



TASK FORCE ON
CLIMATE-RELATED
FINANCIAL DISCLOSURE
(TCFD) REPORT 2021

MERCEDES-BENZ GROUP AG TCFD REFERENCE INDEX

Mercedes-Benz Group AG is one of the world's most successful automotive companies. With Mercedes-Benz AG, we are one of the leading global suppliers of premium and luxury cars and vans. Mercedes-Benz Mobility AG offers financing, leasing, car subscription and car rental, fleet management, digital services for charging and payment, insurance brokerage, as well as innovative mobility services.

The company is listed on the stock exchanges of Frankfurt and Stuttgart (ticker symbol MBG). In 2021 we had a workforce of around 172,000 and sold 2.3 million vehicles. Our Group revenue amounted to €168.0 billion and Group EBIT to €29.1 billion.

TCFD Recommendations

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Governance

Disclose the organization's governance around climate-related risks and opportunities.

a) Describe the board's oversight of climate-related risks and opportunities

Our goal is to make our entire new vehicle fleet CO₂-neutral across all stages of the value chain by 2039. In order to achieve this goal, we are transforming the products and services that are at the heart of our business operations. We are promoting climate protection with equal ambition in all upstream and downstream phases of the automotive life cycle. It encompasses climate neutrality at our suppliers, CO₂-neutral production in our production facilities worldwide and the CO₂-neutrality of our vehicles during the use phase. We also want to drive forward the implementation of our climate neutrality objective at our suppliers and partners.

With the strategic step from “electric first” to “electric only”, Mercedes-Benz is accelerating its transformation into an emission-free and software-driven future.

The Group Sustainability Board (GSB) is our central management body for all sustainability issues and reports to the Board of Management. The Chairman of the Board of Management and the Board of Management members responsible for Finance, Marketing & Sales and Greater China are members of the GSB. The GSB is chaired jointly by Renata Jungo Brüngger (the Board of Management member responsible for Integrity and Legal Affairs) and Markus Schäfer (the Board of Management member responsible for Development & Procurement, who is also Chief Technology Officer). The operational work is done by the Sustainability Competence Office (SCO), which consists of representatives from the units managed by the two Co-chairs of the GSB as well as additional representatives from Corporate Strategy, Finance and Corporate Communications. Besides performing its other tasks, the SCO also monitors the progress made in the six areas of action and the three enablers defined in the sustainable business strategy. The results are reported to the GSB and the Board of Management in the form of detailed scorecards at least once a year.

Our corporate management is responsible for setting strategic goals, including targets for reducing our CO₂ emissions, and for monitoring the progress made in achieving these goals. The Product Steering Board (PSB) is responsible for monitoring the development of the CO₂ emissions of the car fleet in markets in which such emissions are regulated. It is also responsible for providing forecasts. The CO₂ Project and Steering Committee (CO₂ PSC) does the same for the van fleet. In its evaluations, these bodies take into account a variety of factors, including the increasing degree of vehicle electrification and the changes that have been made to legal requirements, for example those related to the introduction of the new WLTP certification procedure.

The PSB is assigned to the Committee for Model Policy and Product Planning, while the CO₂ PSC is assigned to the Van Executive Committee. They report directly to the Board of Management of Mercedes-Benz Group AG.

The Board of Management then decides which measures need to be implemented. On the market side of the equation, price and volume control measures can also affect our ability to achieve our CO₂ targets over the short term. For this reason, such measures are also discussed with the Board of Management within the framework of regular reporting on the current state of CO₂ fleet compliance.

At Mercedes-Benz Cars & Vans, an interdisciplinary team consisting of environmental experts, buyers, developers, logistics specialists, production specialists, strategists and sales experts is working to make our new-car fleet CO₂-neutral by 2039. This team monitors the CO₂ emissions and manages the measures for reducing them.

The Corporate Environmental Protection unit, for example, calculates the CO₂ emissions of all model series and all drive types at Mercedes-Benz Cars & Vans and conducts environmental and life cycle assessments for the vehicles. The Procurement unit at Mercedes-Benz is working together with around 2,000 tier 1 suppliers in order to also make the supply chain CO₂-neutral.

Our logistics experts are addressing the emissions caused by the delivery of goods, sales operations and shipments to distribution hubs. Their goal is to avoid

shipments as much as possible and to optimise routes and transport systems. The teams are also applying additional measures for achieving CO₂ neutrality in areas such as production and customer-specific charging concepts.

The majority of the CO₂ emissions in the life cycle of a vehicle are generated during the use phase, i.e. while driving. That's why the teams are supplemented by CO₂ strategists who specialise in tank-to-wheel emissions. They analyse how much CO₂ our vehicles actually emit out on the road. This information, in turn, provides the basis for reducing CO₂ emissions.

In addition, climate-related risks and opportunities are integrated into the Group-wide risk management process at Mercedes-Benz Group AG. Via the segments, information for reporting to the Board of Management and Supervisory Board is passed on to Group Risk Management.

The Group Risk Management Committee (GRMC) is responsible for the continual improvement of the risk management system and for assessing its suitability and effectiveness. The GRMC is composed of representatives of Accounting & Financial Reporting, the Legal department, Compliance, Corporate & Information Security and the members responsible for finance of the Boards of Management of Mercedes-Benz Group AG, Mercedes-Benz AG, and Mercedes-Benz Mobility AG. It is chaired by the Board of Management members of Mercedes-Benz Group AG responsible for Finance & Controlling / Mercedes-Benz Mobility and for Integrity and Legal Affairs. The Internal Auditing department contributes material findings on the internal control and risk management system.

References:

CDP Climate Change Questionnaire: C1/ (C1.1b)
Annual Report 2021 p. 29, 98, 131
Sustainability Report 2021

b) Describe management's role in assessing and managing climate-related risks and opportunities.

