehicles from automobile manufacturers such as **Volkswagen**, **Toyota**, **GM**, or **Ford** despite indefinitely pausing this methodology in March 2022 due to its incompatibility with a 1.5°C trajectory (SBTi, 2022). None of these companies have been validated under SBTi Land Transport guidance for automobile manufacturers (SBTi, 2024b), released in October 2024. This new guidance requires a 'phase out of new ICE cars and vans by 2035 in leading markets and by 2040 globally' (SBTi, 2024b, p. 17). Our analysis for Volkswagen and Toyota, for example, shows that neither of them has set ICE phase-out targets in line with these requirements nor the requirements listed in the new draft standard released for public consultation (SBTi, 2025a, pp. 74–76)

Broader issues that require further guidance and regulation for more structural change

With a long history of scattered and inconsistent regulations across jurisdictions, regulators need to double down on reliable, science-informed and comprehensive regulation to incentivise the largest incumbent manufacturers to effectively transition their business models, foster innovation of incumbents and new entrants alike, and guide a holistic shift towards low-emission mobility. For this purpose, they can lean on emerging good practice from automakers and standard setters alike, for example on science-aligned phase-out commitments for internal combustion engines as set out in the following non-exhaustive list.

- **Preserve and further develop existing regulations on the phase-out of internal combustion engines:** Regulators should recognise the long-term advantages of a timely EV transition and set clear and reliable regulatory environment for incumbent and newcomer companies alike. This can be centrally anchored by implementing – and if already in place, maintaining – an ICE phase-out target, such as the EU's 2035 target to reach 100% zero-emission vehicle sales (European Commission, 2025).
- **Expand regulation to include full lifecycle impact:** Regulation should address upstream emissions from purchased products such as steel, aluminium and batteries, and incentivise procurement of near-zero emission products, circularity and recycling throughout vehicle production.
- **Support accessibility of electric mobility:** Targeted policies can ensure affordability and access to EVs by expanding charging infrastructure and maintaining consumer purchase incentives, such as subsidies, to reduce upfront costs. Such policies should be embedded in wider strategies for low-emission, affordable and inclusive transport.
- **Encourage business model innovation and reduce car dependency:** Promote shared mobility schemes and integrated public transport solutions, especially in areas where EV ownership remains less accessible.

6.2 Company analyses

The following pages set out our detailed analyses of **Ford**, **General Motors**, **Stellantis**, **Toyota** and **Volkswagen**.

→ *See the assessment methodology for the Corporate Climate Responsibility Monitor. Guidance and assessment criteria for good practice corporate emission reduction and net-zero targets: Version 5.0 (NewClimate Institute, 2025).*

Our evaluation of the transparency and integrity of companies' climate strategies represents the authors' views and interpretations of publicly available information that is self-reported by the companies assessed. Due to the fragmentation, inconsistency and ambiguity of some of the information provided by the assessed companies, as well as the fact that the authors did not seek to validate the public self-reported information provided by those companies, the authors cannot guarantee the factual accuracy of all information presented in this report. Therefore, neither the authors nor NewClimate Institute makes representations or warranties as to the accuracy or reliability of any information in this report. The authors and NewClimate Institute expressly assume no liability for information used or published by third parties with reference to this report.

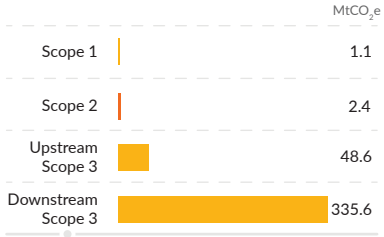
Ford

Ford has pledged to achieve carbon neutrality by 2050 but does not communicate any specific emission reduction target alongside this pledge. The company commits to entirely phase out the sales of internal combustion engine vehicles by 2040. Uncertainty remains on the commitment's status in the absence of interim targets for key markets. Ford also pledges to procure at least 10% near-zero steel and aluminium by 2030. Although this is a notable 1.5°C-compatible ambition, it currently provides limited information on how it will achieve these goals apart from several non-binding agreements with steel producers.

TRANSPARENCY	INTEGRITY
Moderate	Poor

1 TRACKING AND DISCLOSURE OF EMISSIONS

Ford discloses emissions for all scopes over the past 3 years, but does not provide historical data for the past 5 years to allow for a full assessment of its emission trends.



MAJOR EMISSION SOURCES

- Use of LDVs
- EV power consumption
- Steel
- Aluminium
- Batteries

2 GHG EMISSION REDUCTION TARGETS

Headline pledge: *Carbon neutral by 2050*

	TRANSPARENCY	INTEGRITY
Short term ? — *Short-term target does not cover scope 3 emissions. Scope 1&2 reduction of 18% by 2023 vs 2017 is not sufficient to meet 1.5°C pathways.*	Moderate	Poor
Medium term ? — *Vehicle emissions intensity reduction targets of 50% by 2035 vs 2019 is not aligned with 1.5°C pathways.*	Reasonable	Poor
Longer term ? — *Target to become carbon neutral by 2050 without any specific commitment for deep emission reductions.*	Poor	Poor

EMISSION TRENDS

Ford's absolute emissions between 2021 and 2023 increased, a trend misaligned with 1.5°C pathways. A 1.5°C aligned reduction pathway requires emissions reductions in the near term.

3 TRANSITION TARGETS

	TRANSPARENCY	INTEGRITY
Phase-out of internal combustion engine LDVs — *Target of 40-50% US EV vehicle sales by 2030. Pledge to "work toward" 100% ZEVs in leading markets by 2035 and 100% globally by 2040. These targets fall short of regional and global 1.5°C-aligned benchmarks.*	Moderate	Moderate
Efficiency of BEV's — *No target or measures on the efficiency of BEV's identified. Partial recognition of the tranistion's necessity.*	Poor	Poor
Procurement of near-zero emission steel — *Target of 10% near-zero steel purchases likely aligns with 1.5°C-compatible benchmarks. Non-binding MoUs signed with Salzgitter Flachstahl, Tata Steel and ThyssenKrupp Steel in 2022.*	Reasonable	Moderate
Procurement of near-zero emission aluminium — *Target of 10% low-carbon aluminium by 2030. The target reflects an ambitious commitment, but measures and procurement volumes remain unclear.*	Moderate	Moderate
Low-carbon batteries — *No target or measures on low-carbon batteries identified. Partial recognition of the tranistion's necessity.*	Poor	Poor

TRANSITION PROGRESS

- ✖
- ? *In 2023, BEV sales for LDVs remained at around 3% and did not increase compared to 2022. No data identified on progress on EV efficiency improvements or the procurement of near-zero aluminium or low-emission batteries. No progress data on near-zero steel despite several MoUs.*
- ?
- ?
- ?

4 RESPONSIBILITY FOR ONGOING EMISSIONS AND SCALING UP DURABLE REMOVALS

	TRANSPARENCY	INTEGRITY
Climate contributions & offsetting practices — *No climate contributions identified. Plant-specific carbon neutrality claims with minimal information provided.*	Poor	Poor
Support for durable carbon dioxide removals — *No current support for durable CDR identified, although Ford's 2050 carbon neutrality target explicitly depends on carbon removals.*	Poor	Poor

Transparency & integrity : 5-point rating scale:

High | Reasonable | Moderate | Poor | Very poor

Transparency refers to the disclosure of information.
Integrity refers to the quality and credibility of the approach.

? Integrity assessment not possible due to lack of available benchmarks for the transition.

Progress:
- ✔ Right direction, on track
- ✚ Right direction, off track
- ✖ Well off track
- ⮌ Wrong direction, critically off track
- ? No progress identified or insufficient data
- ? No benchmarking possible.

The analysis represents the authors' interpretations of publicly available information. NewClimate cannot guarantee the factual accuracy of all information presented in this factsheet due to potential fragmentation, inconsistency and ambiguity across data sources.

Source: *Ford (2022, 2024a, 2024b, 2025a).*

Note: As of July 2025, Ford has not released a sustainability report covering the year 2024. Ford previously published its integrated sustainability and financial reports between March and April each year in 2022, 2023, and 2024. The company released its 2024 annual report in February 2025 (Ford, 2025a), which we have considered in this analysis.

Ford

Ford is one of the world's largest manufacturers of motor vehicles. Most of the company's 2024 emissions originate from the use phase of its sold cars and vans (86%) and sourced materials (11%), such as steel. Although Ford has pledged to achieve carbon neutrality by 2050, it has not communicated any specific emission reduction target alongside this pledge. The company commits to entirely phase out the sales of internal combustion engine vehicles by 2040. Uncertainty remains on the commitment's status in the absence of interim targets for key markets. Ford has also pledged to procure at least 10% near-zero steel and aluminium by 2030. Although this is a notable 1.5°C-compatible ambition, the company currently provides limited details on how it will achieve these goals, or data to track its progress.

Ford commits to phasing out internal combustion engines (ICEs) for light-duty vehicles (LDVs) by 2040, although the commitment's status remains unclear in the absence of recent updates. In 2021, the company signed the COP26 Accelerating to Zero declaration, pledging to achieve 100% EV sales in Europe by 2026, 100% BEV sales in Europe by 2030, and to reach 50% and 100% ZEV sales globally by 2030 and 2035 respectively (Accelerating to Zero Coalition, 2021b). However, we could not find a reference to these targets in Ford's most recent sustainability reports (Ford, 2024b, 2024a). Instead, the company now outlines a target to reach 40–50% EV sales in the US by 2030, and states that it will 'work toward' 100% ZEVs in leading markets by 2035 and 100% globally by 2040 (Ford, 2024b, p. 52). Ford also states that its 'strategy to offer all-electric fleet vehicles in Europe by 2035 is unchanged' (Ford, 2024b, p. 33). However, the revised wording around its global target suggests that Ford's original Accelerating to Zero pledge has been shifted from 2035 to 2040. This lack of clarity and consistency creates uncertainty around the status of its regional and global ICE phase-out commitments.

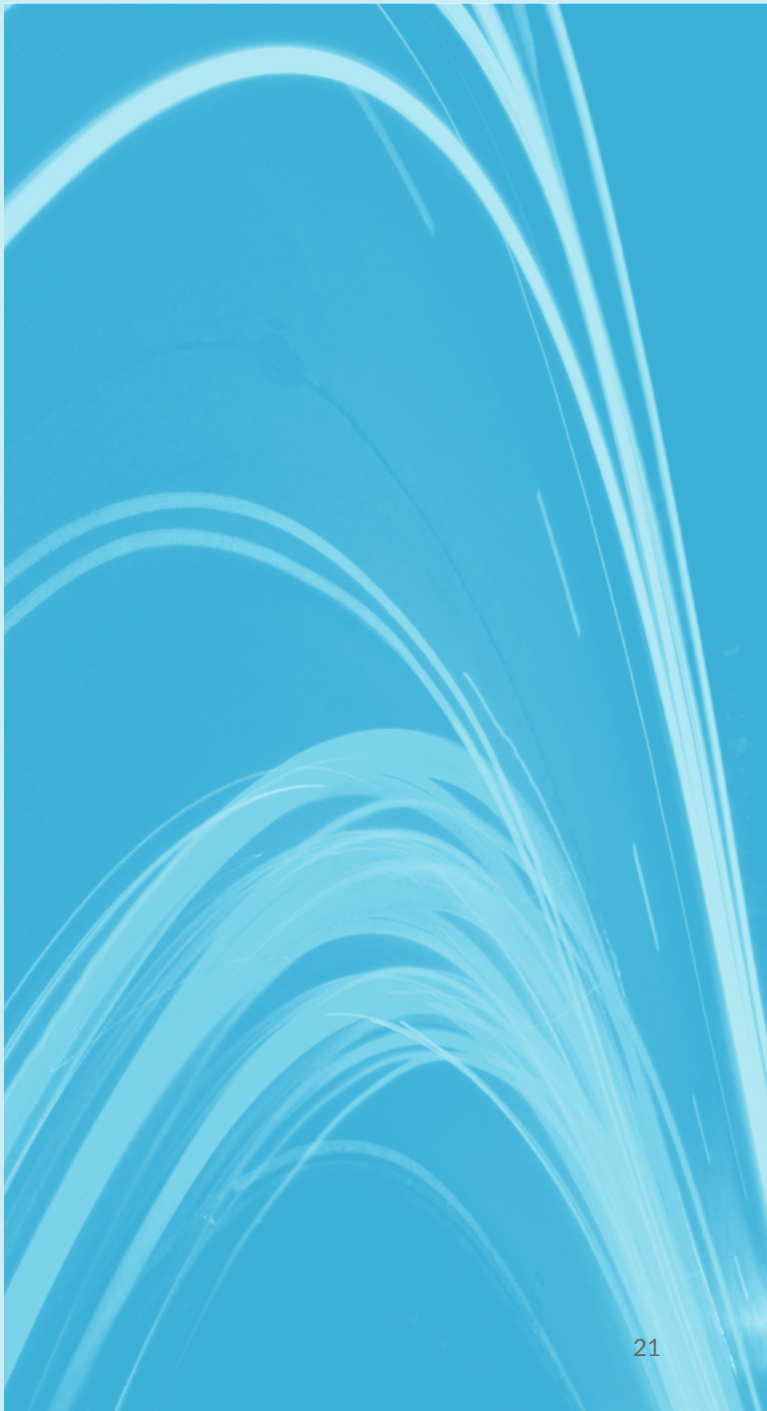
Ford's targets fall short of the electric LDV sales required in its European and US markets, which represent two key markets making up 69% of the company's annual total sales (Ford, 2025a, p. 5). In these markets, EV sales should reach 95–100% by 2030 to stay align with the Paris Agreement's 1.5°C limit (CAT, 2020, p. 27; UNFCCC, 2021, pp. 10–11; Teske *et al.*, 2022, p. 4). Additionally, progress on LDV electrification likely remains off track, with Ford's global retail ZEV sales remaining at 3% of total sales in 2023 (Ford, 2024b, p. 136), and not increasing compared to 2022. Ford's US retail sales increased from 4% in 2023 to 5% in 2024, but its wholesale sales fell from 5% to 3% (Ford, 2025a, p. 5). Achieving both its US 2035 target and global 2040 ZEV target would require Ford to accelerate EV sales significantly within the next decade.

