

Mercedes-Benz Group

# CLIMATE TRANSITION ACTION PLAN 2025





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Sustainability and climate protection are key pillars of the business strategy of the Mercedes-Benz Group. With Ambition 2039, the Group has already set the course towards net carbon-neutrality<sup>1</sup> for the new vehicle fleet. This includes taking the necessary steps to go all-electric. Mercedes-Benz is preparing its production network to meet demand and be ready to capture the tipping point into an all-electric era. It is doing so in full awareness that market conditions, infrastructure, and consumer behaviour influence the course of the transformation.

All associated actions are based on the sustainable business strategy, which was adopted by the Board of Management of the Mercedes-Benz Group with the approval of the Supervisory Board. The company has revised the strategic focus areas of sustainability through a comprehensive analysis process and, through these, is embedding sustainability into the core of its daily business operations. The six focus areas are: Decarbonisation, Resource Use & Circularity, People, Human Rights, Digital Trust and Traffic Safety.

The Mercedes-Benz Group hereby publishes its third Climate Transition Action Plan for decarbonisation. It outlines the steps being taken to achieve the Group's goals in respect of the development of its products, their subsequent production (including the supply chain), their use in customer hands and the recovery of valuable resources at the end of their service life. The latest edition takes into account recent developments. These include continued expansion of the company's all-electric and hybrid vehicle portfolio and increased efficiencies in production as well as ongoing investment in renewable energies. The ramp-up of CO<sub>2</sub>-reduced production materials in key areas such as batteries, steel and aluminium is another important driver. There has also been strong growth in the global public charging network and access to "green charging" for Mercedes-Benz customers. And when it comes to the end of vehicle life, the company took an important step in 2024 when it opened its own battery recycling plant, where a recovery rate of more than 96 % is possible for valuable materials.

The Mercedes-Benz Group is committed to a high degree of transparency. The Climate Transition Action Plan 2025 provides a comprehensive but compact overview of the Group's sustainable transformation. Many more details on planned and already implemented measures, goals and initiatives can be found in the following sources:

 [Annual Report with integrated Sustainability Statement](#)  
[Climate Policy Report](#)  
[Website Mercedes-Benz Group](#)

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<sup>1</sup> Net carbon-neutral means that carbon emissions that are not avoided or reduced at Mercedes-Benz are compensated for by certified offsetting projects.





# The ambition

As a player in the transport sector, the Mercedes-Benz Group supports the Paris Climate Agreement. The Group is convinced of the targets of the agreement and is working to implement them in all its divisions. Around one fifth of greenhouse gas emissions in Europe is caused by the transport of people and goods by road. The Mercedes-Benz Group is taking deliberate measures to counteract this trend and has confirmed decarbonisation as a core strategic element and one of the most important sustainability focus areas. The ambition of the Mercedes-Benz Group is: by 2039, the entire Mercedes-Benz new vehicle fleet is to be net carbon-neutral<sup>1</sup> along the entire value chain and over the vehicles' entire life cycle.

The necessary transformation to a climate-neutral society requires the transformation of entire industries. The Mercedes-Benz Group wants to actively shape the transformation of the automotive industry and is transforming its products and the services that are at the heart of its business. Mercedes-Benz Cars and Mercedes-Benz Vans are taking the necessary steps to go all-electric. The Mercedes-Benz Group actively supports its customers in switching to emission-free mobility through electric vehicles and green charging options. The pace of transformation is determined by market conditions, the infrastructure and consumer behaviour. At the same time, the Group takes climate protection into account in all life cycle phases of its automobiles – from the supply chain and its own production to the use and disposal of the vehicles.

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# Emissions reduction throughout the value chain

The Mercedes-Benz Group sets itself ambitious targets for the decarbonisation in the individual life cycle phases of its vehicles and systematically analyses the resulting greenhouse gas emissions and other environmental impacts along its entire value chain.

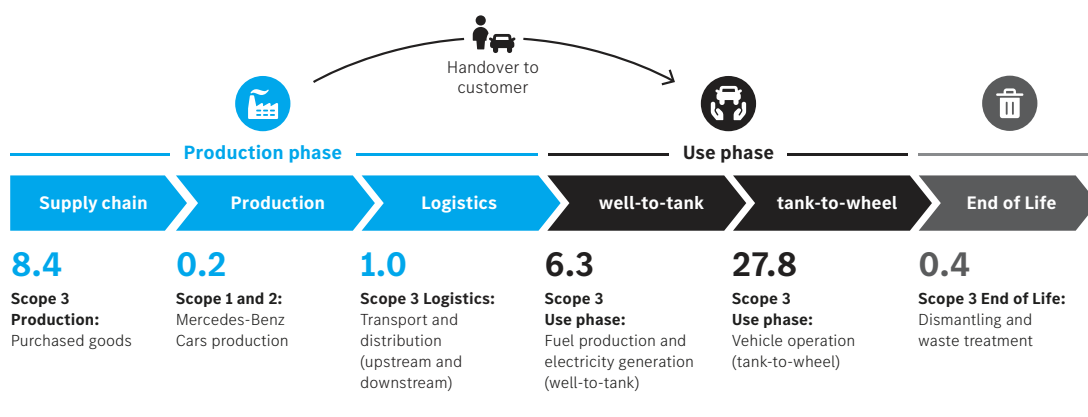
To implement its climate targets, the Mercedes-Benz Group has identified the supply chain, logistics, production, and the use phase of its vehicles as levers for decarbonising its business model. Around 17%<sup>1</sup> of indirect Scope 3 emissions are attributable to the supply chains that provide the Mercedes-Benz Group with goods and services. To reduce these emissions, as part of the decarbonisation of the supply chain, the Group is focusing on sourcing net carbon neutral production materials. For global logistics, the Group relies on an optimal transport mix of road, rail, air, and water freight; through process optimisation, the Group aims to avoid and reduce CO<sub>2</sub> emissions. In production (Scope 1 and Scope 2), the Mercedes-Benz Group focuses on the sourcing of green electricity, the expansion of renewable energies, the implementation of a sustainable heat supply and the optimisation of energy efficiency at its own locations. At 75%<sup>1</sup>, the majority of the Mercedes-Benz Group's Scope 3 emissions arise during the use phase of the vehicles, which includes fuel and electricity production (well-to-tank) and driving operation (tank-to-wheel). To reduce these emissions, the Group is focusing on fully electrifying the vehicle fleet, charging with green electricity, and optimisation battery technology.

Further information on the accounting of greenhouse gas emissions of the Mercedes-Benz Group:

[Chapter Calculation of greenhouse gas emissions](#)

[Annual Report with integrated Sustainability Statement – Gross greenhouse gas emissions \(from page 149\)](#)

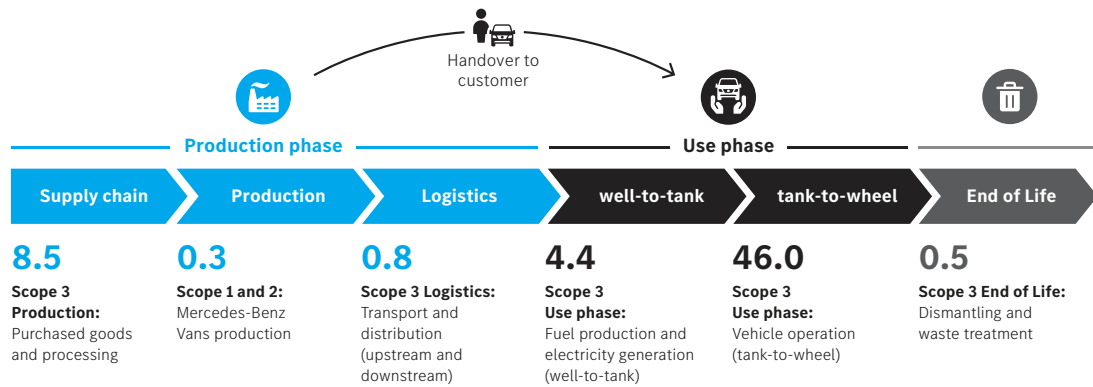
## CO<sub>2</sub> emissions along the value chain (Scope 1 – 3) of Mercedes-Benz Cars 2024<sup>2</sup>



<sup>1</sup> Status 2024; the percentage shares refer to the greenhouse gas emissions at group level.

<sup>2</sup> A description of the methodology and underlying assumptions is contained in the [Mercedes-Benz Group's 2024 Annual Report in the section on greenhouse gas emissions \(from page 149\)](#).

## CO<sub>2</sub> emissions along the value chain (Scope 1 – 3) of Mercedes-Benz Vans 2024<sup>1</sup>



# The Mercedes-Benz Climate Transition Action Plan at a glance

With Ambition 2039, the Mercedes-Benz Group aims to achieve a net carbon-neutral<sup>2</sup> new vehicle fleet along the entire value chain and over the vehicles' entire life cycle by 2039. A key element of this ambition is the electrification of vehicles.