The Mercedes-Benz Group's management approach to climate protection is based on the Ambition 2039 targets. They are an expression of our commitment to the Paris Agreement on climate change. We have also defined the measures that we plan to use to attain

these goals. We use internal and external performance reviews to evaluate their effectiveness. To this end, we conduct internal reviews at the level of the specialist units several times a year. Externally, we commission an auditing company to audit selected goals and measures. In addition, Mercedes-Benz Cars & Vans has defined a concrete CO₂ reduction pathway in line with the standards of the Science Based Targets initiative (SBTi). The SBTi has confirmed that this pathway conforms to the Paris Agreement on climate change.

Furthermore, we conduct dialogues regarding climate protection and we use the knowledge gained in this way to review our management approach and adjust it as needed. For example, we hold in-depth discussions with environmental institutes and NGOs during our annual Sustainability Dialogue. We also conduct talks on the subject of climate protection with our Board of Management throughout the year. In addition, the feedback we continually receive from the government, the public and our other stakeholders lets us know how the sustainability goals we have set for.

In order to identify business risks and opportunities at an early stage and to assess and manage them actively, the Board of Management applies effective management and control systems, which have been brought together in an overall risk and opportunity management system. Risks and opportunities are not offset.

Risks and opportunities resulting from sustainability aspects are integrated into the Group-wide risk management process at Mercedes-Benz Group. They are understood to be conditions, events, or developments involving environmental, social or governance factors (ESG), the occurrence of which may have an actual or potential impact on the Mercedes-Benz Group's profitability, cash flows and financial position, as well as on its reputation. Climate-related risks and opportunities in connection with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) are part of the environment area and are thus also identified and assessed as part of the risk management process.

The organisational embedding of risk and opportunity management takes place through the risk management organisation established at the Group. Responsibility for operational risk management and for the risk

management processes lies with the segments, corporate functions, organisational entities and companies. They report on the specific risks and opportunities to the next-higher level unit on a regular basis. Significant, unexpected risks must be reported on immediately. Through the segments, this information is passed on to Group Risk Management for reporting to the Board of Management, the Audit Committee and the Supervisory Board. The Group Risk Management Committee (GRMC) is responsible for the continual improvement of the risk management system and for assessing its suitability and effectiveness. The GRMC is composed of representatives of Accounting & Financial Reporting, the Legal department, Compliance, Corporate & Information Security and the members responsible for finance of the Boards of Management of Mercedes-Benz Group AG, Mercedes-Benz AG, and Mercedes-Benz Mobility AG. It is chaired by the Board of Management members of Mercedes-Benz Group AG responsible for Finance & Controlling / Mercedes-Benz Mobility and for Integrity and Legal Affairs. The Internal Auditing department contributes material findings on the internal control and risk management system.

The Group Risk Management Committee (GRMC) is responsible for the assessment of the suitability and effectiveness of the Group-wide internal control system with regard to the scope of business operations and the Group's risk situation. The Board of Management, Audit Committee and Supervisory Board are regularly informed about potential significant control weaknesses and the effectiveness of the control mechanisms installed.

The Audit Committee and the Supervisory Board of Mercedes-Benz Group AG and the Supervisory Boards of Mercedes-Benz AG and Mercedes-Benz Mobility AG are responsible for monitoring the internal control and risk management system. The Internal Auditing department monitors whether the statutory conditions and the Group's internal guidelines concerning the internal control and risk management system of the Group are adhered to. If required, measures are initiated in cooperation with the respective management. External auditors audit the system for the early identification of risks, which is integrated in the risk management system, for its general suitability to identify risks threatening the existence of the Group; in addition, in the context of the

audit of the consolidated financial statements, they report to the Audit Committee and the Supervisory Board on any significant weaknesses that have been recognised in the accounting-related internal control and risk management system.

References:

CDP Climate Change Questionnaire:
C1 / (C1.2) / (C1.2a)
C2 / (C2.2) / (C2.2a)
Annual Report 2021 p. 130, 131, 132
Sustainability Report 2021

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.

a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

The Mercedes-Benz Group is exposed to a large number of risks that are directly linked with the business activities of Mercedes-Benz Group AG and its subsidiaries or which result from external influences. A risk is understood as the danger that events, developments or actions will prevent the Group or one of its segments from achieving its targets. This includes monetary and non-monetary risks. At the same time, it is important to identify opportunities in order to safeguard and enhance the competitiveness of the Mercedes-Benz Group. An opportunity is understood as the possibility due to events, developments or actions to safeguard or to surpass the planned targets of the Group or of a segment.

In the context of the financial planning, risks and opportunities are considered with an observation period of up to five years. The reporting of risks and opportunities in the risk and opportunity report of the Annual Report generally relates to a period of one year.

In order to achieve its long-term climate-protection goal of becoming CO₂-neutral by 2039, Mercedes-Benz is planning the complete electrification of its product range. By the end of this decade, Mercedes-Benz wants to be all-electric wherever market conditions allow. This strategic step from electric-first to electric-only will accelerate the transformation of Mercedes-Benz to an emission-free, software-driven future.

Climate-related risks and opportunities in connection with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) are assessed as part of the risk management process. They can be found in the respective categories of the risk and opportunity report of the Annual Report according to their cause. Examples include risks from market risks on the acceptance of electric vehicles, legal and political

framework conditions to reduce emissions and consumption levels, or risks and opportunities from equity investments and partnerships for the transformation towards electric mobility.

General market risks and opportunities

The risks and opportunities for the economic development of automotive markets are strongly affected by the cyclical situation of the global economy. The assessment of market risks and opportunities is linked to assumptions and forecasts about the overall development of markets in the regions in which the Mercedes-Benz Group is active.

The lack of market acceptance for electric vehicles can also lead to risks in the development of unit sales – especially in the Mercedes-Benz Vans segment – and have a negative impact on earnings. The development of markets, unit sales and inventories is continually analysed and monitored by the segments; if necessary, specific marketing and sales programmes are implemented.