Ford's headline target to achieve carbon neutrality no later than 2050, covering 95% of its emissions along the value chain, remains unsubstantiated without a specific commitment to deep emission reductions. Alongside this global pledge, the company has also set a target to reach carbon neutrality in Europe by 2035 (Ford, 2024b, p. 46). Ford does not disclose any information on the extent to which it will *reduce* its own emissions to meet these two targets, despite requirements for carbon neutrality pledges to include emission reduction targets, as laid out by the UN High-Level Expert Group and the International Organization for Standardization (ISO, 2022; UN HLEG, 2022). Ford states its intention to neutralise what it terms 'hard-to-reduce' GHG emissions in 2050 by 'using carbon removals, i.e., natural or technical strategies that remove CO_2 from the atmosphere and provide secure long-term storage' (Ford, 2024b, p. 47). However, we found no additional information on Ford's strategy to support durable CDR in the near-term nor the extent to which it aims to neutralise emissions as part of its carbon neutrality pledges.

Ford commits to purchasing 10% near-zero steel and aluminium globally by 2030, but neither communicates a detailed plan to reach these goals nor information to enable tracking of its progress. Upstream materials, including aluminium and steel, accounted for almost 11% of Ford's 2023 emissions across the value chain (Ford, 2024b, p. 138). As a member of the First Movers Coalition, Ford has pledged to purchase at least 10% near-zero aluminium and near-zero steel by 2030 (Ford, 2024b, p. 46), signalling a commitment toward near-zero steel and aluminium procurement, in line with the International Energy Agency's Net Zero pathway for decarbonization of the steel sector. Accordingly, the sector should reach at least 8% of near-zero steel and 7% near-zero aluminium by 2030 to be aligned with 1.5°C (IEA, 2023b, p. 95).

Alongside it steel procurement target, Ford signed non-binding Memorandums of Understanding (MoUs) with three European steel suppliers (Ford, 2024b, p. 48), namely Salzgitter, Tata Steel and ThyssenKrupp Steel in 2022 (Ford, 2022). We could not identify whether these agreements all specifically address the procurement of near-zero steel as defined by the First Mover Coalition (FMC, 2024). Ford also announced a partnership with Rio Tinto to procure 'low-carbon' aluminium (Rio Tinto, 2022). Overall, Ford does not present data on the status of procurement of near-zero steel and aluminium as of 2025, hindering an independent assessment of its progress. A shareholder proposal of 2025 also emphasised this lack of available information, asking the company to produce forward-looking disclosures on how it intends to meet its commitment to purchase at least 10% near-zero carbon steel by 2030 (Ford, 2025b, p. 93). In a proxy statement prior to its 2025 Annual General Meeting, Ford's Board of Directors asked investors to vote against this proposal (Ford, 2025b, p. 93). The proposal received 6.6% of shareholder votes in favour (Thomas, 2025). While the FMC target and signing of three MoUs are a clear step in the right direction, systematically reporting on its progress and implementation would strengthen the integrity of Ford's commitments.

Ford neither communicates a target on the CO_2 emissions from the batteries used in its EVs nor sets a target for improving energy efficiency of BEVs. We could not identify information on the emissions from batteries that Ford produces or sources, nor a commitment to reduce these emissions. Additionally, we could not identify any disclosure of the energy efficiency of its BEV fleet in terms of power consumption (kWh per vehicle-km). The lack of transparency and attention towards these two critical transitions neglects the increasing importance of battery emissions and the rising significance of downstream electricity consumption.



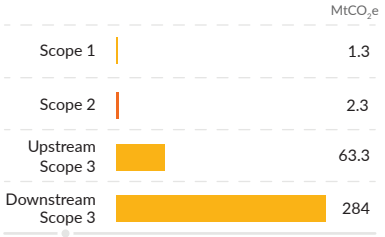
General Motors

GM aims to become carbon neutral by 2040 but does not communicate a specific emissions reduction target alongside this pledge. In 2021, the company committed to phase out the sales of internal combustion engine vehicles by 2035 in the United States and globally. Uncertainty remains on the commitment's status in the absence of transparent interim targets for key markets. GM has also pledged to procure at least 10% near-zero steel and aluminium by 2030. While this is a notable 1.5°C-compatible ambition, the company currently provides limited details on how it will achieve these goals apart from several non-binding agreements with steel producers.

TRANSPARENCY	INTEGRITY
Poor	Poor

1 TRACKING AND DISCLOSURE OF EMISSIONS

GM discloses emissions for all scopes over the past 3 years, but does not provide historical data for the past 5 years to allow for a full assessment of its emission trends.



MAJOR EMISSION SOURCES

- Use of LDVs
- EV power consumption
- Steel
- Aluminium
- Batteries

2 GHG EMISSION REDUCTION TARGETS

Headline pledge: *Carbon neutrality in global products and operations by 2040*

			TRANSPARENCY	INTEGRITY
Short term	?	*No emissions reduction target for 2030, only regional scope 2 target to source 100% renewable electricity for US sites by the end of 2025.*	○	○
Medium term	?	*2040 carbon neutrality pledge (scope 1, 2 and 3 category 11) not substantiated by an emissions reduction target. 2035 scope 3 category 11 intensity target (-51% per vehicle km below 2018), is not 1.5°C-aligned.*	◐	○
Longer term	N/A	*No target within the timeframe identified.*	N/A	N/A

3 TRANSITION TARGETS

		TRANSPARENCY	INTEGRITY
Phase-out of internal combustion engine LDVs	*GM commits to selling 50% EVs in the US by 2030 and 100% globally by 2035. While the global target aligns with 1.5°C-aligned global benchmarks, the US target falls short of regional benchmarks.*	◐	◐
Efficiency of BEV's	*No target on the efficiency of BEV's identified.*	○	○
Procurement of near-zero emission steel	*2030 target for 10% near-zero steel purchases for US, Canada and Mexico, likely in line with 1.5°C benchmarks. Several MoUs with steel producers, but timeline and volumes remain unclear.*	◔	◐
Procurement of near-zero emission aluminium	*2030 target for 10% near-zero aluminium purchases in US, Canada and Mexico, dependent on price conditions. The target reflects an ambitious intention, but underlying measures and volumes remain unclear.*	◐	◐
Low-carbon batteries	*No target on low-carbon batteries identified. Partial recognition of its necessity.*	○	○

4 RESPONSIBILITY FOR ONGOING EMISSIONS AND SCALING UP DURABLE REMOVALS

		TRANSPARENCY	INTEGRITY
Climate contributions & offsetting practices	*No climate contributions identified.*	○	○
Support for durable carbon dioxide removals	*No support for durable CDR identified.*	○	○

EMISSION TRENDS

↩ *GM's absolute emissions between 2021 and 2023 have increased, a trend misaligned with 1.5°C pathways. A 1.5°C-aligned reduction pathway requires emissions reductions in the near term.*

TRANSITION PROGRESS

\+

?

✖ *In 2023, BEV sales for LDVs were around 10%, increasing slightly from 9% in 2022. No progress data on EV energy efficiency or the procurement of near-zero aluminium or low-emission batteries. No progress data on near-zero steel despite several MoUs.*

?

?

Transparency & integrity : 5-point rating scale:

High | Reasonable | Moderate | Poor | Very poor

Transparency refers to the disclosure of information.
Integrity refers to the quality and credibility of the approach.

? Integrity assessment not possible due to lack of available benchmarks for the transition.

Progress:
- ✔ Right direction, on track
- \+ Right direction, off track
- ✖ Well off track
- ↩ Wrong direction, critically off track
- ? No progress identified or insufficient data
- ? No benchmarking possible.

The analysis represents the authors' interpretations of publicly available information. NewClimate cannot guarantee the factual accuracy of all information presented in this factsheet due to potential fragmentation, inconsistency and ambiguity across data sources.

Sources: General Motors (2021, 2023a, 2023b, 2025).

Note: As of June 2025, GM has not released a sustainability report covering the year 2024. GM previously published its sustainability reports in April 2021, 2022, 2023, and 2024. The company released its 2024 annual report in January 2025 (General Motors, 2025), which we have considered in our analysis

General Motors

General Motors Company (hereafter: GM) is one of the world's largest manufacturers of motor vehicles, with brands including Chevrolet, Buick and Cadillac. Most of the company's 2023 emissions originate in the use phase of its sold cars and vans (69%) and sourced materials (16%) such as steel and aluminium. Although GM has pledged to achieve carbon neutrality by 2040, it has not communicated any specific emission reduction target alongside this pledge. The company's commitment of 2021 to phase out the sales of internal combustion engine vehicles by 2035 in the US and globally, if implemented, substantiates its 2040 carbon neutrality pledge. Uncertainties remain about GM's continued intention to indeed implement this target. GM has also pledged to procure at least 10% near-zero steel and aluminium by 2030. While this is a notable 1.5°C compatible ambition, the company currently provides limited details on how it will achieve these goals, or its progress achieved to date.

GM commits to phase out internal combustion engines for light-duty vehicles (LDVs) globally by 2035, although uncertainties around this commitment remain in the absence of any recent updates. In 2021, GM became a signatory of the COP26 declaration, committing to making 50% of its U.S. vehicle sales electric by 2030 and reaching 100% electric vehicle sales globally by 2035 (Accelerating to Zero Coalition, 2021a). While the US target falls slightly short of electric LDV sales reaching 95–100% by 2030 to meet the Paris Agreement's 1.5°C target (CAT, 2020, p. 27; UNFCCC, 2021, pp. 10–11; Teske *et al.*, 2022, p. 4), the global EV sales commitment aligns with a 1.5°C global pathway.

GM's most recent sustainability report, however, omits any reference to its global EV sales target. Instead, it reaffirms GM's intention to 'eliminate tailpipe emissions from new U.S. light-duty vehicles by 2035' (General Motors, 2023a, p. 43) and to reduce GHG emissions from the use of sold products by 51% per vehicle km compared to 2018 (General Motors, 2023a, p. 8). The company's statement that its 'all-electric future is guided by customer choice' while continuing to offer a 'compelling lineup of gas-powered vehicles' raises further uncertainty about its long-term commitment to phasing out ICEs (General Motors, 2025, p. 1). GM reached 10% zero-emissions vehicle sales of its total sales in 2023, up from 9% in 2022 (General Motors, 2023b, p. 28). To meet its 2035 global EV target, GM would need to further accelerate EV sales over the next decade.