The Group aims to reduce CO<sub>2</sub> emissions per passenger car in the new vehicle fleet up to 50 % across all stages of the value chain over the entire life cycle within the next decade<sup>3</sup>. The market conditions, the infrastructure and the consumer behaviour determine the course of the transformation.

The focus of the efforts is on actual avoidance and reduction of CO<sub>2</sub> emissions, which is to be achieved primarily with the transformation towards an all-electric product range and technological innovation in all life cycle phases.

<sup>1</sup> A description of the methodology and underlying assumptions is contained in the [Mercedes-Benz Group's 2024 Annual Report in the section on greenhouse gas emissions \(from page 149\)](#).

<sup>2</sup> Net carbon-neutral means that carbon emissions that are not avoided or reduced at Mercedes-Benz are compensated for by certified offsetting projects.

<sup>3</sup> Compared to 2020.



# Overarching ambition

Ambition 2039: Create a net carbon-neutral<sup>1</sup> Mercedes-Benz new vehicle fleet along the entire value chain and over the entire life cycle.

The market conditions, the infrastructure and the consumer behaviour determine the course of the transformation. The Group aims to reduce CO<sub>2</sub> emissions per passenger car in the new vehicle fleet up to 50 % across all stages of the value chain over the entire life cycle within the next decade<sup>2</sup>.

Supply Chain	Levers:	Targets and milestones:
	Decarbonisation of production materials	All production materials procured by Mercedes-Benz Cars and Mercedes-Benz Vans are net carbon-neutral by 2039.
Production	Expansion of renewable energies, sustainable heat supply	Target: Reduce CO <sub>2</sub> emissions in production (Scope 1 and 2) by 80 % by 2030 compared to 2018.
		Target: Increase the share of renewable energies in production to 100 % by 2039.
	Optimisation of energy efficiency	Milestone: Increase the share of renewable energies to cover energy consumption to 70 % at Mercedes-Benz Cars and to 80 % at Mercedes-Benz Vans by 2030.
Logistics	Decarbonisation of transport network	Target: Reduce the specific energy consumption in production per vehicle by 2030 compared to 2023: Mercedes-Benz Cars by 36 %, Mercedes-Benz Vans by 16 %.
	Electrification of vehicle fleet	Mercedes-Benz Cars and Mercedes-Benz Vans: Reduce CO <sub>2</sub> emissions in logistics by 60 % by 2039 compared to 2021.
Use phase		Increase the share of electrified vehicles <sup>3</sup> in the respective new car fleets of Mercedes-Benz Cars and Mercedes-Benz Vans to up to 50 % in the second half of the decade <sup>4</sup> .
		2030 2039

<sup>1</sup> Net carbon-neutral means that carbon emissions that are not avoided or reduced at Mercedes-Benz are compensated for by certified offsetting projects.

<sup>2</sup> Compared to 2020.

<sup>3</sup> Mercedes-Benz Cars: plug-in hybrids and all-electric vehicles, Mercedes-Benz Vans: all-electric vehicles.

<sup>4</sup> The transformation is determined by the market conditions, the infrastructure and the consumer behaviour.



The Mercedes-Benz Group has defined further targets for its own operations: by 2030, it plans to reduce CO<sub>2</sub> emissions in the production plants (Scope 1 and Scope 2) by 80 % compared to 2018. The share of renewable energies is to be significantly increased. The Group has set itself the target of covering more than 70 % (cars) or 80 % (vans) of its energy requirements in production with renewable energies by 2030. The ambition for all Mercedes-Benz production plants worldwide is to supply them 100 % on renewable energy by 2039.

Other corporate divisions are also continuously working on decarbonising their own remits. In the supply chain, the company has integrated target values into the criteria for award processes across the board to reduce CO<sub>2</sub> emissions, particularly for components from carbon intensive production processes. The sales organisation also has a roadmap to support sales partners worldwide in their transformation to net carbon-neutrality. By 2039, the transport logistics of Mercedes-Benz Cars and Mercedes-Benz Vans plan to reduce carbon emissions by 60 % compared to 2021.

## External validation of targets

The Scope 1 and 2 as well as Scope 3 mid-term emission reduction targets of Mercedes-Benz Cars and Mercedes-Benz Vans were confirmed externally by the Science Based Target Initiative (SBTi) in 2019. Mercedes-Benz Cars and Mercedes-Benz Vans have committed to reducing their absolute Scope 1 and Scope 2 emissions by 50 % by 2030 compared to 2018 (1,5 °C compliant according to SBTi validation). This target was already achieved in 2022, which is why the Mercedes-Benz Group plans to reduce CO<sub>2</sub> emissions at its production plants (Scope 1 and Scope 2) by 80 % by 2030 compared to 2018. The target of reducing the CO<sub>2</sub> emissions of the Mercedes-Benz new car fleet by more than 40 % by 2030 compared to 2018 in terms of the use phase (well-to-wheel) has also been confirmed by the Science Based Targets initiative (well-be-low-2 °C according to SBTi validation).

The SBTi has published an interim guidance for the transport sector, which is valid until a final 1.5 °C compliant reduction path for the automotive industry (sector-based decarbonisation approach) is developed. The Mercedes-Benz Group is reviewing the criteria and requirements of the corresponding transitional arrangement.

# How the transformation succeeds

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## 2.1 Use phase

A large part of the CO<sub>2</sub> emissions of cars with internal combustion engines is produced while driving. The Mercedes-Benz Group is therefore convinced that the most important means of decarbonising the industry is the complete electrification of the vehicles. The company has set itself the goal of contributing to the electrification of individual mobility worldwide.

However, there are still obstacles to overcome that require efforts on the part of the business community: For example, the charging infrastructure must not lag behind the demand. The growth rate of renewable energies could also be too slow. The Mercedes-Benz Group is therefore committed to a political and regulatory framework that accelerates the transition to electromobility. However, the Group itself is also continuously working on private and commercial charging solutions for the home, the workplace and public spaces.

The transformation can succeed if customers are enthusiastic about the electrified and digital future. Many of them want to contribute to a more sustainable future without having to compromise on their everyday lives. With its product range, the Mercedes-Benz Group aims to meet both of these customer demands and thus accelerate the transformation.

## The all-electric future of vehicles

The Mercedes-Benz Group sees the complete electrification of its product range as the most important lever for achieving net carbon neutrality<sup>1</sup> for the entire new vehicle fleet across all stages of the value chain by 2039.

The Group is sticking to this clearly defined and ambitious goal. Mercedes-Benz Cars and Mercedes-Benz Vans are taking the necessary steps to go all-electric. The Mercedes-Benz Group actively supports its customers in switching to emission-free mobility through electric vehicles and green charging options. The pace of transformation is determined by market conditions, the infrastructure and consumer behavior. Mercedes-Benz Cars and Mercedes-Benz Vans plan to be in a position to cater to different customer needs, whether it's an all-electric drivetrain or an electrified or a high-tech combustion engine, if necessary until well into the 2030s. The Mercedes-Benz Group aims to actively improve the framework conditions for electromobility worldwide in order to support the ramp-up of fully electric vehicles. For example, the Group is investing extensively and worldwide in the expansion of charging and fast-charging networks – in its own charging parks, known as the Mercedes-Benz Charging Network, but also in networks with other providers.

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### **Fully electric vehicles**

The Group has been offering all-electric vehicles since 2018 – and continuously expands the portfolio with additional models. In 2024, the electric G-Class was introduced, and at the beginning of 2025, the new electric CLA followed. With these additions, the Mercedes-Benz Cars portfolio includes eleven fully electric models in 2025. In the second half of the decade, all newly introduced vehicle architectures are to be electrified.

With the Mercedes-Benz Modular Architecture (MMA), the Group has developed an architecture primarily geared towards electric vehicles that has been specifically designed for a vehicle family consisting of four models with different body variants. In March 2025, the Mercedes-Benz Group unveiled the first vehicle developed under the MMA: With the new fully electric CLA, the pioneer of a new, innovative electric vehicle family from Mercedes-Benz enters series production. It represents another significant milestone in the implementation of the sustainable business strategy, Ambition 2039. The carbon footprint of the new all-electric CLA is reduced by 40 % over the entire value chain compared to its non-electrified predecessor.

Mercedes-Benz Cars plans to introduce two further all-electric architectures in the Top-End and Core segments in 2026: the Mercedes-Benz Electric Architecture (MB.EA) and AMG Electric Architecture (AMG.EA).

Mercedes-Benz Vans is also setting the course for a fully electric future: From 2026, all newly developed mid-size and large all-electric vans from Mercedes-Benz Vans are to be based on the modular, flexible and scalable Van Architecture. All model series are already systematically electrified. Customers and upfitters can choose an all-electric van in every segment, whether for commercial or private use.