Volatilities with regard to market developments can also lead to the overall market or regional conditions for the automotive industry developing better than assumed in the internal forecasts and premises, resulting in business opportunities in the market. Opportunities may also arise from an improvement in the competitive situation or a positive development of demand. The utilization of opportunities is supported by sales and marketing campaigns.

The discontinuation of government subsidies for electric vehicles can also negatively affect their pricing and minimise profit margins. Continuous monitoring is carried out in order to recognise risks at an early stage. Depending on the situation, product-specific and possibly regionally different measures are taken to support weaker markets.

The Mercedes-Benz Group also applies various programmes to boost sales, including financial incentives for customers.

Risks related to the legal and political framework

The automotive industry is subject to extensive governmental regulation worldwide. Risks and opportunities

from the legal and political framework have a considerable influence on the Mercedes-Benz Group's future business success. Regulations concerning vehicles' emissions, fuel consumption, safety and certification, as well as tariff aspects and taxes in connection with the sale or purchase of vehicles or vehicle parts, play an important role.

The Mercedes-Benz Group constantly monitors the development of the legal and political framework and attempts to anticipate foreseeable requirements and long-term objectives at an early stage in the product development process. In particular, changes in the legal and political framework at short notice can be associated with additional costs or higher investments.

Many countries and regions have implemented legal limits for the fuel consumption and/or CO₂ emissions of car fleets, with varying target limits. Non-compliance with regulations applicable in the various markets might result in significant penalties and reputational harm, and might even mean that vehicles with conventional drive systems could not or could no longer be registered in the relevant markets. The Mercedes-Benz Group counteracts these risks by with the transformation towards electric mobility and the associated realignment of its products.

Mercedes-Benz Cars and also Mercedes-Benz Vans faces the described risks with respect to regulations on mandatory targets for the average fleet fuel consumption and CO₂ emissions of new vehicles especially in the markets of China, Europe and the United States. The Mercedes-Benz Group gives these targets due consideration in its product planning. The increasingly challenging target of a fully electric future requires significant proportions of actual unit sales of plug-in hybrids and cars with other types of electric drive. We assume that the ambitious statutory targets can be met, whereby in some markets, the modalities for target achievement granted by law will have to be utilised - including the acquisition of external credits. The market success of alternative drive systems is greatly influenced not only by customer acceptance but also by regional market conditions such as the battery-charging infrastructure and state support.

Risks and opportunities from research and development

Technical developments and innovations are of key importance for the safe and sustainable mobility of the future. The transformation towards electric mobility and comprehensive digitisation have resulted in ambitious development targets and the market launch of new technologies. Through the design of the product range, technical innovations are integrated in the strategic product planning of the automotive segments. In addition to the resulting opportunities, decisions in favour of certain technologies and the continuously growing scope of emission, consumption and safety requirements to be met are associated with risks and opportunities from research and development.

Risks and opportunities from purchasing and logistics

Interruptions in global supply chains, especially caused by bottlenecks for electronic components and other important parts, as well as possible failures in supply by energy providers, can cause bottlenecks in the automotive segments and can affect the ramp up of our electric product portfolio. In order to avoid such bottleneck situations with supplied parts and components, we place importance on being able to offset capacity bottlenecks through forward-looking planning. Supplier management is undertaken for the prevention of risks with the aim of ensuring the quantity and quality of the components required to produce the vehicles. Lack of availability and quality problems with certain vehicle parts can lead to production downtimes and cause costs.

Risks and opportunities related to equity investments and partnerships

Cooperation with partners in shareholdings and partnerships is of key importance to the Mercedes-Benz Group, both in the transformation towards electric mobility and comprehensive digitisation, and in connection with mobility solutions. Especially with new technologies, these shareholdings help to utilise synergies and improve cost structures in order to respond successfully to the competitive situation in the automotive industry. The Mercedes-Benz Group generally participates in the risks and opportunities of shareholdings in line with its equity interest, and is also subject to share-price risks and opportunities if such companies are listed on a stock exchange.

Legal risks - Regulatory

The automotive industry is subject to extensive governmental regulations worldwide. Laws in various jurisdictions govern occupant safety and the environmental impact of vehicles, including emissions levels, fuel economy and noise, as well as the emissions of the plants where vehicles or parts thereof are produced. In case regulations applicable in the different regions are not complied with, this could result in significant penalties and reputational harm or the inability to certify vehicles in the relevant markets. The cost of compliance with these regulations is considerable, and in this context, Mercedes-Benz continues to expect a significant level of costs.

References:

CDP Climate Change Questionnaire:
C2 / (C2.1a)
C2 / (C2.2) / (C2.2a)
C2 / (C2.3) / (C2.3a)
C2 / (C2.4) / (C2.4a)
Annual Report 2021 p. 64, 130, 134, 136, 137, 138, 140, 143

b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

At the Mercedes-Benz Group, sustainability means generating sustainable economic, environmental and social value added for our stakeholders, i.e., our customers, employees, investors, business partners and society as a whole. Sustainable development is therefore part of the brand essence of Mercedes-Benz and a guiding principle of our actions and all our interactions with our customers. This holistic strategic approach applies not only to our own products and manufacturing locations but also to our entire upstream and downstream value chain.

The Mercedes-Benz Group acts in line with the sustainable business strategies adopted by the Board of Management in 2019. This means that rather than being supplements to the business strategies, sustainability issues are instead an integral component of them. For the Mercedes-Benz Group, the Paris Agreement represents more than just an obligation; our commitment to its targets stems from our fundamental convictions. We believe that it is our mission to contribute to CO₂-neutral mobility around the world.