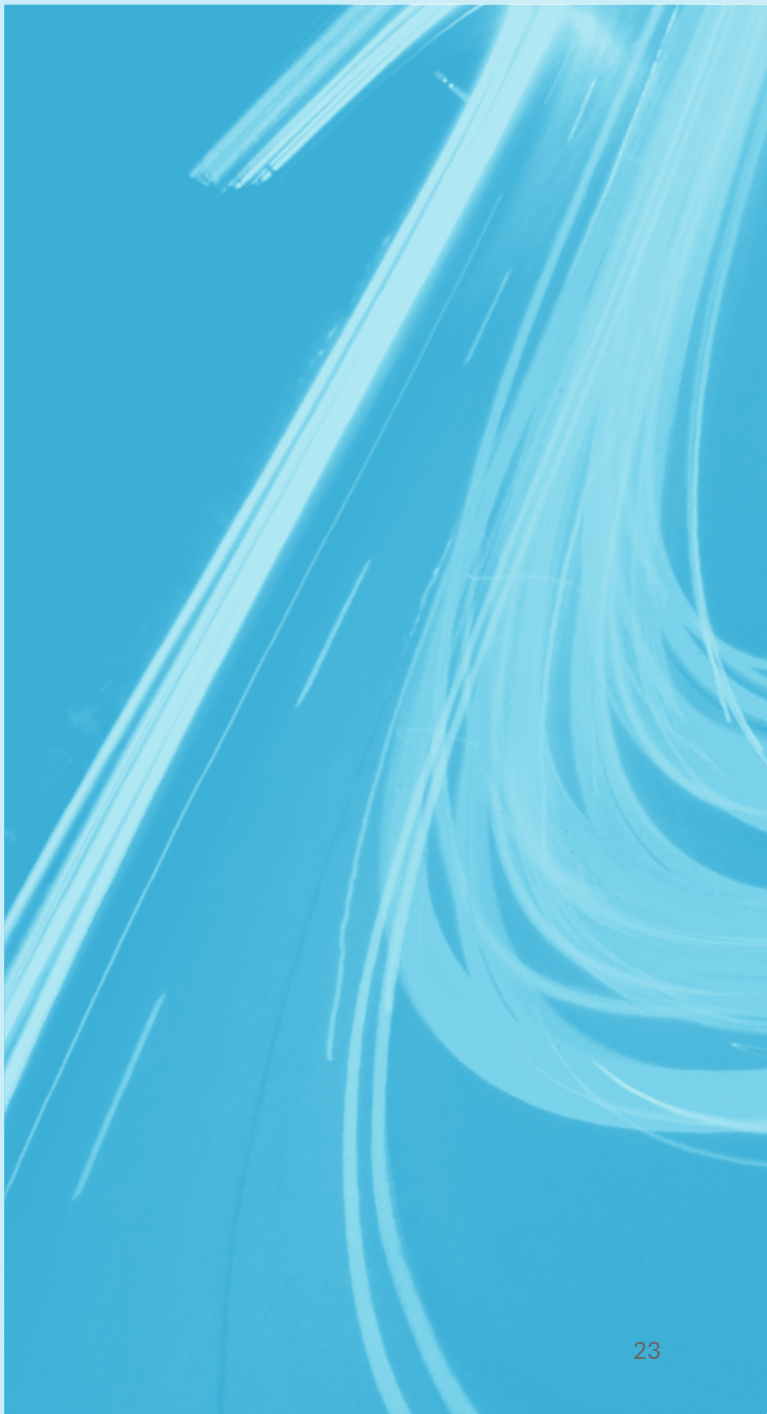
GM's headline 2040 carbon neutrality pledge remains unsubstantiated in the absence of any specific emissions reduction target. Initially announced in 2021, we could not identify any improvements on GM's 2040 carbon neutrality target ever since, despite requirements for long-term pledges to include emissions reductions targets, as laid out by the UN High-Level Expert Group and the International Organization for Standardization (ISO, 2022; UN HLEG, 2022). When first announcing the target in 2021, GM announced to invest in carbon credits or offsets to neutralise remaining emissions (General Motors, 2021). GM has not further clarified how and to what extent it plans to use carbon credits, and it remains unclear to what extent the carbon neutrality target will be achieved through emission reductions in the first place.

In 2024, a US Environmental Protection Agency (EPA) investigation found that certain GM vehicles emitted on average over 10% more CO_2 than the company initially reported in its GHG compliance documentation (EPA Press Office, 2024). This discrepancy applied to approximately 5.9 million pickups and SUVs between 2012–2018, resulting in an estimated additional 5.9 million $MtCO_2$ emissions. GM agreed to retire approximately 50 million tons of greenhouse gas credits to neutralise CO_2 emissions but did not disclose the types of carbon credits used.

GM commits to purchasing 10% near-zero steel and aluminium globally by 2030, but it neither publishes a detailed plan to reach these goals nor enables tracking of its progress. Upstream materials including aluminium and steel, represent almost 16% of GM's 2023 emissions across the value chain (General Motors, 2023b, p. 59). As a member of the First Movers Coalition, GM has pledged to purchase at least 10% near-zero aluminium and near-zero steel by 2030. This target is regionally limited to the US, Canada and Mexico and is conditional on prices not exceeding 20% above current market rates or approval by GM leadership (General Motors, 2023a, pp. 10, 23). These pledges signal a meaningful commitment to reduce emissions from purchased steel and the level of ambition falls in line with the International Energy Agency's Net Zero pathway, according to which the sector should reach at least 8% of fossil-free steel and 7% near-zero aluminium by 2030 to be aligned with the 1.5°C temperature limit (IEA, 2023b, p. 95).

GM has implemented some forward-looking measures to meet these pledges, entering into strategic purchase agreements with select suppliers (General Motors, 2023a, p. 23). GM signed agreements to purchase near-zero emission steel from Nucor (2021) starting in 2022, U.S. Steel (2023), and ArcelorMittal (2023) beginning in Q2 of 2023, however it does not specify any purchase volumes. We could not identify whether these agreements all focus on the procurement of near-zero steel as defined by the First Mover Coalition (FMC, 2024). We could not identify any further updates on the status of these partnerships, or the volume of near-zero steel and aluminium currently purchasing.

GM neither communicates a target on the CO_2 emissions from the batteries used in its EVs nor sets a target for improving energy efficiency of BEVs. We could not identify information on the emissions from batteries that GM produces or sources, nor a commitment to reduce these emissions. Additionally, we could not identify any disclosure of the energy efficiency of its BEV fleet in terms of power consumption (kWh per vehicle-km). The lack of transparency and attention towards these two critical transitions neglects the increasing importance of battery emissions and the rising significance of downstream electricity consumption.



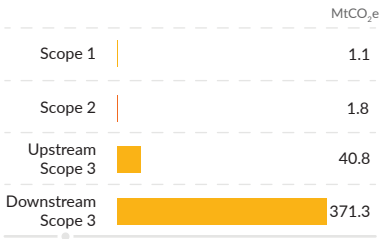
Stellantis

In 2024, **Stellantis** set an absolute emission reduction target for the first time, namely 30% below 2021 levels across all emissions scopes by 2030. This target improves the transparency of the company's ambition over the next five years towards its 2038 'carbon net zero target', even if not fully aligned with a 1.5°C emission pathway for the sector. The company also reconfirmed its commitment to sell 100% battery electric vehicles for passenger cars in the EU and 50% for passenger cars and light-duty trucks in the US by 2030. For the EU, Stellantis reached a sales share of 15% in 2024, making it unclear how it will achieve its 100% target by 2030. We have not identified any specific targets related to other key transitions, such as near-zero emission steel and aluminium procurement.

	TRANSPARENCY	INTEGRITY
	Reasonable	Moderate

1 TRACKING AND DISCLOSURE OF EMISSIONS

After a methodology change, Stellantis fails to disclose new emissions estimates for past years apart from its 2021 base year.



MAJOR EMISSION SOURCES

- Use of LDVs
- EV power consumption
- Steel
- Aluminium
- Batteries

2 GHG EMISSION REDUCTION TARGETS

Headline pledge: *Carbon net zero by 2038.*

			TRANSPARENCY	INTEGRITY
Short term	**30%** by 2030 (below 2021)	*New absolute reduction target of 30% by 2030 below 2021 along the entire value chain falls short of a 1.5°C pathways for this sector, but is a positive step forward to commit to short-term reductions.*		
Medium term	**>90%** intensity by 2038 (below 2021)	*Carbon net zero by 2038 (>90% intensity reduction along the value chain) is aligned with 1.5°-compatible pathways.*		
Longer term	**N/A**	*Stellantis sets no longer-term target beyond 2041.*	N/A	N/A

3 TRANSITION TARGETS

		TRANSPARENCY	INTEGRITY
Phase-out of internal combustion engine LDVs	*Stellantis' EV sales target for the EU (100% by 2030) aligns with 1.5°C, but the US EV targets (50% by 2020, 100% by 2038) falls short of 1.5°C-aligned benchmarks. These targets do not cover all global sales.*		
Efficiency of BEV's	*No targets or measures identified.*		
Procurement of near-zero emission steel	*No targets or measures for low-carbon steel identified. Stellantis claims to consider carbon footprint targets in its steel purchasing roadmaps but provides no further public information.*		
Procurement of near-zero emission aluminium	*No targets or measures for low-carbon aluminium procurement identified. Stellantis reuses aluminium waste in its value chain.*		
Low-carbon batteries	*No targets or measures identified. Stellantis currently conducts pilot projects for more efficient battery technology and downstream battery recycling.*		

4 RESPONSIBILITY FOR ONGOING EMISSIONS AND SCALING UP DURABLE REMOVALS

		TRANSPARENCY	INTEGRITY
Climate contributions & offsetting practices	*Stellantis does not mention any climate contributions beyond its value chain. Leasys, a joint venture between Stellantis and Crédit Agricole, plants trees for customers renting large fleets for offsetting.*		
Support for durable carbon dioxide removals	*In 2024, Stellantis set up a dedicated CDR team responsible to manage its activities to offset residual emissions. The company has also done first investments in carbon credits for biochar.*		

EMISSION TRENDS

\+ *Absolute emissions between 2021 and 2024 have declined by 21% (including market-based scope 2). These reductions are not yet aligned with 1.5°C-compatible pathways, but likely enough to reach Stellantis' own 2030 target (30% by 2030 below 2021 levels).*

TRANSITION PROGRESS

\+

? *Stellantis' sales share of EVs in 2024 has not increased compared to 2023, remaining below 11% in the EU and the US. It remains uncertain how Stellantis will meet its 100% EVs by 2030 target over the next five years. Stellantis fails to disclose information on its progress to implement key transitions, including sourcing low-carbon steel, aluminium, or phasing in EV trucks.*

?

?

Transparency & integrity : 5-point rating scale:

High | Reasonable | Moderate | Poor | Very poor

Transparency refers to the disclosure of information.
Integrity refers to the quality and credibility of the approach.

? Integrity assessment not possible due to lack of available benchmarks for the transition.

Progress:
- ✔ Right direction, on track
- \+ Right direction, off track
- ✖ Well off track
- ⮌ Wrong direction, critically off track
- ? No progress identified or insufficient data
- ? No benchmarking possible.

The analysis represents the authors' interpretations of publicly available information. NewClimate cannot guarantee the factual accuracy of all information presented in this factsheet due to potential fragmentation, inconsistency and ambiguity across data sources.

Sources: *Stellantis (2022, 2023c, 2024, 2025).*

Stellantis

Stellantis is an automotive company headquartered in the Netherlands, comprising brands such as Fiat, Peugeot, Opel and Citroën. Most of Stellantis' emissions originate in the use phase of its vehicles (89% of 2024 emissions). The company commits to reaching 'carbon net zero' in 2038 by reducing at least 90% of its vehicles' CO_2 emissions intensity across their life cycle and offset all remaining emissions. Stellantis' newly announced 2030 target aims for a 30% absolute emission reduction below 2021 levels, substantiated by accelerated vehicle electrification in key markets. These targets partially align with 1.5°C-compatible sectoral pathways for the automobile industry.