### **Plug-in hybrids**

Plug-in hybrids are also an important bridging technology on the way to an all-electric future. The combination of electric drive and combustion engine enables temporarily local CO<sub>2</sub> emission-free driving. The drive – consisting of an electric motor and highvoltage battery – can enable purely electric ranges that are sufficient for the majority of daily journeys. Around 40 model variants in the portfolio enable electric ranges of up to 130 km according to WLTP.



# Efficient vehicle concept

Efficient driving and charging reduces the life cycle CO<sub>2</sub> footprint – and is therefore a key lever for achieving the climate protection targets set by the Mercedes-Benz Group. For this reason, the Group focuses on making the entire vehicle concept energy-efficient right from the early development phase, taking all relevant areas into account: aerodynamics, powertrain, rolling resistance, weight, thermal management and on-board power network.

The Mercedes-Benz Group is setting new standards in efficiency and electric range with the new electric CLA, which the company unveiled at the beginning of 2025 as the first vehicle developed under the MMA (Mercedes-Benz Modular Architecture). The CLA 250+ with EQ technology is the most efficient Mercedes-Benz production vehicle ever built and is considered the “one-liter car” for the electric age (energy consumption combined: 14.1-12.2 kWh/100 km | CO<sub>2</sub> emissions combined: 0 g/km | CO<sub>2</sub> class: A).<sup>1</sup> Due to its exceptional drive efficiency and aerodynamics, the CLA 250+ provides a range of up to 792 kilometers according to WLTP.<sup>1,2</sup>

The technology that can achieve these values is based on the findings of the VISION EQXX technology programme. Within the programme, actions were identified that can further reduce previous energy losses. The new drivetrain, based on the VISION EQXX, from the battery to the wheels, can achieve an efficiency of up to 93 % on long-distance journeys.

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<sup>1</sup> The specified values were determined in accordance with the prescribed WLTP (Worldwide harmonised Light vehicles Test Procedure) measurement method. The ranges given refer to the European market. The energy consumption and CO<sub>2</sub> emissions of a car depend not only on the efficient utilisation of the fuel or energy source by the car, but also on the driving style and other non-technical factors.

<sup>2</sup> For further information, please refer to the [360° Environmental Check for the Mercedes-Benz CLA with EQ technology](#)



# Charging

In the life cycle of an electric vehicle, charging with electricity from renewable sources is an essential factor in reducing CO<sub>2</sub> emissions.

## Public Charging with Mercedes-Benz

With the Digital Extra MB.CHARGE Public<sup>1</sup>, Mercedes-Benz combines all public charging services and offers numerous benefits exclusively for customers of Mercedes-Benz electric vehicles and plug-in hybrids. Through MB.CHARGE Public, customers in more than 30 countries across four continents have easy access to one of the world's largest charging networks, with over 2.3 million charging points from more than 1,600 charging station operators. Over 850,000 of these charging points are located in Europe, with more than 160,000 in Germany. Mercedes-Benz is continuously expanding the charging network available through MB.CHARGE Public by actively developing public charging infrastructure worldwide. Around 45,000 charging points from the global Mercedes-Benz Charging Network and the joint ventures IONITY, IONNA and IONCHI, which are to be established in Europe, North America and China by the end of the decade, will also be accessible via MB.CHARGE Public. Within this service, Mercedes-Benz focuses on electricity from renewable energy sources.

“Green Charging” is an integral part of MB.CHARGE Public in Europe, Canada and the United States. If no electricity from renewable energy sources is available at the respective charging station, “Green Charging” uses green electricity certificates, which ensure that an equivalent amount of electricity from renewable energies is fed into the power grid for charging processes. These are exclusively green electricity certificates from certified wind and solar power plants<sup>2</sup>. “Green Charging” is also an essential aspect of the Mercedes-Benz Charging Network. The Mercedes-Benz Group wants to enable all drivers of electric vehicles to charge with green electricity. This is preferably handled via green power supply contracts, wherever possible, or through the use of renewable energy certificates.

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<sup>1</sup> To use the Digital Extras, you must create a Mercedes me ID and agree to the Terms of Use for Digital Extras and the Mercedes me ID Terms of Use as amended. In addition, the respective vehicle must be linked to the user account. At the end of the limited term, the Digital Extras can be renewed for a fee, provided they are still available for the respective vehicle at that time. In order to use the Digital Extra MB.CHARGE Public, a customer's own separate charging contract with a selected third-party provider is required, which is used for payment and billing of the charging processes.

<sup>2</sup> EKOenergy in Europe, Green-e in North America





### **Smart charging solutions for the home**

For many drivers, their own home is the preferred charging point. The Mercedes-Benz Group is therefore consistently working on expanding its charging services in the MB.CHARGE charging ecosystem. Smart charging solutions for private households can contribute to the successful energy transition through two key factors: Reduced electricity costs when charging with renewable energies motivate customers to actively contribute to the transformation. At the same time, the distribution of electricity from renewable sources can be optimised by intelligent control of charging processes; considering the capacity utilization, wind and solar power can be used to charge electric vehicles in a targeted manner. In the future, this will reduce both grid bottlenecks and the shutdown of overproduction of renewable energy sources in regional electricity distribution grids.

## Services

The Mercedes-Benz Group wants to support the users of its vehicles in adopting a more climate-friendly driving style and in making purchasing decisions in favour of electric vehicles. To this end, it offers a wide range of service solutions.

### **Interactive online advisory tools make it easier to decide in favour of e-mobility**

The Mercedes-Benz Group offers a range of interactive advisory tools relating to electromobility on its website. These tools are designed to help potential customers better understand the benefits of electric vehicles and make an informed decision when choosing their next vehicle. The realistic presentation of various aspects of electric mobility is intended to help promote positive expectations of electric vehicles.

### **Mercedes-Benz App collects data about individual fuel consumption**

The Mercedes-Benz Group offers transparent information and possibilities to compare the fuel consumption of its vehicles in Europe: customers can use the free Mercedes-Benz App to voluntarily and anonymously share their individual fuel consumption for almost all model series and compare it with users of similar vehicles.

### **Saving energy with the Eco Coach**

The Mercedes-Benz Eco Coach is an app with individual energy-saving tips for users of plug-in hybrid and electric vehicles. The app analyses personal driving and charging behaviour and provides personalized tips on how to reduce the carbon footprint and increase the durability of the vehicle battery. The app is available in ten European countries. Since 2024, the Eco Coach app has been supporting users in Germany by providing charging recommendations or challenges to carry out their charging process in time windows when the highest possible proportion of renewable energy is available.

# 2.2 Operations

## Production

The Mercedes-Benz Group has set itself the goal of reducing CO<sub>2</sub> emissions across its entire business activity and, where possible, avoiding them. This includes all Mercedes-Benz locations worldwide. To this end, the Mercedes-Benz Group relies on the purchase of green electricity, the expansion of renewable energies, the implementation of a sustainable heat supply and the optimisation of energy efficiency at its own locations.

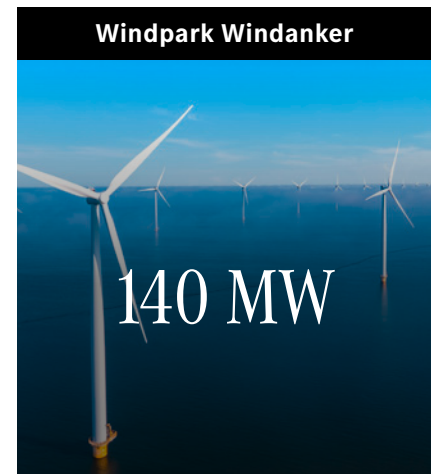
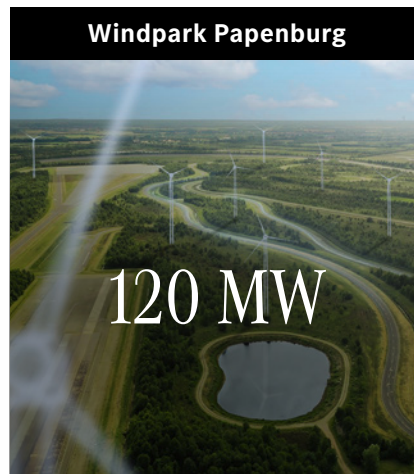
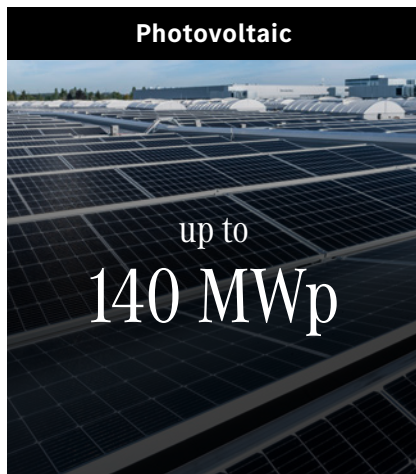
The Mercedes-Benz Group plans to reduce CO<sub>2</sub> emissions in the production plants (in relation to Scope 1 and Scope 2) by 80 % by 2030 compared to 2018. The target set and confirmed by the SBTi of reducing CO<sub>2</sub> emissions in its own plants (Scope 1 and 2) by 50 % by 2030 compared to 2018 was already achieved by the Mercedes-Benz Group in 2022. By 2039, the goal for all Mercedes-Benz production facilities worldwide is to supply them with 100 % renewable energy. As a milestone for 2030, the Group has set itself the goal of covering 70 % (Cars) and 80 % (Vans) of energy consumption in production with renewable energies.