With respect to CO₂ emissions from road traffic, EU legislation focuses on reducing the emissions of new vehicles, for which it defines concrete targets. According to the proposed European Commission regulation that was published in July 2021, the CO₂ emissions of cars are to be reduced by 55 per cent (previously 37.5 per cent) by 2030 compared to the base year of 2021. The CO₂ reduction requirement for 2025 will stay at 15 per cent relative to 2021. The proposed legislation also states that the average CO₂ emissions should be 0g CO₂/km in 2035.

The Mercedes-Benz Group realises that achieving this target will require a high level of investment. In order to finance it, we intend to increasingly use new tools such as Green Bonds in the future. Green bonds offer environment-oriented investors the opportunity to directly participate in the implementation of our technological strategy. However, the broad-based success of low-emission mobility requires not only sustainable investment but also the corresponding framework conditions. From our current perspective, we need ambitious CO₂ pricing systems for fossil fuels and the creation of a comprehensive charging infrastructure as well as a hydrogen filling station network.

In order to achieve its long-term climate-protection goal of becoming CO₂-neutral by 2039, Mercedes-Benz is planning the complete electrification of its product range. By the end of this decade, Mercedes-Benz wants to be all-electric wherever market conditions allow. This strategic step from electric-first to electric-only will accelerate the transformation of Mercedes-Benz to an emission-free, software-driven future.

Our capital allocation is moving accordingly from electric-first to electric-only. Investments into combustion engines and plug-in hybrid technologies will drop by 80% between 2019 and 2026.

We underscored this fact during the UN Climate Change Conference in Glasgow in November 2021, when we signed the COP26 Declaration on accelerating the transition to 100 per cent zero-emission cars and vans. In the declaration, the Mercedes-Benz Group was the only German automaker to confirm that it is working to offer only emission-free cars and vans in leading markets from 2035.

Mercedes-Benz' Ambition 2039 strategy aims not only to help make the world climate-neutral but also to get our customers enthusiastic about such a climate-neutral future. For many customers, it's important that the products they use do not impact the environment and that they do not have to make any compromises while using these products in their daily life. With its product range, Mercedes-Benz wants to fulfil both of these customer requirements.

We want to accelerate the pace at which we are expanding our range of electric vehicles. Our research and development work is correspondingly vast and between 2022 and 2026 we want to invest a total of over €60 billion in the transformation to an emission-free and software-powered future. In this way, we are continuously expanding the portfolio of Mercedes-Benz with further models. Mercedes-Benz also offers a wide variety of transport solutions that do not produce local emissions for the commercial vans sector.

Since 2018 we have been offering battery-powered automobiles under the Mercedes-EQ brand. We are continuously expanding this brand's portfolio through the addition of more models.

In August 2021, our Cars division launched the first all-electric luxury EQS sedan on the car market. The all-electric EQS is the company's first automobile whose structure is not derived from that of a combustion engine model, but instead based on a modular electric architecture: the wheelbase, the track and many other system components (especially the batteries) are variable due to the modular system. This enables them to be used on any scale and for any model. As a result, the vehicle concept is designed to fulfil all of the requirements for a family of battery-powered luxury and upper-range models. The EQE business sedan and the EQS and EQE SUV variants are to be followed by additional models equipped with the modular electric architecture.

To make electric mobility possible, the charging infrastructure has to make rapid progress. That's why Mercedes-Benz is continuously working to make the charging of electricity more convenient, faster and more accessible — at home, at the workplace and in public spaces.

In March 2021, Mercedes-Benz launched Green Charging in Europe. Mercedes me Charge enables our customers with EQ models and plug-in hybrids to charge sustainable energy at public charging stations. Green Charging offsets the electricity used during charging by subsequently feeding energy from renewable sources into the grid. Green Charging was launched on the United States and Canadian markets in August 2021.

To achieve CO₂ neutrality along the entire value chain needs to take into account our partners and suppliers. That's because our supplier network plays a crucial role in the attainment of the climate-protection goals. For example, the production of an all-electric vehicle generates about twice as much CO₂ as that of a conventional combustion-engine vehicle. This is primarily due to the lithium-ion batteries.

Mercedes-Benz Group AG implements various projects and measures in order to avoid and reduce CO₂ emissions in its supply chains for services as well as for production and non-production materials.

In 2020, Mercedes-Benz AG also began to send an Ambition Letter about CO₂-neutrality to its suppliers of production materials. By signing this document, they commit themselves to supply Mercedes-Benz AG only with products that are CO₂-neutral over their life cycle — and thus to pursue our climate-protection goals — by 2039 at the latest.

Vans also pursues selected focal points for production materials. In a first step, we investigated which players and which stages of the supply chain produce large amounts of CO₂ emissions. We then defined quantitative intermediate targets for CO₂ emissions in our supply chains. These targets were derived on the basis of the results of our supplier talks and set with the help of external experts. We are focusing on materials and components that emit large amounts of CO₂ during production, e.g. steel, aluminium, certain types of plastic and batteries. To conclude, we integrated the target values into our criteria for the awarding of contracts. When awarding contracts for our Mercedes-Benz Modular Architecture (MMA) electric vehicle platform for compact and mid-range models, we employ the CO₂ and recycle requirements as key criteria for all areas. During the reporting year, suppliers assured us that they would

fulfil our targets for more than 40 contracts awarded for this model series alone. This means that they will continuously reduce the CO₂ emissions of materials and components that cause high CO₂ emissions in particular, as well as increasing the amount of secondary raw materials.

In 2021, we developed requirements and guidelines for the calculation of CO₂ emissions in order to provide suppliers with guidance and obtain uniform, and thus comparable, supplier data.

The reduction of greenhouse gas emissions applies also to our own production processes. By pursuing our goal of making our production processes CO₂-neutral we are fulfilling our voluntary commitment to the Paris Agreement and complying with other national and international climate-protection guidelines.

The Mercedes-Benz Group operates more than 30 production facilities all over the world. All of the car and battery assembly locations operated by the Mercedes-Benz Group will have climate-neutral production processes from 2022.