Key developments over the past year: Stellantis has set a new absolute emission reduction goal of 30% by 2030 across all scopes (Stellantis, 2024, p. 178). A methodology change has affected its scope 1 and 2 baseline emissions, impeding a comparison of emissions over time. Stellantis announced it will purchase biochar carbon credits at the end of 2025 (Stellantis, 2025, p. 47). Apart from these, we have not identified any other major updates to Stellantis' climate strategy since the previous analysis was published in April 2024 (NewClimate Institute, 2024).

Stellantis has set a new ambitious target to reduce absolute scope 1, 2 and 3 emissions by 30% by 2030 compared to 2021 levels, committing to an *absolute* emission reduction target by 2030 for the first time. This target complements and further provides credibility to a range of previously announced 2030 targets, particularly the goal to reduce emission intensity across the entire vehicle life cycle by 50% by 2030 below 2021 levels (Stellantis, 2024, p. 178). Stellantis' emissions data suggests a 21% emission reduction across scopes between 2021 and 2024 (Stellantis, 2025, p. 43). This is a positive development and seems to align with its newly announced 2030 target, even if not yet in line with a 1.5°C-compatible pathway. Compared to 2023, Stellantis appears to have discontinued its disclosure of emissions data time series for previous reporting years. Stellantis also changed its methodology to calculate its scope 1 and 2 baseline data, which impedes a comparison with data from 2020, 2022 and 2023.

While Stellantis' EV sales target for the European market aligns with a 1.5°C-compatible pathway, the target for the US market does not. A major measure to reach emission reduction targets for the automotive sector is increasing the sales share of battery electric vehicles (BEV). Stellantis aims to sell 100% BEVs for passenger cars in Europe and 50% BEVs for passenger cars and light-duty trucks in the US by 2030 (Stellantis, 2025, p. 43). These two markets are responsible for 71% of the company's total sales in 2024 (Stellantis, 2024, pp. 21–23). Stellantis' target for the European market aligns with 1.5°C-compatible decarbonisation milestones, while the one for the US market falls short of them *(see detailed assessment in the Annex 6B)*. We could not identify information on how Stellantis has been progressing on its aspirational targets for Brazil, India, and China, as outlined in its 2022 strategic blueprint (Stellantis, 2022).

Stellantis seems to have discontinued its 2025 sales share target of battery electric vehicles (BEVs) and low-emission vehicles (LEVs), including hydrogen-powered vehicles, in its global sales. Stellantis previously set a goal for 2025 to increase the share of LEVs to 44% (including 34% BEVs) for passenger cars in the EU and 37% LEV (including 14% BEV) for passenger cars and light-duty trucks in the US (Stellantis, 2023b, p. 23). While the company still tracks progress toward its 2030 target, we could no longer identify the 2025 target in the 2024 edition of Stellantis' sustainability report (Stellantis, 2024).

In 2024, Stellantis' share of LEV sales reached 15% in the EU and 11% in the US. Contrary to its sustainability report in 2023, Stellantis no longer discloses regional BEV or LEV sales, nor total LEV sales for all key markets in 2024 (Stellantis, 2023a, p. 60). We calculate that 6% of Stellantis' global sales were LEVs (Stellantis, 2025, p. 123). While the share of BEV in total sales reached 11% in the EU in 2024, Stellantis does not disclose the share of BEV sales in the US (Stellantis, 2025, p. 43). Stellantis will need to accelerate BEV sales significantly over the next five years to meet its 2030 sales targets in the EU and the US.

Stellantis currently expands its portfolio of hydrogen-powered vehicles for midsize and large vans, with uncertain efficiency. In 2023, Stellantis acquired a third of Symbio, a company specialised in hydrogen-powered engines, and plans to produce eight fuel cell hydrogen versions of midsize and large vans by the end of 2025 (Stellantis, 2024, p. 200). However, compared to BEVs, the use of hydrogen for such vehicles might require significantly more renewable electricity production (Ajanovic, 2023).

Stellantis is taking some actions to reduce emissions from purchased aluminium, steel, and batteries, but these actions' scope, timeline and impact remain unclear without specific targets and reported progress. The company claims to consider carbon footprint targets when purchasing steel for its vehicle production (Stellantis, 2024, p. 202), but neither commits to specific zero-carbon steel procurement targets nor provides public information on the scope and progress of such measures. Similar as for near-zero steel, we could neither identify targets nor specific measures for the procurement of near-zero aluminium. Although Stellantis currently conducts pilot projects for more efficient battery technology and downstream battery recycling (Stellantis, 2024, p. 220), we did not identify specific targets or information on recent progress. Stellantis has a target to reduce CO_2 emissions from purchased parts for its BEV production; however, this is not yet backed by publicly communicated and trackable measures. The company aims to cut CO_2 emissions by 40% by 2030 compared to 2021 (Stellantis, 2025, p. 43), focusing on key components like batteries, steel, and aluminium that account for most emissions. Data on the progress towards this target is not yet available for 2023 or 2024, nor does the company communicate the base year emissions for 2021 (Stellantis, 2025, p. 43). Against this backdrop, uncertainty remains on how Stellantis plans to achieve its target to reduce CO_2 emissions from purchased parts for its BEV production.

Stellantis aims to reach its 2038 'carbon net zero' pledge by reducing its vehicle emission intensity along the value chain (>90% below 2021) and neutralise remaining emissions (<10%) with carbon dioxide removals. The company intends to neutralise the remaining emissions with carbon dioxide removal (Stellantis, 2025, p. 47). To that end, Stellantis set up a dedicated CDR team and has undertaken its first investments in carbon credits for biochar, a carbon dioxide removal with medium durability (i.e. more than 100 but less than 1,000 years storage). However, biochar is not a durable CDR technology (i.e. >1'000 years storage) and should not be used to neutralise residual emissions. Stellantis could further strengthen its support for durable CDR through longer-term offtake or prepurchase agreements for durable CDR. We have not yet identified an intention by Stellantis to make a climate contribution beyond it value chain to take responsibility for its ongoing emissions *(see explanations in section 4 of NewClimate Institute, 2025a)*.

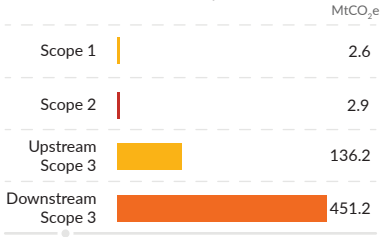
Toyota

Toyota aims to become carbon neutral by 2050 but does not communicate a specific emissions reduction target alongside this pledge. Toyota's climate strategy is critically undermined by a lack of transparency and specificity in its emission disclosure, reduction measures and pledges. Toyota falls short of several 1.5 °C-aligned transition milestones for the automobile industry, lacking targets for procurement of near-zero steel, aluminium and batteries. The company is lagging in its electrification of light-duty and heavy-duty vehicles while not comitting to a global target for electrifying its fleet.

TRANSPARENCY	INTEGRITY
Poor	Very poor

1 TRACKING AND DISCLOSURE OF EMISSIONS

Subsidiaries are included in emissions reporting, but Toyota lacks transparency on Scope 3 calculation assumptions like annual driving distance and WtW intensity.



MAJOR EMISSION SOURCES

- Use of LDVs
- Use of HDVs
- EV power consumption
- Steel
- Aluminium
- Batteries

2 GHG EMISSION REDUCTION TARGETS

Headline pledge: *Net carbon neutrality by 2050*

	TRANSPARENCY	INTEGRITY	
Short term	?		*Intensity targets for LDVs (-33.3%) and HDVs (-11.6%) for 2030 vs 2019 do not comply with 1.5°C-compatible pathways.*
Medium term	?		*Vehicle emissions intensity target -50% by 2035 vs 2019 is not aligned with 1.5°C pathways.*
Longer term	?		*Group target to become carbon neutral by 2050 without any commitment for deep emission reductions.*

3 TRANSITION TARGETS

	TRANSPARENCY	INTEGRITY	
Phase-out of internal combustion engine LDVs			*No ICE phase-out targets for LDVs in key markets like US and Japan. Targets for EU fall way short of 1.5°C decarbonisation milestones.*
Phase-out of internal combustion engine HDVs			*No ICE phase-out target for HDVs globally or in key markets.*
Efficiency of BEV's			*No target on the efficiency of BEV's identified.*
Procurement of near-zero emission steel			*No target or measures on near-zero steel procurement identified.*
Procurement of near-zero emission aluminium			*No target or measures on near-zero aluminium procurement identified.*
Low-carbon batteries			*No target on low-carbon batteries identified. Measures with limited scope towards battery recycling mentioned.*

4 RESPONSIBILITY FOR ONGOING EMISSIONS AND SCALING UP DURABLE REMOVALS

	TRANSPARENCY	INTEGRITY	
Climate contributions & offsetting practices			*No climate contributions identified.*
Support for durable carbon dioxide removals			*No support for durable CDR identified.*

EMISSION TRENDS

Toyota's absolute emissions increased between 2020 and 2023, a trend misaligned with 1.5°C pathways. A 1.5°C aligned reduction pathway requires emissions reductions in the near term. The calculation of its scope 3 emissions cannot be independently assessed due to undisclosed assumptions.

TRANSITION PROGRESS

BEV sales remain less than 1% of total LDV sales in 2023, well below the 1.5°C aligned pathway. No disclosure for sales of electrified HDVs or progress on BEV efficiency. No information is available on the procurement of near-zero steel, near-zero aluminium, or low-carbon batteries.

Transparency & integrity : 5-point rating scale:

High | Reasonable | Moderate | Poor | Very poor

Transparency refers to the disclosure of information.
Integrity refers to the quality and credibility of the approach.

? Integrity assessment not possible due to lack of available benchmarks for the transition.

Progress:
- ✔ Right direction, on track
- ✚ Right direction, off track
- ✖ Well off track
- Wrong direction, critically off track
- ? No progress identified or insufficient data
- ? No benchmarking possible.

The analysis represents the authors' interpretations of publicly available information. NewClimate cannot guarantee the factual accuracy of all information presented in this factsheet due to potential fragmentation, inconsistency and ambiguity across data sources.

Sources: *Toyota Europe (2021, 2023, 2024), Hino (2022, 2023), Hino Motors Ltd. (2025).*

Toyota

Toyota Motor Corporation (hereafter: Toyota) is one of the world's largest manufacturers of motor vehicles. The majority of the company's emissions footprint come from the use of its sold cars, vans, trucks, and buses. Vehicle use accounts for 75% of Toyota's 2023 emissions, with an additional 21% in upstream emissions from sourced materials such as steel. Toyota's climate strategy is critically undermined by a lack of transparency and specificity in its emission disclosure, reduction measures and pledges. Toyota falls short of several 1.5 °C-aligned transition milestones for the automobile industry, lacking targets for procurement of near-zero steel, aluminium and batteries. The company is lagging in its electrification of light-duty and heavy-duty vehicles while not committing to a global target for electrifying its vehicle fleet.

Key developments over the past year: We have identified limited developments and minor updates to Toyota's climate strategy since the previous analysis was published in April 2024 (NewClimate Institute, 2024, pp. 78–80). Differences in our evaluation are mainly due to further development of the methodology and evaluation criteria (NewClimate Institute, 2025a). The company remains off track in committing to or implementing key sectoral transition such as the accelerated transition towards electric vehicles, as reflected in an increase in its total scope 1, 2 and 3 emissions.