### **Purchase of green electricity and expansion of renewable energies**

The procurement of green electricity plays a key role in decarbonisation of production. The Mercedes-Benz Group's locations obtain 100 % of their external electricity from renewable sources. In Germany, the Mercedes-Benz Group currently relies on a mix of solar, wind and hydropower for external electricity procurement.







In total, renewable energy sources covered 51% of the total energy consumption of the Mercedes-Benz Cars production sites worldwide in 2024. At Mercedes-Benz Vans, the proportion in total energy consumption was 41%.

The Mercedes-Benz Group is furthermore committed to the expansion of renewable energies at its own locations. The Group plans to make further investments to advance the expansion and installation of photovoltaic systems (PV systems) at its locations worldwide. PV systems have already been installed at ten production locations, and PV systems at three additional locations are nearing completion. This means that the photovoltaic capacity at the production sites and other locations worldwide is to be expanded to up to 140 MW<sub>p</sub> by the end of 2025, which corresponds to more than 1,000,000 square metres of solar modules. In addition, potential new locations for PV systems are continuously being evaluated.

Another focus of the Group's energy strategy is expanding the portfolio to include wind energy from onshore and offshore wind farms. In the offshore sector, the Group has concluded a power purchase agreement (PPA) with an energy supplier for the supply of electricity from the Windanker wind farm in the Baltic Sea. This will secure the Mercedes-Benz AG 140 MW of renewable electricity from 2027, covering around 30% of its electricity needs in Germany.

In September 2022, the Mercedes-Benz Group began planning to install a wind farm on its test site in Papenburg, northern Germany. In the coming years, around 20 wind turbines with an output of around 120 MW are to be built on the site as part of a PPA with a German energy park developer. This will cover up to 20% of Mercedes-Benz AG's annual electricity needs in Germany.

### **Heat supply**

The Mercedes-Benz Group is also taking various actions to further reduce the use of fossil fuels in heat supply and thereby further reduce CO<sub>2</sub> emissions. Surface geothermal energy is already being used at the production sites in Rastatt and Kamenz (both Germany). Several production sites in Germany receive district heating with varying proportions of renewable energy. Immendingen (Germany) and Jawor (Poland) receive heat from biomass heating plants. In the future, heat pumps powered by green electricity are also to be put into operation at the sites in Kecskemét (Hungary) and Tuscaloosa (USA). There are also plans to use production waste heat and electrify production processes. In addition, interdisciplinary teams across sites are examining how renewable heat generation can be further expanded.

### **Energy efficiency**

The energy efficiency of a plant is of great importance when it comes to reducing the carbon footprint of vehicle production. Various measures, such as the optimisation of lighting and ventilation technology, the intelligent control of electrical energy supply or the use of efficient and state-of-the-art technology in planning, contribute to significant energy savings in production plants today.

### **Energy storage systems**

To balance the volatility of renewable energy generation with electricity consumption, the Mercedes-Benz Group is also expanding its energy storage facilities. One approach is to give automotive lithium-ion batteries a second life and use them in a stationary energy storage system, as in Mercedes-Benz Factory 56 in Sindelfingen. Another approach is a new partnership with a German cleantech company. The first Organic SolidFlow battery storage facility with a capacity of around 11 MWh is planned for 2025 at the plant in Rastatt (Germany). The innovative technology offers high potential in terms of scalability and sustainability. The batteries are fully recyclable, have a long service life and are scalable up to the GWh range.

### **Offsetting CO<sub>2</sub> emissions**

Since 2022, all greenhouse gas emissions (Scope 1 and Scope 2) of the Mercedes-Benz Group locations that could not previously be avoided have been compensated for by carbon offsets from qualified climate change mitigation projects. Since 2023, the net neutrality also includes other greenhouse gases that are stated in CO<sub>2</sub> equivalents. Remaining greenhouse gas emissions from Mercedes-Benz locations arise in particular from the natural gas-powered combined heat and power plants that generate electricity and heat. All locations of the Mercedes-Benz Group have therefore been operating net carbon-neutral since 2022 in terms of Scope 1 and Scope 2.

Further details on CO<sub>2</sub> offsetting:

[!\[\]\(6059a5aa8b4ca7bb793408023d6c6e42\_img.jpg\) CO<sub>2</sub> offsetting and carbon removal](#)



# Logistics

On the way to net carbon-neutral<sup>1</sup> transport logistics, the Group is committed to avoiding and reducing the CO<sub>2</sub> emissions generated in the global transport network for Mercedes-Benz Cars and Mercedes-Benz Vans. As part of Ambition 2039, Mercedes-Benz Cars aims to reduce CO<sub>2</sub> emissions from transport logistics by 60 % compared to 2021.

Shifting the transport volume to rail can make a significant contribution to avoiding CO<sub>2</sub>. The Mercedes-Benz Group therefore takes the approach of transporting vehicles by rail, among other means. In addition to avoiding air freight, the Group and transport service providers rely on the use of Sustainable Aviation Fuel (SAF). In order to reduce CO<sub>2</sub> emissions in sea transport as well, the Mercedes-Benz Group is working closely with its transport service providers and is using biofuels as a bridging technology. CO<sub>2</sub>-reduced technologies are also used in road transport, such as e-trucks and HVO (Hydrotreated Vegetable Oil). In recent years, the Group has been able to implement several projects with various transport service providers.

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# Sales operations

The Mercedes-Benz Group has set itself the goal of making its sales organisation more climate-friendly – but this can only be achieved with the support of its sales partners.

As part of the Ambition 2039, all sales partners worldwide are to achieve the goal of net carbon-neutral operation by 2039. This includes switching to electricity from renewable energies, the energy-efficient renovation of existing buildings and the construction of highly energy-efficient new buildings. This is based on the global CO<sub>2</sub> emissions of the Mercedes-Benz sales organisation and its continuous reporting for subsequent years. This enables the Mercedes-Benz Group to check the effectiveness of the implemented measures, and to measure the realised CO<sub>2</sub> reduction.

In 2024, the Group calculated the global CO<sub>2</sub> emissions of all sales and service locations for the third time. In addition, a “Guidebook Conscious Retail” has been available for all dealers since 2023. This guide provides comprehensive information on the sustainable business strategy of Mercedes-Benz AG and the necessary measures to be taken by dealers. It also lists several best practices that have already been implemented.

Mercedes-Benz AG’s German own-retail outlets have been operating in a net carbon-neutral<sup>1</sup> manner since 2022, in line with the own global Mercedes-Benz plants. The German own-retail outlets have not only focussed on switching to renewable energies across the board in their own business. They also want to make electricity from renewable sources available to their customers and promote electromobility in general. Most of the charging points at these outlets are publicly accessible. The car dealerships continue to focus on reducing their energy consumption and increasing their energy efficiency.

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<sup>1</sup> Net carbon-neutral means that carbon emissions that are not avoided or reduced at Mercedes-Benz are compensated for by certified offsetting projects.







# IT

Increasing the energy efficiency plays a key role for the Mercedes-Benz Group in establishing a more climate-friendly IT landscape. This includes switching to more energy-efficient public cloud services and transforming the data centres in collaboration with the respective partners. There is an increased focus on energy-efficient data centres, for example in Norway, which benefit from natural cooling. Less efficient data centres are being closed or consolidated and continuously modernised. In recent years, more than 30 data centres have been closed. The Mercedes-Benz Group remains actively committed to optimising its infrastructure and is planning further closures in order to consistently achieve its sustainability goals. The successful transformation has already led to a significant improvement in Power Usage Effectiveness (PUE). Further improvements are expected in the future. Besides reducing energy consumption, part of the IT strategy is to work with the respective partners to convert cloud and data centre operations completely to green electricity.

The Mercedes-Benz Group is also involved in cross-company exchanges and associations, such as the Green Software Foundation, to optimize the software code of their applications, thereby saving computing power and energy. Furthermore, IT plays an important role in driving digitisation and helping the Group in achieving its transformation goals.