Mercedes-Benz has committed itself to consistently reducing CO₂ emissions caused by vehicle production and energy supply at its plants, or to eliminate them completely wherever possible. The procurement of green electricity plays a key role in these efforts. Beginning in 2022, all of the Mercedes-Benz Group's own production plants worldwide will only procure electric power from renewable sources.

Another major pillar of CO₂-neutral production at Mercedes-Benz involves increasing the generation of energy from renewable sources at the various locations.

The Mercedes-Benz Group is also reducing CO₂ emissions arising from the plants' heat supply. Among other things, the company plans to use biogas, biomass, geothermal energy and solar heating systems and to commission heat pumps powered by green electricity.

Due to its many locations, the sales organisation of Mercedes-Benz also has considerable potential to drastically reduce CO₂ emissions. The company-owned sales and service outlets of Mercedes-Benz AG in Germany are striving to become CO₂-neutral by the end of 2022.

However, the associated investments in energy efficiency and renewable energies are not only contributing to climate protection. They also produce financial benefits due to rising energy prices and various political decisions. For example, climate-protection measures also have a high marketing potential for our car dealerships, because they are the main point of contact for customers and are very visible at the local level.

Furthermore and in addition to other criteria from areas such as environmental protection, social commitment and corporate governance, the Mercedes-Benz Group has, since 2020, been including the achievement of CO₂ fleet targets as a factor for determining the annual bonus for the Board of Management and executives.

References:

CDP Climate Change Questionnaire:
C2 / (C2.3a)
C2 / (C2.4a)
C3 / (C3.1)
C3 / (C3.2a)
C3 / (C3.3)
C3 / (C3.4) / (C3.4a)
Annual Report 2021 p. 89
Sustainability Report 2021
[Mercedes-Benz Strategy Update](#)

c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

The Mercedes-Benz Group's management approach to climate protection is based on the Ambition 2039 targets. They are an expression of our commitment to the Paris Agreement on climate change. We have also defined the measures that we plan to use to attain these goals. We use internal and external performance reviews to evaluate their effectiveness. To this end, we conduct internal reviews at the level of the specialist units several times a year. Externally, we commission an auditing company to audit selected goals and measures. In addition, Mercedes-Benz Cars & Vans has defined a concrete CO₂ reduction pathway in line with the standards of the Science Based Targets initiative (SBTi). The SBTi has confirmed that this pathway conforms to the Paris Agreement on climate change.

We are striving to reduce the CO₂ emissions at our Mercedes-Benz Cars & Vans plants (Scope 1 and 2) by 50% relative to the reference year 2018 by 2030. This production-related reduction target is in line with

current scientific findings given a maximum global warming of 1.5 degrees.

By 2030, we also plan to reduce the greenhouse gas emissions of the new vehicle fleet during the vehicle use phase (“well-to-wheel”) by more than 40% as compared to 2018.

These targets have been confirmed by the Science Based Targets Initiative.

Mercedes-Benz is continuously working with various future scenarios for the period up until 2039 in order to model its approach over time. To achieve a profound basis for our analyses, emission trajectories of commonly recognized scenarios, like the International Energy Agency’s (IEA) “Net Zero Emissions by 2050 Scenario (NZE)” or the “Sustainable Development Scenario (SDS)” were analyzed, broken down and used to compare against our projected reduction pathways. In general, forecasts regarding 2039 depend on different factors, including customer demand patterns, political conditions, and infrastructure development, and CO₂ pricing.

Mercedes-Benz is therefore accelerating the transformation to an emission-free, software-driven future with the strategic step from “Electric first” to “Electric only”. It is planning the complete electrification of its product range. By the end of this decade, Mercedes-Benz wants to be all-electric wherever market conditions allow. We underscored this fact during the UN Climate Change Conference in Glasgow in November 2021, when we signed the COP26 Declaration on accelerating the transition to 100% zero-emission cars and vans. In the declaration, the Mercedes-Benz Group was the only German automaker to confirm that it is working to offer only emission-free cars and vans in leading markets as of 2035.

References:

CDP Climate Change Questionnaire:

C3 / (C3.1)

C3 / (C3.2) / (C3.2a)

Annual Report 2021 p. 98

Sustainability Report 2021

[🌐 How the CO₂ footprint of a passenger car materializes](#)

Risk Management

Disclose how the organization identifies, assesses, and manages climate-related risks.

a) Describe the organization's processes for identifying and assessing climate-related risks.

The Mercedes-Benz Group is exposed to a large number of risks that are directly linked with the business activities of Mercedes-Benz Group AG and its subsidiaries or which result from external influences. A risk is understood as the danger that events, developments or actions will prevent the Group or one of its segments from achieving its targets. This includes monetary and non-monetary risks. At the same time, it is important to identify opportunities in order to safeguard and enhance the competitiveness of the Mercedes-Benz Group. An opportunity is understood as the possibility due to events, developments or actions to safeguard or to surpass the planned targets of the Group or of a segment.

In order to identify business risks and opportunities at an early stage and to assess and manage them actively, the Board of Management applies effective management and control systems, which have been brought together in an overall risk and opportunity management system. Risks and opportunities are not offset.

The risk management system is intended to systematically and continually identify, assess, control, monitor and report on risks threatening the Mercedes-Benz Group's existence and other material risks jeopardizing the Group's success, in order to support the achievement of corporate targets and to enhance risk awareness at the Group. The risk management system is integrated into the value-based management and planning system of the Mercedes-Benz Group and is a fixed component of the overall planning, management and reporting process in the companies, segments and corporate functions.

The opportunity management system at the Mercedes-Benz Group is based on the risk management system. The objective of opportunity management is to recognise the possible opportunities arising in business activities resulting from positive developments at an early stage, and to use them in the best possible way

for the Group by taking appropriate measures. By taking advantage of opportunities, planned targets should be met or exceeded.