Toyota's headline carbon neutrality pledge for 2050 remains unsubstantiated, as the company provides no information on the extent to which it will reduce its own emissions and remains vague about its offsetting strategy. The company does not explain how its 2050 carbon neutrality pledge aligns with key 1.5°C-compatible decarbonisation milestones for the automobile industry, apart from vague references to the Paris Agreement's temperature limit (for example Toyota, 2024, p. 41). Toyota does not disclose any information on the extent to which it will *reduce* its own emissions and the extent to which it will rely on carbon credits to meet its 2050 carbon neutrality pledge (Toyota, 2024, p. 46). Medium-term emissions reduction targets also fall short of actions necessary for 1.5°C-aligned pathways in the automobiles sector. In 2035, the company intends to reduce 68% of its scope 1 and 2 emissions compared to 2019 levels, equivalent to a 4.8 $MtCO_2e$, or a 0.8% emissions reduction of total emissions. In the same year, it has set a 2035 carbon neutrality target which only applies to its operational emissions from plants (Toyota, 2024, p. 46). Toyota does not communicate the type of carbon credits or any integrity criteria for its future purchases of carbon credits to meet these targets, making both its medium-term and 2050 carbon neutrality pledges highly ambiguous and contentious.

The climate strategy provides only few details on the status of and commitments to transitions needed for 1.5°C-aligned climate action in the automobile sector, especially the urgent transition to electric mobility. Most prominently, Toyota does not commit to phase out internal combustion engines for light-duty vehicles (LDVs) or heavy-duty vehicles (HDVs) in key markets, falling short of action needed by 2030 and 2035. Battery electric vehicles (BEVs) made up only 3% of electrified vehicle sales in 2023 and less than 1% of total vehicle sales, excluding its subsidiary Hino (Toyota, 2024, p. 51). Toyota has communicated a production target of 1.5 million BEV vehicles annually by 2026 and 3.5 million vehicles per year worldwide by 2030 (Toyota, 2024, p. 39), but does not specify the share of the total fleet that BEVs will represent. However, according to news outlet reports in 2024 Toyota clarified that these figures were not targets but benchmarks for shareholders (Reuters, 2024), and reportedly informed suppliers of automobile parts that their production goal had been lowered to 800,000 units (Yao, 2025). In 2023, BEV sales reached 117,000, representing only 8% of the intended 2026 sales goal and 3% of the 2030 goal (Toyota, 2024, p. 51).

Only for the European Union and the United Kingdom, Toyota has set a target of 50% electric LDV sales by 2030 and to only sell zero-emission vehicles by 2035 (Toyota Europe, 2021, 2023). However, this targeted sales share for 2030 merely reflects the automobile sector's business-as-usual development for Europe, rather than a 1.5°C-compatible climate ambition going beyond this. The IEA estimates that the EV sales share for Europe will reach around 50% under its stated policies and announced pledges scenario (IEA, 2023a, p. 114), while electric LDV sales for Europe and other key markets should reach 95%–100% by 2030 to stay below the Paris Agreement's warming limit of 1.5°C (CAT, 2020, p. 27; UNFCCC, 2021, pp. 10–11; Teske *et al.*, 2022, p. 4). We could not identify any such targets for other key markets for light-duty vehicles such as Japan, the United States or China. The CEO of Toyota Motor North America stated that they were more likely to buy EV credits from other automakers than invest in expanding EVs (Vellequette, 2024). Similar to LDVs, we cannot identify any specific targets for the phase-in of zero emission heavy-duty vehicles (HDVs) by 2030 (*see Box 6.4*).

At the expense of transitioning towards fully electrified mobility, Toyota continues to develop technologies with highly uncertain efficiency and sustainability such as hydrogen, e-fuels, and biofuel. The company has expanded its lineups of electrified vehicles but continues to be a strong proponent of light-duty hybrid vehicles (e.g. Keohane and Inagaki, 2024). Recent scientific literature raises concerns on energy efficiency and sustainability for all of these technologies to effectively and efficiently decarbonise light-duty vehicle transport towards 2030 and beyond (Jaramillo *et al.*, 2022, pp. 1064–1071). E-fuel produced with hydrogen and hydrogen-based fuel cells, for example, would require much greater amounts of renewable electricity production than BEVs (Transport & Environment, 2018). Toyota claims a CO_2 emissions reduction by selling hybrid vehicles, even though its total emissions keep increasing.

Toyota does not disclose the group-level average energy efficiency of its BEVs or a target to reduce the power consumption (kWh) per vehicle-km. While Toyota acknowledges that lowered emissions from BEV vehicles depend on renewable energy sources, it does not set targets to reduce the overall energy use by reducing the power consumption (kWh) per vehicle-km (Toyota, 2024, p. 19). Toyota has a target to reduce average GHG emissions from new vehicles by more than 50% by 2035 compared to 2019 levels (Toyota, 2024, p. 23), however, this falls short of the decarbonisation needed to align with 1.5°C pathways.

The climate strategy mentions very limited details on its activities to reduce emissions from sourced upstream materials such as aluminium and steel, despite upstream emissions representing almost one fifth of its emissions across the value chain. We could not identify any measures or plans aiming to systematically reduce emissions from purchased aluminium, steel and other sourced products. Toyota did not provide information on near-zero steel procurement in response to a request for information from Greenpeace (Greenpeace East Asia, 2024).

Toyota neither communicates the CO_2 emissions from its procured or in-house produced batteries nor sets a target for low-carbon in-house battery production. Toyota aims to develop battery recycling in Japan and North America with an aim of 'promoting carbon neutrality' and has expanded its in-house battery production by acquiring battery production facilities (Toyota, 2024, p. 43). While the in-house battery production would enable Toyota to directly influence battery-related emissions through decarbonising its own scope 1 and 2 emission, we could not identify any plan or activities to address the reduction of these emissions in the future. The company provides little information on renewable procurement constructs, a key levers to reducing battery production emissions, despite claiming 28% renewable electricity in 2023, already surpassing its 25% target for 2025, provided this share is maintained (Toyota, 2024, p. 55).

Box 6.4 – Analysis of Toyota's subsidiary Hino producing heavy-duty vehicles

Toyota produces heavy-duty trucks and buses through its subsidiary Hino. Hino's revenue of USD 11.5 billion in the financial year of 2024 (April 2023 to March 2024) accounts for around 3% of Toyota's total revenue over the same period (Hino Motors Ltd., 2024, p. 1). Hino has not published a sustainability report since 2021, but publishes ESG information on a Japanese language website (Hino Motors Ltd., 2025a). In 2023, its total emissions amounted to around 48 $MtCO_2e$, of which around 89% originate in the use phase of sold heavy-duty vehicles. Toyota includes Hino's downstream emissions from the use of HDVs in its group-wide emissions disclosure for 2022 and 2023 *(Toyota, 2024, see footnote 4 of Table D)*. In 2025, Hino was levied a USD 1.6 billion fine after pleading guilty to false and fraudulent data on its CO_2 emissions test data in California (Smith, 2025).

The lack of detailed information on base year emissions data or the link between group- and subsidiary-level intensity targets raises questions about Hino's target setting for 2030 and beyond. Similar to Toyota's group-level pledge, Hino's carbon neutrality target for 2050 lacks substantiation, with no information provided on the extent to which the carbon neutrality target is to be achieved through emission reductions as opposed to offsetting (Hino, 2022, 2023). In the period leading up to 2030, Toyota and Hino commit to different intensity reduction targets for the heavy-duty vehicles' use phase. Toyota aims for an 11.6% reduction below 2019 levels (Toyota, 2024, p. 47), while Hino targets a 40% reduction below 2013 levels (Hino Motors Ltd., 2025b). We could neither identify any explanation on how these targets relate to each other nor the disclosure of any base year emissions data for Hino's scope 3 emissions in 2013. Additionally, we cannot identify specific targets for the phase-in of zero-emission heavy-duty vehicles by 2030, neither at the group level by Toyota nor at the subsidiary level by Hino.

Hino provides limited information on its implemented or planned measures to achieve its emission reduction targets. We cannot identify targets for the phase-in of zero-emission heavy-duty vehicles by 2030, nor the expansion of related charging infrastructure (for example in Hino, 2022, 2023). Recent literature indicates that globally 30–37% of heavy-duty trucks should be battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs) by 2030 to align with the 1.5°C Paris Agreement temperature limit (UNFCCC, 2021, pp. 10–11; Mission Possible Partnership, 2022, p. 40; Boehm *et al.*, 2023, pp. 77–78; IEA, 2023b, pp. 88, 93). Hino also does not communicate any information on measures to address emissions related to the procurement of upstream materials such as low-carbon steel or aluminium.

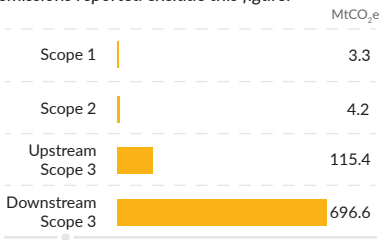
Volkswagen Group

Volkswagen aims to become carbon neutral by 2050 but continue to remain vague on its explicit emissions reduction target alongside this pledge. The company sets regional electrification targets for light-duty vehicles by 2030. These sales targets fall critically short of 1.5°C-aligned milestones, and their implementation is lagging. Volkswagen's subsidiary Traton aims for around 50% zero-emission heavy-duty vehicle sales by 2030, likely aligning with Paris Agreement goals, though sales have reached less than 1% as of 2024. The climate strategy offers limited details on commitments and measures for near-zero steel, aluminium, and batteries, which are critical for the company's 1.5°C-aligned tranistion.

	TRANSPARENCY	INTEGRITY
	Poor	Poor

1 TRACKING AND DISCLOSURE OF EMISSIONS

Volkswagen reports scope 3 emissions from Traton and MAN Energy Solutions for the first time in 2024 (403 $MtCO_2$), but no prior data disclosed and total emissions reported exclude this figure.



2 GHG EMISSION REDUCTION TARGETS

Headline pledge: *Net carbon neutrality by 2050*

		TRANSPARENCY	INTEGRITY
Short term	?	*2030 scope 3 category 11 target (-30% below 2018 by 2030), falls short of 1.5°C-aligned decarbonisation milestones. No group-level target set for upstream scope 3 emissions.*	
Medium term	?	*New net carbon neutrality target for 2040 only covers scope 1 and 2 emissions (90% by 2040 below 2018). No targets identified for scope 3 emissions responsible for 98% of all emissions.*	
Longer term	? (90% reduction below an undisclosed base year)	*The group aims to become carbon neutral by 2050 and intends to keep offsetting below 10%, but it does not specify an emissions reduction target against a base year.*	?

EMISSION TRENDS

The emissions time series is incomplete due to disclosure gaps in subsidiary emissions from HDV use-phase emissions before 2024 (43% of 2024 emissions). LDV use-phase emissions (36% of 2024 emissions) have fluctuated slightly over the past five years but have plateaued rather than decreased. This trend falls short of the reductions needed to align with a 1.5°C pathway.

3 TRANSITION TARGETS

MAJOR EMISSION SOURCES			TRANSPARENCY	INTEGRITY
Use of LDVs	Phase-out of internal combustion engine LDVs	*No global ICE phase-out target. Targets for electric LDV sales to reach 70% in Europe by 2030 and at least 50% in China and the US fall short of 1.5°C benchmarks for these markets.*		
Use of HDVs	Phase-out of internal combustion engine HDVs	*No global ICE phase-out target for HDVs identified. Target of ~50% zero-emission vehicles in EU27+3 region, USA, and Canada by 2030 aligns with regional 1.5°C-aligned milestones.*		
EV power consumption	Efficiency of BEV's	*No target or measures to reduce EV power consumption identified.*		
Steel	Procurement of near-zero emission steel	*No group-level target on near-zero steel procurement identified but MoUs signed with Tyssenkrupp, Salzgitter and Vulcan Green Steel. Subsidiary SCANIA targets 10% of low-carbon steel globally by 2030.*		
Aluminium	Procurement of near-zero emission aluminium	*No group target on near-zero aluminium procurement identified. No forward-looking measures, apart from small-scale pilots.*		
Batteries	Low-carbon batteries	*No group-level target on low-emission batteries identified. Some measures exist to reduce emissions of its battery-producing subsidiary PowerCo and to mandate binding supplier targets.*		

TRANSITION PROGRESS

In 2024, BEV sales for LDVs remained at around 8% and did not increase compared to 2023. Electrified HDVs made up 0.5% of Traton sales (excl. MAN TGE), likely below what is needed for 1.5°C-aligned pathways.

No progress disclosed on near-zero steel, aluminium, or BEV efficiency.

Goals for low-CO_2 battery production and supplier CO_2 limits lack detail, preventing assessment of ambition.