## 2.3 Supply chain

### Sustainable transformation at the suppliers

With Ambition 2039, the Mercedes-Benz Group is striving for a net carbon-neutral<sup>1</sup> new vehicle fleet across all stages of the value chain and the entire life cycle. The decarbonisation of the supply chain plays an important role in this.

For future model series and vehicle architectures, suppliers of Mercedes-Benz Cars and Mercedes-Benz Vans must meet CO<sub>2</sub> reduction targets and implement appropriate actions. This applies in particular to suppliers of components and focus materials such as steel, aluminium, polymers, or battery cells, as these are CO<sub>2</sub> and energy intensive to manufacture. To promote suppliers and business partners in the transformation, Mercedes-Benz Cars and Mercedes-Benz Vans use three instruments:

- In the “Ambition Letter”, which is contractually mandatory for all new contracts, the suppliers of Mercedes-Benz Cars and Mercedes-Benz Vans guarantee that from 2039 they will only supply products that are net carbon-neutral.
- Mercedes-Benz Cars and Mercedes-Benz Vans have integrated target values for CO<sub>2</sub> emissions into their award criteria. The focus is on CO<sub>2</sub> -intensive components and materials. The targets not only affect direct suppliers; they also apply to the upstream extraction of raw materials and the production of components
- In addition, Mercedes-Benz Cars and Mercedes-Benz Vans are working with selected partners to reduce CO<sub>2</sub> emissions in the supply chain through innovative technologies. The focus is on the production of important components such as battery cells or body-in-white components.

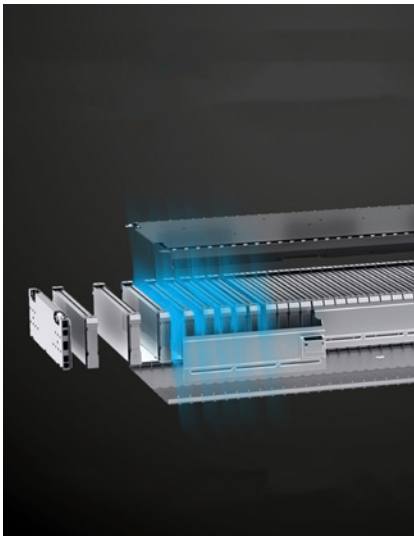
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<sup>1</sup> Net carbon-neutral means that carbon emissions that are not avoided or reduced at Mercedes-Benz are compensated for by certified offsetting projects.



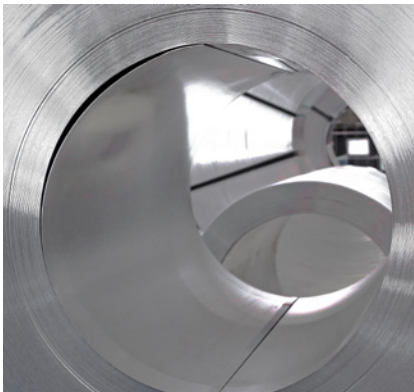
# CO<sub>2</sub>-reduced production materials

To reduce CO<sub>2</sub> in the supply chain, Mercedes-Benz Cars and Mercedes-Benz Vans are focusing on materials and components that have high carbon emissions. These include steel, aluminium, certain plastics and battery cells. Quantitative interim targets for CO<sub>2</sub> emissions in the supply chains were derived from the results of the supplier discussions and the target values were integrated into the award criteria.



## Batteries

- Agreement with battery cell suppliers on the net carbon-neutral production of battery cells.
- New battery generation of the new CLA: Reduction of the CO<sub>2</sub> footprint by about 30 % per cell compared to conventional production through CO<sub>2</sub> reduction measures and use of electricity from renewable energies in anode, cathode and cell housing production.
- Further potential in the supply chain is being investigated and realised.



## Steel

- Intention to purchase over 200,000 metric tons of CO<sub>2</sub>-reduced steel annually from suppliers for own press plants by the end of the decade.
- Investments in decarbonising the steel supply chain: construction of industrial direct reduction plants and smelting units as important prerequisites.



## Aluminium

- At least a third of the primary aluminium used in Europe for upcoming electric models from 2025 onwards is to be produced using renewable energies.
- Technology partnership with aluminium producers for pilot use of aluminium in vehicles by 2030, with a carbon footprint that is up to 90 % lower than the European average in 2024.



# Responsible Sourcing Standards

The Group-wide Responsible Sourcing Standards (RSS) are an important instrument for the transformation of the supply chain. These form the central contractual document for sustainability requirements for suppliers and represent the guard rails of supply chain management. They contain minimum requirements in the areas of environmental due diligence, climate change mitigation, resource conservation, biodiversity, deforestation and water, among others. In line with the German Supply Chain Due Diligence Act (LkSG), the Mercedes-Benz Group sets out clear sustainability requirements and more far-reaching expectations for suppliers with the RSS, which go beyond the legal requirements.

The Mercedes-Benz Group has been applying the RSS since 2023, thereby tightening its sustainability requirements. They define minimum requirements and expectations for Tier 1 suppliers and contractually oblige them to comply with the requirements and to communicate them to upstream value chains. As a central contractual document for sustainability requirements, they are used internationally.



## 2.4 End-of-Life

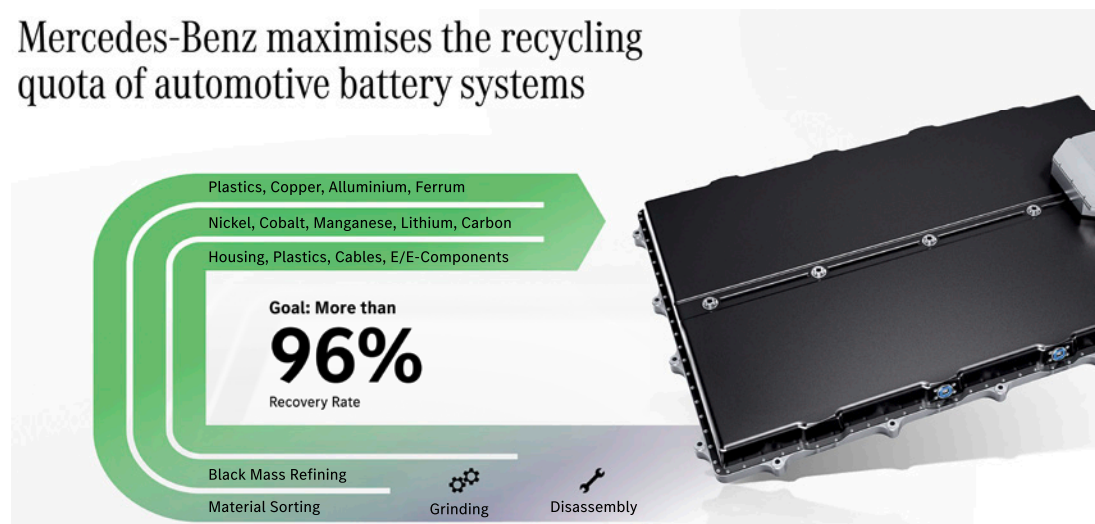
The Mercedes-Benz Group's responsibility for its products extends over the entire life cycle of the vehicle. This is why the company already considers what will happen to the product at the end of the vehicle life cycle during product development. Reusing and recycling materials are important levers not only to minimise the use of resources, but also the carbon footprint.

The Mercedes-Benz Group's vision therefore is to transform its entire value chain into a closed loop as far as possible. For example, it aims to return its old materials to the material cycle – including the batteries of electric vehicles, which still contain many high-grade materials.

When developing products, the Mercedes-Benz Group keeps the circular economy in mind from the start and creates a recycling concept for each new model series. For this, it analyses all components and materials and checks to what extent they are suitable for the various stages of the recycling process.

Batteries are an important part of this. The Mercedes-Benz Group has the ambition to further increase the recycling rate of batteries to use the raw materials they contain in the long term. If a battery can no longer be reused in a vehicle or redeployed in an energy storage system, it is recycled. To this end, Mercedes-Benz AG has built its own pilot factory for recycling lithium-ion battery systems at the Kuppenheim site (Germany) in 2024. Through its integrated mechanical-hydrometallurgical process, a recovery rate of more than 96 % is possible. In 2024, it was the first facility of its kind in Europe. While the mechanical process sorts plastics, copper, aluminium and iron by type in a complex, multi-stage process, the downstream hydrometallurgical process deals with the so-called black mass. In a multi-stage chemical process, the valuable metals cobalt, nickel and lithium are extracted individually. These recyclates are of battery quality and are therefore suitable for the production of new battery cells. Mercedes-Benz AG is also working with partners in China and the United States to create a closed materials cycle for batteries.