As part of the planning process, risks and opportunities are noted within an observation horizon of up to five years. The employees responsible for risk management have the task of defining measures and, if necessary, initiating such measures to avoid or reduce risks or to protect the Group against them. Within the context of opportunity management, measures are to be taken for seizing, improving and (fully or partially) realizing opportunities.

Risks and opportunities resulting from sustainability aspects are integrated into the Group-wide risk management process at Mercedes-Benz Group. They are understood to be conditions, events, or developments involving environmental, social or governance factors (ESG), the occurrence of which may have an actual or potential impact on the Mercedes-Benz Group's profitability, cash flows and financial position, as well as on its reputation. Circumstances categorised as environmental issues include CO₂ emissions or extreme weather events.

Climate-related risks and opportunities in connection with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) are part of the environment area and are thus also identified and assessed as part of the risk management process.

References:

CDP Climate Change Questionnaire:
C2 / (C2.1)
C2 / (C2.2) / (C2.2a)
Annual Report 2021 p. 130, 131
Sustainability Report 2021

b) Describe the organization's processes for managing climate-related risks.

The automotive industry is subject to extensive governmental regulation worldwide. Risks and opportunities from the legal and political framework have a considerable influence on the Mercedes-Benz Group's future business success. Regulations concerning vehicles' emissions, fuel consumption, safety and certification, as well as tariff aspects and taxes in connection with the sale or purchase of vehicles or vehicle parts, play an important role.

The Mercedes-Benz Group constantly monitors the development of the legal and political framework and attempts to anticipate foreseeable requirements and long-term objectives at an early stage in the product development process. In particular, changes in the legal and political framework at short notice can be associated with additional costs or higher investments.

Many countries and regions have implemented legal limits for the fuel consumption and/or CO₂ emissions of car fleets, with varying target limits. Non-compliance with regulations applicable in the various markets might result in significant penalties and reputational harm, and might even mean that vehicles with conventional drive systems could not or could no longer be registered in the relevant markets. The Mercedes-Benz Group counteracts these risks by with the transformation towards electric mobility and the associated realignment of its products.

Mercedes-Benz Cars and also Mercedes-Benz Vans faces the described risks with respect to regulations on mandatory targets for the average fleet fuel consumption and CO₂ emissions of new vehicles especially in the markets of China, Europe and the United States. The Mercedes-Benz Group gives these targets due consideration in its product planning. The increasingly challenging target of a fully electric future requires significant proportions of actual unit sales of plug-in hybrids and cars with other types of electric drive. We assume that the ambitious statutory targets can be met, whereby in some markets, the modalities for target achievement granted by law will have to be utilised - including the acquisition of external credits. The market success of alternative drive systems is greatly influenced not only by customer acceptance but also by regional market conditions such as the battery-charging infrastructure and state support.

Technical developments and innovations are of key importance for the safe and sustainable mobility of the future. The transformation towards electric mobility and comprehensive digitisation have resulted in ambitious development targets and the market launch of new technologies. Through the design of the product range, technical innovations are integrated in the strategic product planning of the automotive segments. In addition to the resulting opportunities, decisions in favour

of certain technologies and the continuously growing scope of emission, consumption and safety requirements to be met are associated with risks.

References:

CDP Climate Change Questionnaire:
C2 / (C2.1) / (C2.1a) / (C2.1b)
C2 / (C2.2)
Annual Report 2021 p. 136, 137

c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

Risk and opportunity management is a fixed component of the Group-wide planning, controlling and reporting process. It is designed to sustainably support the achievement of the corporate targets and to ensure risk awareness at the Group. The sustainability aspects are integrated into the Group-wide risk management process at the Mercedes-Benz Group. These aspects are understood as conditions, events or developments related to the environment, social issues or corporate governance (ESG) whose occurrence could actually or potentially impact the earnings, financial position, asset situation and reputation of the Mercedes-Benz Group. Circumstances categorised as environmental issues include CO₂ emissions or extreme weather events.

The organisational embedding of risk and opportunity management is carried out by the risk management organisation that has been established at the Group. The responsibility for operational risk management and for the risk management processes is borne by the divisions, corporate functions, organisational units and companies. They report on the concrete risks and opportunities at regular intervals to their superordinate units.

Unexpectedly occurring material risks must be reported immediately. The divisions pass along this reporting information to the corporate risk management unit, which presents it to the Board of Management, the Audit Committee and the Supervisory Board. Risk and opportunity management is based on the principle of completeness. This means that at the level of the individual entities, all identified risks and opportunities enter the risk management process.

In the context of the planning, risks and opportunities

are considered with an observation period of up to five years. The reporting of risks and opportunities in risk and opportunity report of the Annual Report generally relates to a period of one year.

References:

CDP Climate Change Questionnaire:
C2 / (C2.1)
C2 / (C2.2)
Annual Report 2021 p. 130, 131
Sustainability Report 2021

Metrics & Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

The assessment of individual risks and opportunities takes place on the basis of their probability of occurrence and possible impact. Multiplying the probability of occurrence by the possible impact results in the expected monetary value, which in this reporting year for the first time also forms the basis for the classification of the risk and opportunity categories in the levels “low”, “medium” or “high”. The expected monetary value is also used and reported as an additional assessment dimension within the framework of internal risk and opportunity reporting.

The Mercedes-Benz Group has made climate protection a core element of its business strategy. Our goal is to make our entire new vehicle fleet CO₂-neutral across all stages of the value chain by 2039.

That’s because sustainability is one of the brand promises of Mercedes-Benz.

One of our key performance indicator is the figure for the CO₂ emissions of our fleet of new cars in Europe (European Union, Norway and Iceland). This takes into account the indicator’s great importance for the management of the Company, especially with regard to sustainability aspects.