4 RESPONSIBILITY FOR ONGOING EMISSIONS AND SCALING UP DURABLE REMOVALS

		TRANSPARENCY	INTEGRITY
Climate contributions & offsetting practices	*No climate contributions found. 6.7 $MtCO_2e$ credits (2024) used for product offset claims. Joint venture with ClimatePartner develops land-based CDR.*		
Support for durable carbon dioxide removals	*No support for durable CDR identified.*		

Transparency & integrity : 5-point rating scale:

High | Reasonable | Moderate | Poor | Very poor

Transparency refers to the disclosure of information.
Integrity refers to the quality and credibility of the approach.

? Integrity assessment not possible due to lack of available benchmarks for the transition.

Progress:
- ✔ Right direction, on track
- + Right direction, off track
- ✖ Well off track
- Wrong direction, critically off track
- ? No progress identified or insufficient data
- ? No benchmarking possible.

The analysis represents the authors' interpretations of publicly available information. NewClimate cannot guarantee the factual accuracy of all information presented in this factsheet due to potential fragmentation, inconsistency and ambiguity across data sources.

Sources: *Volkswagen (2023c, 2023a, 2023b, 2024a, 2024b, 2025); Scania (2024); Traton (2024); Volkswagen ClimatePartner (2024).*

Volkswagen Group

Volkswagen Group (hereafter: Volkswagen) is one of the world's largest manufacturers of motor vehicles. Most of the company's 2024 emissions originate in the use of its sold cars, vans, trucks, and buses (73%) and sourced materials (21%) such as steel. Over the last few years, the company has shown limited progress in aligning its group-level climate targets with the latest scientific and voluntary standards. The company aims to become carbon neutral by 2050 although it does not explicitly communicate a goal for emissions reductions to meet this target. Volkswagen's climate strategy provides limited details on commitments and measures for near-zero steel, aluminium and batteries, necessary to align with a 1.5°C transition pathway in the automotive sector. While it sets regional targets for light-duty vehicle electrification in key markets by 2030, these fall short of decarbonisation milestones for 1.5°C-aligned milestones for the automobile industry and implementation is lagging. Volkswagen's subsidiary Traton aims for around 50% of heavy-duty vehicle sales to be zero-emission by 2030, likely in line with 1.5°C Paris Agreement targets, although progress towards this target remains slow.

Key developments over the past year: We have identified several updates to Volkswagen's climate strategy since our analysis published in April 2024 (NewClimate Institute, 2024, pp. 81–83). Differences in our evaluation also reflect the development of methodology and evaluation criteria (NewClimate Institute, 2025a). In 2024, Volkswagen published emissions disclosures on its subsidiaries Traton and MAN Energy Solutions, which manufacture all its heavy-duty vehicles like trucks and buses, for the first time. While this disclosure nearly doubled its reported total emissions in 2024, the emissions remain excluded from aggregate figures. The new changes are in the same magnitude with the proxy estimates of this emissions source which we previously published (NewClimate Institute, 2024, pp. 81–83). The company also introduced a 2040 net-zero target for scope 1 and 2 emissions, which accounted for 1% of its value chain emissions in 2024. While Volkswagen provided more detail on its 2050 carbon neutrality goal, the target alignment with the 1.5°C pathway remains unclear due to the absence of a base year for emissions reductions.

Volkswagen's 2030 targets for electric light-duty vehicle sales in key markets fall short of 1.5°C-aligned climate action in the automobile sector. Volkswagen does not communicate a global target for the phase-out of internal combustion engines for LDVs. In 2023, Volkswagen communicated a target for electric light-duty vehicle sales to reach 70% in Europe and at least 50% in China and the US by 2030 (Volkswagen, 2023c, p. 8). However, the latest annual report does not mention any regional electric LDV sales targets, making their status uncertain. Moreover, the targets fall short of the electric LDV sales required in these markets by 2030, which should reach 95–100% to meet the Paris Agreement's 1.5°C target (CAT, 2020, p. 27; UNFCCC, 2021, pp. 10–11; Teske *et al.*, 2022, p. 4). Unlike several other automobile manufacturers in the US and Germany, Volkswagen has not signed the COP26 declaration committing to only sell electric vehicles by 2035 (COP26 Presidency, 2021; A2Z Coalition, 2025).

The absence of a specific timeline for the complete the phaseout of internal combustion engines leaves a major gap in the company's climate strategy. Progress towards increasing electric vehicle sales remains limited. Volkswagen reports that in 2024, BEVs made up only 8.3% its sales, unchanged from the previous year. While the company projects electrified vehicles to comprise 50% of global sales by 2030 (Volkswagen, 2025, p. 239), it is unclear how it plans to scale up its sales to meet this ambition within five years. Compared to 2023, the volume of electric vehicle sales decreased by 4.2% in Europe (Volkswagen, 2025, p. 103) and by 30.5% in the US (Volkswagen, 2025, p. 105). Although total sales by Volkswagen in China decreased by 10.3%, electric vehicle sales increased by 8.2% (Volkswagen, 2025, p. 105). For heavy-duty vehicles, Volkswagen's subsidiary Traton has set a new target for around 50% of sales to be zero-emission vehicles by 2030, which likely aligns with 1.5°C Paris Agreement compatible milestones. However, progress towards implementing the HDV transition is lagging *(see Box 6.5)*.

While Volkswagen has further specified its 2050 carbon neutrality target, it remains unlikely that it is in line with the Paris Agreement 1.5°C temperature limit. Volkswagen has provided some limited additional details on its carbon neutrality target, initially announced in 2019. It now communicates 'the goal of basing its carbon offsetting actions on the requirements of the SBTi and the GHG Protocol and to limit their share to below 10%' (Volkswagen, 2025, p. 297). As Volkswagen neither specifies the base year nor the base year emissions for the 10% offset limit, we cannot independently quantify the targeted absolute emissions reductions. Our analysis maintains that the company lacks a clear emissions reduction target for 2050, critically undermining its carbon neutrality goal. Even without clarity on targeted emissions reductions, the carbon neutrality target remains insufficient without any meaningful targets between 2020 and 2050 and transition plan to electrify light-duty vehicles significantly before 2050.

The climate strategy provides limited details on the scope, timeline, and intended impact of Volkswagen's activities to reduce emissions of purchased upstream materials such as steel and aluminium, which present 21% of its 2024 emissions across the value chain. The company does not communicate a group-wide goal on procurement for low-emissions steel. However, it communicates some forward-looking measures to address these emissions. For example, in 2024, Volkswagen signed a Memorandum of Understanding (MoU) to supply the company with low-carbon steel with ThyssenKrupp Steel from 2028 (Volkswagen, 2024a) and with Vulcan Green Steel from 2027 (Volkswagen, 2024b). Additionally, Volkswagen has partnered with Salzgitter AG since 2022 to become one of its first customers of low-CO_2 steel with a delivery start from the end of 2025 (Volkswagen, 2023b, pp. 42–43). The status of this partnership is unclear as there are no updates on its progress in the recent sustainability report. For near-zero aluminium, Volkswagen does not communicate a target or future actions and only mentions small-scale measures at the brand level (Volkswagen, 2025, p. 335).

Volkswagen does not communicate the CO_2 emissions from its procured or in-house produced batteries nor sets a specific target to reduce these emissions. However, the company communicates some measures to address these emissions through its subsidiary PowerCo and plans to set binding CO_2 targets for suppliers of batteries (Volkswagen, 2025, pp. 281–282). Despite these steps, the lack of details and specific milestones hinders an independent assessment of their level of ambition and comprehensiveness.

Despite recent integrity issues with carbon credits purchased through the voluntary carbon market, Volkswagen continues to make present-day carbon neutrality claims for specific production lines based on offsetting. In 2024, the company purchased credits of 6.7 $MtCO_2e$ and plans to continue this until the end of 2025 (Volkswagen, 2025, p. 283). Volkswagen's reliance on carbon credits to make product-specific carbon neutrality claims poses concerns due to the risks around offsetting claims. In 2022, Volkswagen acquired 20% of its total 5.9 $MtCO_2e$ carbon credits from the Kariba REDD+ project in Zimbabwe (Volkswagen, 2023a). However, this project received allegations of inflated climate benefits and due diligence issues, prompting South Pole, one of the project developers, to terminate its role in October 2023 (Elgin and White, 2023).

Volkswagen shares little information on the development of its own carbon credits despite recent reports of human rights violations. In 2022, Volkswagen formed a joint venture with ClimatePartner to develop projects to issue carbon credits from biological carbon dioxide removal (Volkswagen ClimatePartner, 2024). The venture focuses on forest and land use projects, operating 20 projects across 10 countries (Volkswagen ClimatePartner, 2025). However, it presents little to no details on individual project funding amount, additionality, permanence or estimated emissions impact. One of its projects, a soil carbon credit project in Northern Tanzania, has been criticised for violating the human rights of indigenous people, in a report published by the Maasai International Solidarity Alliance (Business & Human Rights Resource Centre, 2025; Volkswagen Climatepartner, 2025). This case highlights the potential negative social consequences of offsetting projects and underscores the continued need to prioritise actual emissions reductions over offsetting.

Box 6.5 – Analysis of Volkswagen Group's subsidiary Traton producing heavy-duty vehicles

Volkswagen produces heavy-duty trucks and buses through its subsidiary Traton. Traton manages four vehicle brands: Scania, MAN, International Motors (previously Navistar International Corporation) and Volkswagen Truck & Bus. In 2024, Traton generated revenue of EUR 46.2 billion (ca. 49.9 USD billion) representing around 14% of Volkswagen's total revenue (Volkswagen, 2025). For the first time, Volkswagen disclosed one year of Traton's consolidated up- and downstream scope 3 emissions in its annual emissions disclosure, nearly doubling its total emissions for 2024 (Volkswagen, 2025, pp. 292–293).

Traton's 50% zero-emission vehicle target aligns with 1.5°C Paris Agreement-compatible milestones for heavy-duty vehicles by 2030, however, progress on achieving these goals is lagging. Traton communicates a target of around 50% of annual new sales to be zero-emission vehicles in the EU27+3 region, the US, and Canada by 2030 (Traton, 2024, p. 117). This commitment would align with the 1.5°C Paris Agreement-aligned milestones for downstream scope 3 emissions of heavy-duty vehicle manufacturers, identified in existing literature (UNFCCC, 2021, pp. 10–11; Mission Possible Partnership, 2022, p. 40; Boehm *et al.*, 2023, pp. 77–78; IEA, 2023b, pp. 88, 93). Accordingly, global 1.5°C-compatible shares for heavy-duty trucks should reach 30–37% of BEVs and fuel cell electric vehicles (FCEVs) by 2030 (UNFCCC, 2021; Boehm *et al.*, 2023; IEA, 2023b). Despite this alignment, progress toward implementation remains limited, with overall sales of battery electric HDVs across all Traton brands accounting for only 0.5% of sales in 2024, down from 0.6% in the previous year (Traton, 2024, p. 42). These figures exclude MAN TGE vans, which represent approximately 8% of total unit sales. The progress towards HDV electrification is not in line with 1.5°C Paris Agreement-compatible decarbonisation milestones for heavy-duty trucks.

Apart from Tarton's overarching target, each brand additionally communicates its own targets and progress separately. MAN aligns with Traton's target by pledging that 50% of all new trucks will be equipped with zero-emission power units by 2030 but does not communicate progress towards this target achieved by 2025 (MAN Truck & Bus, 2025). Scania is a member of the First Movers Coalition's trucking commitment, which requires it to ensure that at least 30% of its heavy-duty and 100% of its medium-duty new truck purchases are zero-emission vehicles by 2030 (First Movers Coalition, 2025a). Despite this, Scania communicates falling short on its electric vehicle rollout and now has a goal to reduce use-phase CO_2e/km from vehicles produced in 2032 by 45% compared to 2022. However, the company has acknowledged falling behind in its electric vehicle rollout. As a result, Scania has set a revised target to reduce use-phase CO_2e/km from vehicles produced in 2032 by 45% compared to 2022 levels (Scania, 2024, p. 23). Additionally, the company has reported that it is not on track to meet its scope 3 emissions intensity target to reach a 20% reduction in CO_2e/km by 2025 compared to 2015. (Scania, 2024, p. 36). International Motors neither mentions any electric vehicle targets nor progress achieved (International Motors, 2025).