### Mercedes-Benz maximises the recycling quota of automotive battery systems



# Steering and organisation

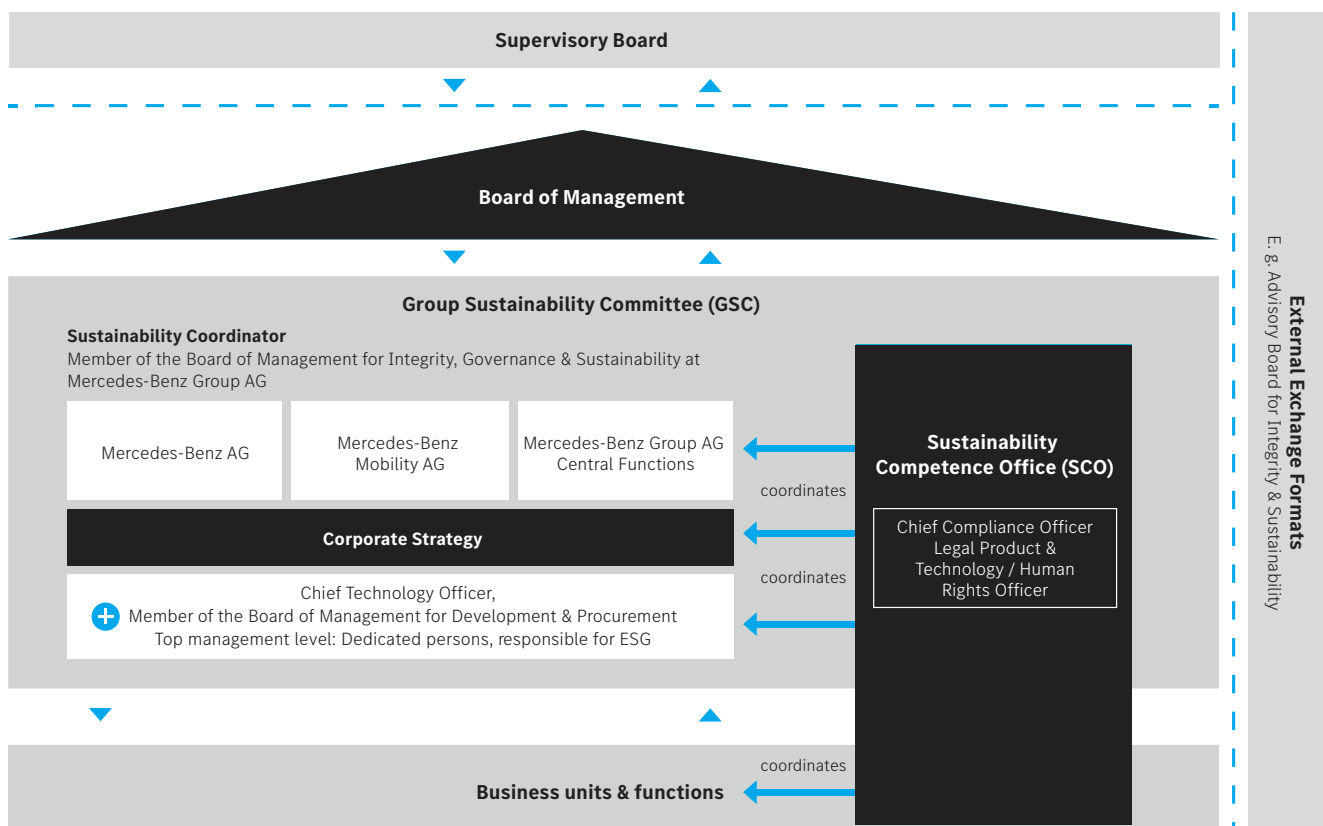


# Organisational structure & governance

The Mercedes-Benz Group acts on the basis of the sustainable business strategy that the Board of Management of the Mercedes-Benz Group AG has adopted with the involvement of the Supervisory Board. Accordingly, sustainability issues are an integral part of the business strategy.

The sustainable business strategy is reflected in the organisational structure of the Mercedes-Benz Group: Sustainability and climate protection are an essential part of all business functions, whether research and development, purchasing, finance or other functions. Representatives of these specialist functions meet regularly in central committees that ensure the implementation and further development of the sustainable business strategy.

The central management body for sustainability is the Group Sustainability Committee (GSC). The GSC meets quarterly under the leadership of the member of the Board of Management of Mercedes-Benz Group AG responsible for Integrity, Governance & Sustainability in their role as Sustainability Coordinator. The GSC consists of representatives from top management and manages sustainability issues in line with the targets, metrics and actions decided by the Board of Management across departments, divisions and regions.



In the Sustainability Coordination Meeting (SCM), the Sustainability Competence Office (SCO) – a department consisting of sustainability experts within the division Integrity, Governance & Sustainability – enters into dialogue with representatives from all relevant board departments and specialist areas. The SCM meets several times a quarter under the leadership of the SCO. The SCO, in turn, advises and supports the specialist areas in the further development of the sustainable business strategy, the implementation of regulatory requirements on sustainability, the integration of relevant sustainability criteria in the Group's governance and core processes, as well as sustainability-related requirements from the Board of Management or GSC.

The Supervisory Board of Mercedes-Benz Group AG monitors the implementation of the sustainable business strategy. The GSC informs the Board of Management and the Supervisory Board of Mercedes-Benz Group AG at least twice a year on current sustainability topics of strategic relevance.

## Incentivisation

From the Mercedes-Benz Group's point of view, the remuneration system of the Board of Management and large parts of the executives makes a significant contribution to promoting the business strategy and the long-term and sustainable development of the company. It provides effective incentives for the long-term, value-creating development of the company in the interests of all stakeholders: customers, investors, employees, business partners and society as a whole. Given the central importance of the topic of sustainability, sustainability-related performance criteria are also taken into account within the variable remuneration in addition to financial performance criteria. Therefore, the variable compensation of the Board of Management and other management levels includes short-term non-financial and transformation goals as well as long-term sustainability goals. The Annual General Meeting of Mercedes-Benz Group AG approved a new remuneration system in May 2025, which will apply from 2026. Sustainability-related performance criteria are given greater weight in the variable remuneration of the Management Board and other management levels.

## Dialogue with stakeholders and experts

The Mercedes-Benz Group places great importance on engaging with its stakeholders. This exchange enables the Mercedes-Benz Group to better understand the concerns of its stakeholders. This allows the Group to look at its sustainability commitment from different perspectives, identify new trends and – where appropriate – take information into account strategically. One important dialogue format is the Sustainability Dialogue. In 2024, such dialogues were held in China, Germany, India and the USA.

Another source of impulses for the Group's sustainability work is the Advisory Board for Integrity and Sustainability. Its members are independent experts from the fields of environmental and social policy, transport and mobility development, and human rights and ethics. The Advisory Board supports the Mercedes-Benz Group in a constructive and critical manner on issues of integrity, sustainability and corporate responsibility.

# Financial planning

The implementation of the sustainable business strategy of the Mercedes-Benz Group requires substantial investments. The Mercedes-Benz Group has already invested a double-digit billion sum in electromobility and will continue to invest considerable sums in new drive-flexible and electric vehicle architectures and batteries in the future.

The proportion of taxonomy-aligned<sup>1</sup> capital expenditure of the Group increased from 24 % to 30 % in 2024 compared to the prior year. This is primarily due to an increase in the percentage of taxonomy-aligned investments in property, plant and equipment from 48 % to 64 % and in intangible assets from 61 % to 69 %. This mainly includes capitalized development costs in connection with the new architectures geared towards electromobility.

In 2024, Mercedes-Benz opened an eCampus at its headquarters in Stuttgart-Untertürkheim, a competence center for the development of cells and batteries for future electric vehicles. With investments in the three-digit million range, Stuttgart-Untertürkheim will be strengthened as a high-tech location for drive technologies as part of the transformation. The goal is to reduce battery costs by more than 30 % in the coming years.

In addition, the Group is investing in the decarbonisation of its value chain, e. g. charging infrastructure (well-to-tank), end-of-life (recycling), but also in the qualification of its employees.

- In order to improve the framework conditions for electric vehicles, the Group is setting up its own global Mercedes-Benz Charging Network in North America, Europe, China and other core markets, which is open to drivers of all brands. Mercedes-Benz's required capital commitment is expected to amount to a low single-digit billion amount, extending over a multi-year period until the end of the decade.
- On October 21, 2024, the Mercedes-Benz Group opened Europe's first battery recycling factory with an integrated mechanical-hydrometallurgical process in Kuppenheim, southern Germany. The group invested a double-digit million euro amount in 2024 for this purpose.
- As part of the "Turn2Learn" training campaign for its employees launched in 2022, the Group aims to invest more than €2 billion in worldwide training by 2030, of which €1.3 billion will be in Germany alone.

The Mercedes-Benz Group's Green Finance Framework, which was developed in 2020 and updated in 2023, makes it possible to finance investments in the development, production and customer financing of all-electric vehicles in a targeted manner, for example through bonds or loans.