In the reporting year, the average CO₂ emissions of our total car fleet in Europe (European Union, Norway and Iceland) as measured on the basis of legal regulations will have amounted to an estimated 115 g/km (WLTP, including vans that are registered as passenger cars). The CO₂ target of 125 g/km was thus achieved in Europe (European Union, Norway and Iceland) in 2021. As a result, our CO₂ emissions decreased significantly compared to the comparable WLTP value for 2020 of 136 g/km, as had been forecast at the beginning of 2021.

Since 2018 we have been offering battery-powered automobiles under the Mercedes-EQ brand. We are continuously expanding this brand’s portfolio through the addition of more models.

In 2021 deliveries of Mercedes-Benz plug-in hybrid and electric passenger cars reached a record 227,458 units (+69.3%) of which 48,936 were Mercedes-EQ battery electric passenger cars (BEV) (+154.8%). Including smart and Mercedes-Benz Vans, total BEV sales rose above 99,000 units.

Alternative drive systems at Mercedes-Benz Cars¹

		2020	2021
Worldwide	Hybrid	115,191	178,526
	Electric drive	47,672	90,082
	Alternative drive systems (total)	162,863	268,608
	MBC unit sales (total)	2,202,579	2,093,476
Europe	Hybrid	91,427	135,431
	Electric drive	37,013	64,966
	Alternative drive systems (total)	128,440	200,397
	MBC unit sales (total)	626,655	548,680

¹ Retail unit sales Mercedes-Benz Cars (incl. V- and X-Class)

The Mercedes-Benz Group is obliged to apply the EU taxonomy regulation. The proportions of revenue, capital expenditure and operating expenses accounted for by environmentally sustainable economic activities are to be reported on an annual basis. These proportions are determined on the basis of IFRS amounts. For detailed information on our taxonomy reporting refer to our Annual Report 2021 p. 91ff.

References:

CDP Climate Change Questionnaire:
C4 / (C4.1a) / (C4.1b)
C4 / (C4.2) / (C4.2b) / (C4.2c)
C9 / (C9.1)
Annual Report 2021 p. 50, 58, 91ff (EU Taxonomy), 131
Sustainability Report 2021
[Mercedes-Benz sees strong demand as high-end and electrified vehicle sales surge](#)

b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

In order to evaluate the environmental compatibility of a vehicle, Mercedes-Benz carries out life cycle assessments. We systematically examine a vehicle's CO₂ emissions and other environmental effects throughout its entire life cycle — from the extraction of raw materials and vehicle production to product use and recycling. Among other things, these analyses have made it clear that as more and more vehicles are electrified, the focus is shifting towards other factors, such as the production of the high-voltage battery and the generation of the electricity for charging the battery.

We record and publish the key figures for the life cycle assessments in line with the basic principles of the Greenhouse Gas (GHG) Protocol.

We correspondingly divide our greenhouse gas emissions into three categories called the Greenhouse Gas Scopes. Scope 1 comprises all the emissions we cause ourselves through the combustion of energy carriers at our production locations, such as the generation of electricity and heat in our own power plants.

Scope 2 includes all emissions that are due to external providers from whom we purchase energy in forms such as electricity and district heating. Scope 3 includes all the emissions that are generated before (upstream of) or after (downstream of) our business operations. For example, Scope 3 includes the CO₂ emissions that arise in the supply chain (purchased goods and services), as a result of our vehicles' operation in customers' hands (the use phase, including the production of fuel and electricity), or in the recycling phase of the vehicles.

The GHG Protocol specifies a total of 15 categories of Scope 3 emissions. The emissions are determined on the basis of comprehensive methodological considerations and complex calculations. Most (approximately 80 per cent) of our reported Scope 3 emissions are generated during the use phase — in other words, during the production of fuel, and the generation of electricity (well-to-tank) and the driving operation of our products (tank-to-wheel). About 17 per cent of our indirect Scope 3 emissions are due to the supply chains that provide us with goods and services.

We determine the CO₂ emissions of our vehicles in the use phase on the basis of our worldwide sales figures and the fleet's average normalised CO₂ emissions figure. For this calculation, we assume that each vehicle travels 20,000 kilometres per year. We also assume that each car is used for a period of ten years. The average total mileage thus amounts to 200,000 kilometres per vehicle.

At the moment, it is safe to assume that Scope 3 reporting will play an important role in the struggle to limit climate change in the future. We expect that this will create more transparency and trigger a competition among CO₂ emitters to develop the most effective way to limit the greenhouse gases that are damaging the climate.

Scope 1, 2 and 3 emissions worldwide for Mercedes-Benz Cars^{1,5}

Scope 3	2020		2021	
	Specific CO ₂ in t/car	Absolute CO ₂ in t/million t ⁴	Specific CO ₂ in t/car	Absolute CO ₂ in t/million t ⁴
Procured goods and services ⁶	8.1	17.0	8.4	17.0
Logistics	1.0 ²	2.1 ²	1.1 ²	2.2 ²
Business travel	0.006	0.012	0.009	0.019
Employee traffic	0.060	0.125	0.053	0.107
Use phase of our products (well-to-tank)	5.6	11.8	6.3 ³	12.7 ³
Use phase of our products (tank-to-wheel)	33.7	70.4	32.2	65.5
Recycling and waste disposal ⁶	0.4	0.8	0.4	0.8
Scope 1 and 2				
Manufacture	0.8	0.9 ⁴	0.7	0.7 ⁴
Total	49.7	103.2	49.1	99.2

1 Values are rounded

2 Forecast value

3 Incl. Green Charging: Contribution per vehicle -0.03 t CO₂

4 Absolute Scope 3 emissions relate to retail sales (2020: 2,087,200; 2021: 2,032,663; unaudited). Absolute Scope 1 and 2 emissions relate to vehicles produced from fully consolidated locations, excluding third-party products (2020: 1,230,733; 2021: 1,132,213; unaudited)