Some of Traton's brands have started to implement measures to reduce emissions from upstream materials, although the measures' scope and intended impact remain uncertain. As a member of the First Mover Coalition, Scania aims to procure at least 10% of low-carbon steel by 2030 (FMC, 2024). The truck maker also commits to procure 100% green purchases of steel, batteries, aluminium and cast iron for European operations by 2030 (Scania, 2024, pp. 23, 146), but does not substantiate the meaning of 'green purchases' in detail. This lack of clarity creates uncertainty about the target's potential impact. Since 2023, Scania has had a green steel agreement with its largest steel supplier, SSAB to buy hydrogen-made steel from 2026 (Michel, 2024) and a cooperation with H2 Green Steel (Volkswagen, 2023b, p. 43). There is no clear communication on measures by Traton's other brands.

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Annex 6A – Comparison to other assessors and validators

The comparison of the *Corporate Climate Responsibility Monitor*'s (CCRM) integrity assessments for short-, medium-, and long-term emission reduction targets with the Science Based Target initiative's validations and assessments by the Transition Pathway Initiative, the MSCI Net Zero Tracker and the Transition Arc.

Table 6.3: Comparison between assessment for emission reduction targets by (1) the Corporate Climate Responsibility Monitor (CCRM) 2025, (2) the Science Based Targets initiative (SBTi), (3) the Transition Pathway Initiative, (4) the MSCI Net Zero Tracker and (5) Transition Arc; all as of July 2025. Companies listed in alphabetical order for each sector.

COMPANY	CCRM 2025					SBTi	SBTi	TPI	TPI	TPI	MSCI*	WBA** *via Transition Arc*	Planet Tracker
	Overaerching	*GHG Targets*	*Short-term (by 2030)*	*Medium-term (2031-2040)*	*Long-term (beyond 2041)*	*Near-term*	*Net zero*	*Carbon Performance Alignment 2027*	*Carbon Performance Alignment 2035*	*Carbon Performance Alignment 2050*		*Targets*	*Climate alignment*
Ford	*Poor*	*Very poor*	*Very poor*	*Very poor*	*Very poor*	*1.5°C/Well-below 2°C*	*Commitment removed*	*Not Aligned*	*National Pledges*	*1.5 Degrees*	*1,8°C*	*C*	
GM	*Poor*	*Very poor*	*Very poor*	*Very poor*	*N/A*	*1.5°C/Well-below 2°C*	*Commitment removed*	*National Pledges*	*National Pledges*	*1.5 Degrees*	*2,2°C*	*D*	
Stellantis	*Moderate*	*Moderate*	*Moderate*	*Reasonable*	*N/A*			*National Pledges*	*Below 2 Degrees*	*1.5 Degrees*	*1,6°C*	*E*	
Toyota	*Very poor*	*Very poor*	*Very poor*	*Very poor*	*Very poor*	*1.5°C/Well-below 2°C*		*National Pledges*	*Below 2 Degrees*	*1.5 Degrees*	*2,0°C*	*D*	
Volkswagen	*Poor*	*Poor*	*Poor*	*Very poor*	*Very poor*	*1.5°C/2°C*		*Not Aligned*	*National Pledges*	*1.5 Degrees*	*2,1°C*	*E*	

** The MSCI Net Zero Tracker discontinued the public disclosure on its website for single company evaluations in the first half of 2025. Evaluations presented date back to March 2025 before this change in policy.*

*** The Transition Arc assessments use analysis by the World Benchmarking Alliance (WBA) as a default option to assess the alignment of emissions targets. The user can further switch to use Transition Pathway Initiative's (TPI) assessments of 2027, 2035 and 2050.*

Key issues for difference with the Science Based Target initiative (SBTi) validations

The SBTi is currently in the process to revise its Corporate Net Zero Standard with a first draft published in March 2023 (SBTi, 2025b). Some of the differences identified below might be addressed in the next version of the standards, which is intended for publication within the next months.

- **Legacy issues:** The SBTi continues to list outdated validations on their website, which are subsequently and continuously used by companies in their sustainability reporting. In addition, SBTi list 'well-below 2°C' validations for the scope 3 emissions intensity targets for light duty-vehicles for automobile manufacturers such as **Volkswagen**, **Toyota**, **GM** and **Ford** despite indefinitely pausing the methodology's use due to its 1.5°C-incompatibility since March 2022 (SBTi, 2022). None of these companies have been validated under SBTi Land Transport guidance for automobile manufacturers (SBTi, 2024b), released in October 2024. This new guidance requires a "phase out of new ICE cars and vans by 2035 in leading markets and by 2040 globally" (SBTi, 2024b, p. 17). Our analysis for Volkswagen and Toyota, for example, shows that neither of the two companies sets ICE phase-out targets in line with these requirements.
- **Exclusion of upstream scope 3 emissions:** SBTi validations for automobile manufacturers currently exclude all upstream scope 3 emissions, including purchased materials such as steel and aluminium (scope 3 category 1).

Key issues for difference with the Transition Pathway Initiative (TPI)

- **Allowance of an undefined amount of carbon credits to meet longer-term net-zero and carbon neutrality targets:** TPI assumes longer-term net-zero and carbon neutrality targets to reach an emissions intensity leading to a (targeted) emissions intensity of zero in the respective target year. To the best of our understanding of the assessment and the assessment methodology (Dietz, Chiu and Sokol-Sachs, 2023), this is regardless of whether a company has specified (or not) to what degree it will actually reduce emissions within the respective target year. This is particularly relevant to explain the differences for the carbon neutrality and net-zero targets for **Volkswagen**, **Toyota**, and **Ford** (all by 2050) and **GM** (2040).

Key issues for difference with the MSCI Net Zero Tracker assessments

- **Lack of disclosure on method and underlying data:** The MSCI Net Zero Tracker does not disclose specific data and methodological approaches on emission reduction targets going into its temperature alignment assessments (MSCI ESG Research LLC, 2024). For this reason, we cannot understand any differences between MSCI's assessments for companies' short-, medium-, and long-term targets.

Key issues for difference with the Transition Arc (beta) assessments

- We currently cannot explain differences with the CCRM 2025 integrity assessments for targets due to the TransitionArc's beta version, for example stating that Stellantis has not set any public emissions targets as of 16th of June 2025. The Transition Arc (beta) assessments use analysis by the World Benchmarking Alliance (WBA) as a default option to assess the alignment of emissions targets (Climate Arc, 2025). The user can further switch to use Transition Pathway Initiative's (TPI) assessments of 2027, 2035 and 2050.

Annex 6B – Target Integrity assessments

	Short term *(now-2030)*	**Medium term** *(2031-2040)*	**Long term** *(2041 and beyond)*
1 – What are the targets and what do they mean in terms of emission reductions?			
Volkswagen	By 2030, compared to 2018 • scope 1+2: reduce production-related CO_2e emissions by 50.4% • scope 2: procure 100% of external electricity from carbon-neutral sources at all sites • scope 3: reduce CO_2e emissions in the use phase of passenger cars and light commercial vehicles (category 11) by 30%	By 2040, scope 1+2: global production sites are to achieve net carbon neutrality by reducing greenhouse gas emissions by 90% compared to 2018	By 2050, scope: 1+2+3: aim to be a net carbon-neutral company, with the intention to keep offsetting below 10% of emissions
Stellantis	By 2030, compared to 2021 • scope 1, 2 & 3: Reduce absolute GHG emissions by 30% • scope 1 & 2: Reduce absolute GHG emissions by 75% • scope 1, 2 & 3: Reduce GHG emissions intensity per vehicle by 50%	By 2038: Achieve carbon net zero, with less than 10% compensation for the remaining emissions.	No target identified.
GM	By the end of 2025, scope 2: source 100% renewable electricity for U.S. sites	By 2035, compared to 2018 • scope: 1+2: reduce GHG emissions from operations by 72% • scope: 2: source 100% renewable electricity globally • scope: 3: reduce GHG emissions from the use of sold products by 51% per vehicle kilometre • scope: 3: eliminate tailpipe emissions from new U.S. light-duty vehicles By 2040: Carbon neutrality in scope 1 & 2, and scope 3 category 11	No target identified.
Ford	By 2023, scope: 1+2: reduce absolute GHG emissions by 18% from all manufacturing locations compared to 2017; strategy to be extended in 2024	By 2035 • scope 1 & 2: Reduce emissions by 76% compared to 2017 levels. • scope 3: Reduce GHG emissions from category 11 (passenger vehicles) by 50% per vehicle compared to 2019 levels.	By 2050: Carbon neutrality group-wide and zero CO_2 emissions from corporate activities and production plants (scope 1).
Toyota	By 2030, compared to 2019 • scope 1, 2 & 3: Reduce vehicle life-cycle emissions intensity by 30% • scope 3: Reduce vehicle use-phase emissions intensity by 33.3% for light-duty vehicles (LDVs) and 11.6% for heavy-duty vehicles (HDVs)	By 2035 • scope 1 & 2: Reduce emissions by 68% compared to 2019 levels. • scope 1: Reduce emissions to carbon neutrality, with offsets allowed. • scope 3: Reduce vehicle use-phase emissions intensity by 50% compared to 2019 levels.	By 2050: Carbon neutrality group-wide and zero CO_2 emissions from corporate activities and production plants (scope 1).

	Short term *(now-2030)*	**Medium term** *(2031-2040)*	**Long term** *(2041 and beyond)*
2 – What do the targets mean in terms of emission reductions?			
Volkswagen	?	?	? (90% reduction below an undisclosed base year)
	We cannot independently quantify Volkswagen's 2030 intensity targets for scope 3 emissions in absolute terms. The 2030 absolute emissions reduction target for scope 1 and 2 is equivalent to a 3% emission reduction by 2030 below 2019 levels across the entire value chain	Volkswagen's 2040 absolute emissions reduction target for scope 1 and 2 is equivalent to less than 1% emission reduction below 2019 levels across the entire value chain.	While Volkswagen states its intention to keep offsetting below 10% of total emissions, it does not specify against which base year. For this reason, we cannot quantify the proposed reduction below a 2019 base year.
Stellantis	30% by 2030 (below 2021)	>90% intensity across all scopes by 2038 (below 2021)	N/A
	Following the recent merger, it is not possible to recalculate Stellantis' emission reduction targets using 2019 as the base year.	Following the recent merger, it is not possible to recalculate Stellantis' emission reduction targets using 2019 as the base year.	No target within the timeframe identified.
GM	?	?	N/A
	Scope 2 target of 100% renewable electricity by 2025 only applies to US sites and is therefore <1% of total emissions across the value chain. It is reported as achieved however, it is unclear whether it is met according to market-based or location-based accounting.	We cannot independently quantify GM's 51% reduction intensity targets for scope 3 emissions by 2035 in absolute terms.	No target within the timeframe identified.
Ford	?	?	?
	Ford's 2023 target to reduce absolute Scope 1 and 2 GHG emissions by 18% from all manufacturing locations by 2023, measured from a 2017 baseline represents only an ~0.2% reduction.	We cannot independently quantify Ford's 2035 intensity targets for scope 3 emissions in absolute terms. The 2035 absolute emissions reduction target for scope 1 and 2 is equivalent to less than 1% emission reduction below 2019 levels across the entire value chain	Ford does not commit to an emissions reduction target alongside its 2050 carbon neutrality pledge. For this reason, we cannot quantify potential emissions reductions.
Toyota	?	?	?
	We cannot independently quantify Toyota's interim intensity targets in terms of absolute emission reduction by 2030. Toyota has disclosed to CDP that its 2030 target for LDVs is equivalent to an estimated 23.1% reduction of absolute emissions from scope 3 category 11 and its 2030 target for HDVs is equivalent to an estimated 0.5% (Toyota, 2023c). This CDP disclosure is not publicly available and the assumptions that underpin the estimate are not clear (e.g., for sales volumes assumed in 2030).	We cannot independently quantify Toyota's interim intensity targets in terms of absolute emission reduction by 2035.	Toyota does not commit to a deep emissions reduction target alongside its 2050 carbon neutrality pledge and related scope-specific carbon neutrality pledges.