[!\[\]\(e474458956c9a37fbf9586ddb60a7fa1\_img.jpg\) Annual Report with integrated Sustainability Statement](#)

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<sup>1</sup> Share of the Mercedes-Benz Group's taxonomy-compliant investments: Detailed reporting on the EU taxonomy in the Group's Annual Report 2024



# Climate- related risks and climate scenarios

As part of an overarching materiality assessment, the Mercedes-Benz Group has analysed the impacts on climate change, taking into account its activities and plans, and has considered its greenhouse gas emissions along the value chain.

Impacts, risks and opportunities identified as material for the Group:

[Annual Report with integrated Sustainability Statement – Material impacts, risks and opportunities \(from page 129\)](#)

The Group has also carried out a climate-specific scenario analysis with the aim of better understanding and assessing the identified risks and opportunities along the value chain.

The analysis was based on the risk and opportunity dimensions defined by the Task Force on Climate-related Financial Disclosures (TCFD) and differentiated between transitory and physical climate risks. Transitory climate risks are related to the transition to a low-carbon economy and result from changing political conditions, technological developments and changing markets. Physical risks arise from climatic changes.



# Climate-related transition risks

Using climate scenarios, relevant transition events for the Mercedes-Benz Group were identified, validated by assessments from internal experts, and aligned with the Group's strategic direction and supplemented accordingly – including changes in demand and prices, new technologies and market expectations as well as political changes. In the climate scenario analysis, the potential impacts of transition events on individual business areas and activities were qualitatively assessed to identify possible risks and evaluate the necessary adjustments to align with the transition to a climate-neutral economy. The analysis covers the key stages of the value chain: supply chain, development and production as well as sales of passenger cars and light commercial vehicles.

For the analysis, the climate scenarios “Net Zero Emissions by 2050 Scenario” (NZE) and “Stated Policies Scenario” (STEPS) of the International Energy Agency (IEA), among others, were used to map a range of possible transformation paths in a uniform, globally applicable and cross-sectoral scenario framework. The NZE scenario outlines a rigorous path for the global energy sector to achieve net-zero CO<sub>2</sub> emissions globally by 2050, taking into account technical, economic and regulatory feasibility. It aims to limit the global temperature increase by 2100 to 1.5°C relative to pre-industrial levels with at least a 50 % probability. The STEPS scenario projects expected emission reductions based on current political commitments and announced actions by governments, resulting in significantly higher warming.

The analysis evaluates the impacts of climate change up to 2030 for short-term adaptations and for mid- and long-term developments up to 2050.

# Climate-related physical risks

To analyse the impacts of changing climatic conditions, in addition to the SSP2-4.5 scenario from the Intergovernmental Panel on Climate Change (IPCC), a scenario with high emissions (SSP5-8.5 scenario), which corresponds to a warming of approximately 4°C by the year 2100, was particularly used. The assessment included acute (e. g. floods) and chronic (e. g. persistent changes in temperature and precipitation) consequences of climate change. The considered time periods of 2030, 2040, and the long-term trend beyond are based, among other factors, on the lifespan of assets. In the next step, adaptation measures at the locations were identified, which were selected based on the analysis results. Additionally, when evaluating suppliers regarding natural hazards, the vulnerability to production disruptions due to extreme weather events was considered. These analysis results were incorporated into the supplier selection processes, and, where necessary, measures were taken.

Results of the scenario analysis:

[!\[\]\(e474458956c9a37fbf9586ddb60a7fa1\_img.jpg\) Annual Report with integrated Sustainability Statement – Climate Change, Material impacts, risks and opportunities \(from page 134\)](#)







Just transition

# Mercedes-Benz' Just Transition Approach

The decarbonisation of the business model of the Mercedes-Benz Group leads to profound transformations; not only in terms of technology and products, but also in terms of people working at the Mercedes-Benz Group worldwide or along its complex value chains. The Mercedes-Benz Group is therefore advancing the just transition as an integral part of its sustainable business strategy. The focus is not only on its own employees and the workforce in the value chain but also on political and lobbying activities as well as the impact of corporate activities on local communities. This is in line with Mercedes-Benz Group's support of the Paris Climate Agreement and its objectives.

In the following sections, the four pillars of the Mercedes-Benz Group approach to shape a just transition are briefly described. Further details can be found at the end of each section.

[!\[\]\(99f58673407353e96a019fbca558fd72\_img.jpg\) Mercedes-Benz Group's Just Transition Approach](#)

## Own Workforce – The “Sustainable People Plan” of Mercedes-Benz

In times of transformation, it is not just the right business models, products, technologies and digital solutions that are necessary. Equally important is a workforce that embraces change, constantly expands its skills and brings these into daily work with a willingness to innovate and perform.

With electrification, digitalisation and the increasing use of powerful artificial intelligence (AI) systems, the working world of employees at the Mercedes-Benz Group is also changing. Work processes and structures are changing just as fundamentally as tasks and collaboration within the Group. The Mercedes-Benz Group is meeting the challenges and requirements of personnel transformation with a corresponding sustainable personnel strategy – the Sustainable People Plan.

With this sustainable HR strategy, the Mercedes-Benz Group strives to shape the ongoing changes as part of the transformation in a responsible, socially acceptable and future-oriented manner.

[!\[\]\(3211b5d1d968fc1665909b34f9f16010\_img.jpg\) Annual Report with integrated Sustainability Statement – Own Workforce](#)  
[Website Mercedes-Benz Group – Human rights Mercedes-Benz](#)



# Protecting and promoting human and employee rights along the entire value chain

Respect for human rights is of central importance to the Mercedes-Benz Group and therefore constitutes one of the six sustainability focus areas. The Group is committed to protecting and promoting human and employee rights along the entire value chain. This also applies to all employees along the complex supply chains.

With the expansion of electromobility in particular, the protection of workers in the upstream value chain is increasingly coming into focus. The production of battery cells requires an increased demand of certain raw materials, particularly lithium and cobalt. These often come from countries with a potentially increased risk of human rights violations and negative impacts on working conditions and employee rights.

[Annual Report with integrated Sustainability Statement – Workers in the value chain](#)  
[Website Mercedes-Benz Group – Human Rights](#)



# Political influence and the representation of interests

The focus of the Mercedes-Benz Group's climate policy is on reducing and avoiding CO<sub>2</sub> emissions. The Mercedes-Benz Group thus supports the efforts of policymakers to protect the climate and is making its contribution to reduce CO<sub>2</sub> emissions as part of its sustainable business strategy. At the same time, the Group is convinced that the climate protection targets can only be achieved through collective action and dialogue based on partnership between politics, business, and civil society.

As a company, Mercedes-Benz operates within the framework of the rules set by politics. In order to achieve the climate targets, it is therefore also up to the policymakers to set framework conditions, such as a capable charging infrastructure and increased use of renewable energies.

[Climate Policy Report Mercedes-Benz Group AG](#)  
[Website Mercedes-Benz Group – How to be a responsible advocate for corporate interests](#)

# Affected Communities – Protecting local communities and indigenous peoples

The Mercedes-Benz Group strives to combine economic success with responsible action towards the environment, people and society. For the Group, respect for human rights is a central component of responsible corporate governance and an elementary focus area of its sustainable business strategy. The protection of local communities and indigenous peoples is of great importance to the Mercedes-Benz Group.

The commitment is to protect and promote human rights along the entire value chain. This also addresses the rights of members of local communities and indigenous peoples who may be affected by business activities at supply chain locations and by local impacts of corporate activities.

The protection of the affected communities is also increasingly coming into focus due to the expansion of electromobility. The mining and processing of battery raw materials often takes place in regions where there is a potential risk of negative impacts on affected communities.

[Annual Report with integrated Sustainability Statement – Affected communities](#)  
[Website Mercedes-Benz Group – Responsibility beyond the factory gates](#)

# Climate and nature



The global climate system and nature are closely intertwined. To achieve global climate goals, ways are needed to protect the world's natural carbon sinks and prevent further destruction of ecosystems. Science shows that climate change is already interfering with the balance of nature. An effective climate protection strategy therefore also includes the protection of nature and the sensible use of resources.

## Resource conservation

The steadily increasing resource consumption worldwide has negative impacts on the environment and society. Extracting and processing primary raw materials is often energy-intensive and leads to emissions of greenhouse gases and other pollutants. The Mercedes-Benz Group has the ambition to increasingly decouple resource consumption from the growth of its production output and to keep the consumption of primary resources as low as possible.

The Mercedes-Benz Group has set itself the goal of increasing the use of secondary raw materials to 40 % within the next decade in line with the Ambition 2039.

Plastics, steel and aluminium are particularly important materials for this approach, as they are required in large quantities in vehicle production and are particularly energy and resource intensive. Lithium-ion batteries also contain valuable raw materials such as lithium or cobalt. For this reason, the Mercedes-Benz Group is striving to reuse the battery in the vehicle or to convert it for use in a stationary energy storage system. If a battery can no longer be reused, it is recycled. The Group's ambition is to achieve a recovery rate of more than 96 % in its own pilot factory at the Kuppenheim site, which was opened in 2024 for the recycling of lithium-ion battery systems.

The Mercedes-Benz Group is increasingly focusing on circular economy. With the aim of establishing a design-for-circularity approach, special attention is paid to durability, repairability, reusability and recyclability in the development of vehicles and components.



# Nature and biodiversity

Biological diversity and the services provided by ecosystems are an indispensable foundation for society and the environment. This makes it all the more important to protect natural habitats. Economic activities along the value chain can have an influence on this. As a player in the automotive industry, the Mercedes-Benz Group is aware of its role in protecting natural resources, biodiversity and ecosystems. The Group is committed to the three fundamental objectives of the International Convention on Biological Diversity (CBD) and the Kunming-Montreal Biodiversity Framework: conservation of biological diversity, sustainable use of biodiversity and equitable sharing of benefits arising from the use of genetic resources.

The Mercedes-Benz Group has the ambition to act in an environmentally conscious manner at all locations and to continuously improve its operational environmental performance. This also includes preserving and promoting biodiversity at the production sites. As part of an internal environmental due diligence process to assess environmental risks, the Group creates location profiles for its production plants worldwide. The Group takes into account, among other things, the degree of sealing of the sites, the hydro-geological situation and the classification of the area according to the type of building use and the use in the immediate vicinity. It also checks and documents whether the site and the surrounding area are in ecologically sensitive areas or protected zones. When planning sites, the Group also takes into account the land use for construction projects, which should generally be kept as low as possible. The Mercedes-Benz Group has already established numerous actions in its production plants worldwide to protect, preserve and improve biodiversity. For example, nesting aids for native birds and insects have been built and wild bee hotels have been set up. Some locations have created green roofs, dry streams and stone areas as habitats for cold-blooded animals as well as rock gardens and flower meadows.

The Mercedes-Benz Group is also driving the issue forward in the supply chain: It imposes minimum requirements on its partners, which are set out in the Responsible Sourcing Standards (RSS) – the Group's central contractual document for sustainability requirements on the part of suppliers. These aim to ensure that suppliers avoid environmental damage and take due diligence measures to protect biodiversity. This includes, among other things, that suppliers take appropriate due diligence measures to support the long-term protection of natural ecosystems, including the protection of natural and cultural values, if there are risks for the conversion of natural forests or other natural ecosystems.

In addition, Mercedes-Benz aims to further expand its activities to protect biodiversity in the supply chain. To this end, the company is examining the introduction of suitable analytical methods in order to systematically identify significant potential negative impacts on biodiversity in the future.







# Calculation basis and transparency

# Calculation of greenhouse gas emissions

The Mercedes-Benz Group calculates and documents its greenhouse gas emissions in Scope 1 to Scope 3 in accordance with the Corporate Accounting and Reporting Standard 2004 and the Corporate Value Chain Standard 2011 of the Greenhouse Gas (GHG) Protocol initiative.

It covers all direct emissions from sources for which the Group is directly responsible or which it controls (Scope 1), all indirect emissions from purchased energy, such as electricity or district heating, which is generated externally but consumed by the Group (Scope 2), and all indirect emissions that occur in the Group's value chain, both upstream and downstream emissions (Scope 3).

Besides CO<sub>2</sub>, the Mercedes-Benz Group takes other greenhouse gases into account in its balance sheets under Scope 1, Scope 2 and Scope 3. In addition, the Group reports its biogenic CO<sub>2</sub> emissions separately.

The GHG Protocol distinguishes a total of 15 Scope 3 categories. Emissions are determined on the basis of extensive methodological considerations and complex calculations. The reported Scope 3 categories are selected after an assessment of their significance. The categories reported are purchased goods and services (3.1), capital goods (3.2), Fuel- and energy-related activities (3.3), upstream transportation and distribution (3.4), waste generated in operations (3.5), business travel (3.6), employee commuting (3.7), processing of sold products (3.10), use of sold products (3.11), end-of-life treatment of sold products (3.12), franchises (3.14) and investments (3.15).

At 75 %, the majority of the Mercedes-Benz Group's reported Scope 3 emissions arise in the use phase, i. e., during fuel and electricity production (well-to-tank) and during the operation of its products (tank-to-wheel). The Mercedes-Benz Group calculates these emissions based on, among other things, global unit sales figures and the average standardized CO<sub>2</sub> fleet value of the annual new vehicle fleet. Using a model approach that includes all vehicle segments, an annual mileage of 20,000 km is assumed. The assumed operating life is ten years. In total, the mileage based on this calculation amounts to 200,000 km per vehicle. Further indirect emissions from the supply chain (Purchased goods and services, Category 1) or in connection with the recycling of vehicles (Category 12) are calculated using vehicle-specific life cycle assessments in accordance with ISO 14040/44. The supply chain accounts for around 17 % of indirect Scope 3 emissions.

Further information on the calculation of greenhouse gas emissions as well as current emissions data are published in the Sustainability Statement of the Mercedes-Benz Group.

 [Annual Report with integrated Sustainability Statement of the Mercedes-Benz Group](#)

# Transparency in the supply chain

The complex supply chains in the automotive industry pose a particular challenge for data transparency. This is why the Mercedes-Benz Group is a founding member of the Catena-X cooperation project. The ambition is to enable secure, sovereign and standardized data exchange across all participants in the automotive value chain. Catena-X is intended to support the Mercedes-Benz Group, among other things, in checking whether and to what extent suppliers comply with specified sustainability requirements. From the raw material mines to recycling, the data chain is to be supplemented with CO<sub>2</sub> data from each company, thus enabling a product-specific carbon footprint with the highest possible proportion of primary data.

## CO<sub>2</sub> offsetting and carbon removal

The Mercedes-Benz Group aims to reduce greenhouse gas emissions in its own business activities and throughout the entire value chain. The greenhouse gas emissions that cannot be avoided even after significant reduction at the locations<sup>1</sup> operated by the Mercedes-Benz Group (Scope 1 and Scope 2) have been offset by qualified climate change mitigation projects since 2022.

Beyond its own locations, the entire Mercedes-Benz new vehicle fleet is to be net carbon-neutral<sup>2</sup> across all stages of the value chain and the entire life cycle by 2039. The Mercedes-Benz Group intends to compensate for the emissions that cannot be avoided at that time through offset projects that meet high quality standards.

The Mercedes-Benz Group attaches great importance to the integrity and quality of the offset projects. All projects must comply with international accounting requirements and the quality requirements of the Gold Standard or other high-quality standards. In addition, the Mercedes-Benz Group has the project quality and the calculation methodology for new compensation projects verified in advance by an independent third party in order to identify potential accounting errors and negative impacts, such as on the environment and society in the project countries, at an early stage in the interest of risk minimization. The project implementation is further monitored continuously through ongoing communication with the project providers.

The Mercedes-Benz Group's offset portfolio is also being continuously developed. Since 2023, the focus has been gradually shifting from conventional offset projects that reduce emissions to carbon removal. Both technological and biological removal solutions play a role in this.

Offsetting emissions through carbon credits is an additional contribution by the Mercedes-Benz Group to climate change mitigation that does not negatively affect the level of ambition or the fulfilment of the reduction targets in any way. Greenhouse gas emissions and corresponding reduction targets are tracked and reported independently of compensation activities.

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<sup>1</sup> All considered locations in the respective reporting year of the Sustainability Statement.

<sup>2</sup> Net carbon-neutral means that carbon emissions that are not avoided or reduced at Mercedes-Benz are compensated for by certified offsetting projects.



# Internal CO<sub>2</sub> pricing

In order to accelerate the transformation in internal decision-making processes, the Mercedes-Benz Group uses internal CO<sub>2</sub> pricing systems.

In product development (the focus is on efficiency measures in vehicle projects), the Mercedes-Benz Group takes into account different fleet emissions regulations depending on the region. In its own production, the Group takes into account the CO<sub>2</sub> emission rights of the EU emissions trading system for energy-related projects (e.g., plant supply, energy production, and new energy consumers), which is a key climate policy instrument in Europe

# Measuring the target achievement

The Mercedes-Benz Group uses internal performance assessments to evaluate the effectiveness of the actions it intends to take to achieve its Ambition 2039 targets. To this end, it conducts internal audits at departmental level several times a year.

Progress is documented annually in the company's Sustainability Statement. The process is certified by an external auditing firm.

[Annual Report with integrated Sustainability Statement of the Mercedes-Benz Group](#)