	Short term *(now-2030)*	**Medium term** *(2031-2040)*	**Long term** *(2041 and beyond)*
3 – Is this emission reduction commitment in line with 1.5°C-compatible trajectories or benchmarks for the sector?			
Volkswagen	Poor	Very poor	?
	Volkswagen's 2030 interim targets do not meet the 1.5°C Paris Agreement-aligned milestones for automobile manufacturers' scope 3 emissions from the use of light-duty vehicles (LDVs), as identified in existing literature.	No targets have been set that address scope 3 emissions which cover 98% of its total value chain emissions, is therefore not aligned with 1.5°C pathways.	Volkswagen aims to achieve carbon neutrality by 2050 and states its intention to keep offsetting below 10%. However, it does not communicate a 90% emissions reduction target against a base year. While this is a step in the right direction, it is not possible to assess the integrity of its 2050 carbon neutrality pledge against benchmarks without being able to calculate the emissions reductions.
Stellantis	Moderate	Reasonable	N/A
	Targeted emission reductions for most of the company's major emission sources are nearly in line with 1.5°C compatible trajectories or benchmarks for the sector: The EU target is in line with 1.5, but not the US and other country targets.	Targeted emission reductions for most of the company's major emission sources are nearly in line with 1.5°C compatible trajectories or benchmarks for the sector: The EU target is in line with 1.5, but not the US and other country targets.	No target within the timeframe identified.
GM	Very poor	Very poor	N/A
	No emissions reduction targets towards 2030, only regional scope 2 target to source 100% renewable electricity for U.S. sites by the end of 2025.	2040 carbon neutrality only covers global products and operations (scope 1 & 2, and scope 3 category 11) without an emissions reduction target. 2035 target to reduce scope 3 category 11 by 51% per vehicle km below 2018 levels, is not aligned with 1.5°C-compatible pathways.	No target within the timeframe identified.
Ford	Very poor	Very poor	Very poor
	Short-term target does not cover scope 3 emissions. Scope 1&2 reduction of 18% by 2023 vs 2017 is not sufficient to meet 1.5°C pathways.	Vehicle emissions intensity reduction targets of 50% by 2035 vs 2019 is not aligned with 1.5°C pathways.	No deep emission reduction commitment alongside carbon neutrality pledges by 2050 covers 95% of emissions.
Toyota	Very poor	Very poor	Very poor
	No 1.5°C-aligned phaseout dates for ICEs. Intensity targets for life cycle and use-phase emissions not quantifiable.	No 1.5°C-aligned phaseout dates for ICEs. Target for scope 1 & scope 2 equals a 1% reduction across the value chain. The target to reduce vehicle use-phase emissions intensity by 50% compared to 2019 levels is not aligned with 1.5°C pathways.	No emission reduction commitment alongside carbon neutrality pledge by 2050. No 1.5°C-aligned phaseout dates for ICEs.

Annex 6C – Key transition integrity assessments

	ZEV phase-in for LDVs	Procurement of near-zero emission steel	Procurement of near-zero emission aluminium	Low-carbon batteries	Efficiency of BEV's	ZEV phase-in for HDVs
1 – What transition targets does the company set?						
Volkswagen	No global ICE phase-out target identified. Regional targets for electric LDV sales to reach 70% in Europe by 2030 and at least 50% in China and the US.	No group-level target on near-zero steel procurement identified but MoUs signed with Thyssenkrupp, Salzgitter and Vulcan Green Steel. Subsidiary SCANIA targets 10% of low-carbon steel globally by 2030.	No group target on near-zero aluminium procurement identified. Subsidiary target of 100% green aluminium for Europe by 2030 (Scania) with little substantiation of "green". No forward-looking measures beyond small-scale pilots.	No group-level target on low-emission batteries identified. Some measures to reduce emissions from PowerCo's battery production and to mandate binding supplier targets.	No targets or measures identified.	No global ICE phase-out target for HDVs identified. Regional target of ~50% zero-emission vehicles in EU27+3, US, and Canada by 2030.
Stellantis	100% BEV passenger car sales in EU by 2030 50% BEV passenger car sales in US by 2030, 100% by 2038 (V206) '75 BEV models by 2030 Sale of 5 million BEV 100% of nameplates with BEV offering in the EU & US by 2030. Currently: 44% and 24% respectively	No targets or measures identified.	No targets or measures identified.	No targets or measures identified.	No targets or measures identified.	N/A
GM	GM is a signatory of the COP26 declaration, committing to only sell 50% EV sales in the US by 2030 and 100% globally by 2035	At least 10% of the crude steel used in manufacturing the sheet steel products that GM directly purchases for U.S., Canada and Mexico manufacturing facilities will be near-zero emissions by 2030, if prices are no more than 20% higher than current commercial prices and/or as approved by GM leadership.	At least 10% of the primary aluminium used in manufacturing the sheet aluminium products GM directly purchases for U.S., Canada and Mexico manufacturing facilities will be low carbon by 2030, if prices are no more than 20% higher than current commercial prices and/or as approved by GM leadership.	No targets or measures identified.	No targets or measures identified.	N/A
Ford	2030: Target 40-50% U.S. EV vehicle sales 2035: Work toward 100% zero-emissions cars and vans in leading markets (A2Z) 2040: Work toward 100% zero-emissions cars and vans globally (A2Z)	Ford has pledged to purchase at least 10% low-carbon aluminium and near-zero steel by 2030.	Ford has pledged to purchase at least 10% low-carbon aluminium and near-zero steel by 2030.	No targets or measures identified.	No targets or measures identified.	N/A
Toyota	Europe: 50% ZEV by 2030; UK only sell zero-emission vehicles by 2035	No targets or measures identified.	No targets or measures identified.	No targets or measures identified.	No targets or measures identified.	No targets or measures identified.

	ZEV phase-in for LDVs	Procurement of near-zero emission steel	Procurement of near-zero emission aluminium	Low-carbon batteries	Efficiency of BEV's	ZEV phase-in for HDVs
2 – Are the transition targets in line with 1.5°C-compatible trajectories or benchmarks for the sector?						
Volkswagen	Poor	Poor	Very poor	Poor	Very poor	Moderate
	Lack of global ICE phase-out target for LDVs is misaligned with 1.5°C benchmarks. Regional targets fall short of 1.5°C benchmarks for these markets.	Lack of group target on near-zero steel procurement is misaligned with 1.5°C-aligned measures. The subsidiary target and forward-looking measures indicate that some action is being taken.	Lack of group target and significant measures on near-zero aluminium procurement is misaligned with 1.5°C-aligned action.	Lack of group-level target on low-emission batteries is misaligned with 1.5°C-aligned action. Measures to reduce emissions of its battery-producing subsidiary PowerCo and to mandate binding supplier targets indicate that some action is being taken.	Lack of target or measures to reduce EV power consumption is misaligned with 1.5°C-aligned action.	Lack of global ICE phase-out target for HDVs is misaligned with 1.5°C benchmarks. Target of ~50% zero-emission HDV vehicles in EU27+3 region, US, and Canada by 2030 aligns with the 1.5°C-aligned milestones for these markets.
Stellantis	Moderate	Very poor	Very poor	Very poor	Very poor	
	Stellantis' EU EV target (100% by 2030) aligns with 1.5°C, but not its US EV target (50% by 2030, 100% by 2038). Stellantis' EV sales targets do not cover all its sales. Details on planned measures are missing.	The company sets no targets or significant measures for the key transition.	The company sets no targets or significant measures for the key transition.	The company sets no targets or significant measures for the key transition.	The company sets no targets or significant measures for the key transition.	
GM	Moderate	Moderate	Moderate	Very poor	Very poor	
	GM is a signatory of the COP26 declaration, committing to only sell 50% EV sales in the US by 2030 and 100% globally by 2035. It also has the goal to eliminate tailpipe emissions from new U.S. light-duty vehicles by 2035.	Target of 10% near-zero steel purchases in U.S., Canada and Mexico by 2030. While the target is below the necessary 1.5°C benchmarks, and dependent on price conditions, it signals a commitment to near-zero steel procurement.	Target of 10% near-zero aluminium purchases in U.S., Canada and Mexico by 2030. While the target is dependent on price conditions, it signals a commitment to near-zero aluminium procurement.	No target on low-carbon batteries identified. Partial recognition of its necessity.	No target on the efficiency of BEV's identified.	
Ford	Poor	Moderate	Moderate	Very poor	Very poor	
	Target of 40-50% US EV vehicle sales by 2030. Pledge to "work toward" 100% ZEVs in leading markets by 2035 and 100% globally by 2040. These targets fall short of regional and global 1.5°C-aligned benchmarks.	Target of 10% near-zero steel purchases aligns with 1.5°C-compatible benchmarks. Non-binding MoUs signed with Salzgitter Flachstahl, Tata Steel and ThyssenKrupp Steel in 2022.	Target of 10% low-carbon aluminium by 2030. The target signals a commitment, but timeline and volumes remain unclear.	No target on low-carbon batteries identified. Partial recognition of its necessity.	No target on the efficiency of BEV's identified. Partial recognition of its necessity.	
Toyota	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
	Significantly falls short of the global 1.5°C-aligned benchmarks for 2030. Target for 50% EV sales share by 2030 in the EU27 and GBR reflects the sector's BAU. development for Europe No market-specific phase-out dates for internal combustion engines.	No targets or measures identified.	No targets or measures identified.	No target on low-carbon batteries identified. Small measures towards battery recycling mentioned.	No targets or measures identified.	No ICE phase-out target for HDVs globally or in key markets. A lack of targets falls short of 1.5°C.

	ZEV phase-in for LDVs	Procurement of near-zero emission steel	Procurement of near-zero emission aluminium	Low-carbon batteries	Efficiency of BEV's	ZEV phase-in for HDVs
3 – What is the companies progress towards the sectoral transition?						
Volkswagen	Right direction, off track	Well off track	No progress identified or insufficient data	No progress identified or insufficient data	No progress identified or insufficient data	Wrong direction, critically off track
	Progress on LDV electrification is well off track with Volkswagen's 2024 BEV sales for LDVs remaining at 8% and not increasing compared to 2023.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	Progress towards electrified HDV is not headed in the right direction as sales made up only 0.5% of total Traton sales (excl. MAN TGE) and falling short of the pace required to mee 1.5°C-aligned milestones.
Stellantis	Right direction, off track	No progress identified or insufficient data	No progress identified or insufficient data	No progress identified or insufficient data	No progress identified or insufficient data	
	In 2024, 6% of Stellantis' global sales were EVs. In Europe, the share amounts to 11% (vs. 11.9% in 2023) and in the US, the share of low-emission vehicles amounts to 11% (vs. 11.2% in 2023). Sector benchmarks aligned with 1.5°C suggest that internal combustion engines need to be phased out by 2035-2040.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	
GM	Right direction, off track	Well off track	No progress identified or insufficient data	No progress identified or insufficient data	No progress identified or insufficient data	
	Progress on LDV electrification is well off track with GM's 2023 ZEV sales remaining at 10% and increasing slightly from 9% compared to 2022.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	
Ford	Well off track	No progress identified or insufficient data	No progress identified or insufficient data	No progress identified or insufficient data	No progress identified or insufficient data	
	Progress on LDV electrification is well off track with Ford's 2023 ZEV sales remaining at 3% and not increasing compared to 2022.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	
Toyota	Wrong direction, critically off track	No progress identified or insufficient data	No progress identified or insufficient data	No progress identified or insufficient data	No progress identified or insufficient data	No progress identified or insufficient data
	Toyota's BEV sales were ~1% of total LDV sales in 2023, falling short of the pace required to meet 1.5°C-aligned milestones.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.	No progress indicators identified.

The rapid acceleration in the volume of corporate climate pledges, combined with the fragmentation of approaches and the general lack of regulation or oversight, means that it is more difficult than ever to distinguish between real climate leadership and unsubstantiated greenwashing.

The Corporate Climate Responsibility Monitor 2025 evaluates the climate strategies of 20 major corporations. It critically analyses the transparency and integrity of corporate pledges and claims to identify replicable good practice and areas for improvement.

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