5 For calculation basis see appendix Calculation and documentation of CO₂ emissions and chapter Making life cycle assessments, Calculation of CO₂ emissions in the Sustainability Report 2021

6 See [Life cycle assessments of our vehicles](#) and internal life cycle assessment studies

Scope 1, 2 and 3 emissions worldwide for Mercedes-Benz Vans^{1,4}

Scope 3	2021	
	Specific CO ₂ in t/van	Absolute CO ₂ in t/million t ³
Procured goods and services ⁵	8.6	3.4
Logistics	0.9 ²	0.4²
Business travel	0.007	0.003
Employee traffic	0.039	0.015
Use phase of our products (well-to-tank)	4.9	1.9
Use phase of our products (tank-to-wheel)	47.8	18.9
Recycling and waste disposal ⁵	0.5	0.2
Scope 1 and 2		
Manufacture	0.5	0.2³
Total	63.3	25.0

1 Values are rounded

2 Forecast value

3 Absolute Scope 3 emissions relate to retail sales (2021: 394,978; unaudited). Absolute Scope 1 and 2 emissions relate to vehicles produced from fully consolidated locations, excluding third-party products (2021: 336.847; unaudited)

4 For calculation basis see appendix Calculation and documentation of CO₂ emissions and chapter Making life cycle assessments, Calculation of CO₂ emissions in the Sustainability Report 2021

5 Internal life cycle assessment studies

Further details are available in our tool [“Key figures environment”](#)

[Scope 1, Scope 2 and selected Scope 3 CO₂ emissions in tons per vehicle Mercedes-Benz Cars & Vans](#)

[Scope 1, 2 and 3 emissions worldwide Mercedes-Benz Cars & Vans](#)

References:

CDP Climate Change Questionnaire:
C5 / (C5.1)
C6 / (C6.1) / (C6.2) / (C6.3) / (C6.5) / (C6.10)
C7 / (C7.2) / (C7.3a) / (C7.5) / (C7.6a)
Sustainability Report 2021

c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

For the Mercedes-Benz Group, the Paris Agreement on climate change represents more than just an obligation; our commitment to these targets stems from our fundamental convictions and we believe it is our mission to contribute to CO₂-neutral mobility around the world.

In order to achieve its long-term climate-protection goal of becoming CO₂-neutral by 2039, the Mercedes-Benz Group is planning the complete electrification of its product range. By the end of this decade, Mercedes-Benz wants to be all-electric wherever market conditions allow. Mercedes-Benz is accelerating the transformation to an emission-free, software-driven future with this strategic step from “Electric first” to “Electric only”.

We underscored this fact during the UN Climate Change Conference in Glasgow in November 2021, when we signed the COP26 Declaration on accelerating the transition to 100% zero-emission cars and vans. In the declaration, the Mercedes-Benz Group was the only German automaker to confirm that it is working to offer only emission-free cars and vans in leading markets as of 2035.

The expenditure of €9.1 billion on research and development includes, among other things, R&D expenditure for alternative drive systems such as battery-electric and plug-in hybrid drive, digitalisation and automated driving.

In addition to other criteria from areas such as environmental protection, social commitment and corporate governance, the Mercedes-Benz Group has, since 2020, been including the achievement of CO₂ fleet targets as a factor for determining the annual bonus for the Board of Management and executives. During the reporting year, we continued to differentiate this incentive system and intensified it. We think it helps motivate people to achieve the specified sustainability targets.

References:

CDP Climate Change Questionnaire:
 C4 / (C4.1) / (C4.1a) / (C4.1b)
 C4 / (C4.2) / (C4.2b) / (C4.2c)
 Annual Report 2021 p. 98, 99
 Sustainability Report 2021

Targets: The Mercedes-Benz Group Target horizon

Mercedes-Benz offers battery electric vehicles (BEVs) in all the divisions in which the brand is represented.	2022
We are increasing the proportion of plug-in hybrids and all-electric vehicles to as high as 50%.	2025
All new vehicle architectures are exclusively electric.	2025
Customers are offered the choice of at least one all-electric vehicle in every segment.	2025
The CO ₂ emissions of Mercedes-Benz' fleet of new vehicles are reduced by more than 40 per cent. ¹	2030
Mercedes-Benz is all-electric — wherever market conditions allow.	By the end of this decade
A fleet of new cars and vans that are CO ₂ -neutral along all stages of the value chain.	2039

¹ Compared to 2018 and pertaining to the use phase; corresponding to the target of the Science Based Targets initiative.

We want to accelerate the pace at which we are expanding our range of electric vehicles. Our commitment to research and development work is correspondingly strong. Altogether, we want to invest more than €60 billion between 2022 and 2026 for the transformation towards an emission-free and software-driven future.

This document contains forward-looking statements that reflect our current views about future events. The words “anticipate,” “assume,” “believe,” “estimate,” “expect,” “intend,” “may,” “can,” “could,” “plan,” “project,” “should” and similar expressions are used to identify forward-looking statements. These statements are subject to many risks and uncertainties, including an adverse development of global economic conditions, in particular a decline of demand in our most important markets; a deterioration of our refinancing possibilities on the credit and financial markets; events of force majeure including natural disasters, pandemics, acts of terrorism, political unrest, armed conflicts, industrial accidents and their effects on our sales, purchasing, production or financial services activities; changes in currency exchange rates, customs and foreign trade provisions; a shift in consumer preferences towards smaller, lower-margin vehicles; a possible lack of acceptance of our products or services which limits our ability to achieve prices and adequately utilize our production capacities; price increases for fuel or raw materials; disruption of production due to shortages of materials, labour strikes or supplier insolvencies; a decline in resale prices of used vehicles; the effective implementation of cost-reduction and efficiency-optimization measures; the business outlook for companies in which we hold a significant equity interest; the successful implementation of strategic cooperations and joint ventures; changes in laws, regulations and government policies, particularly those relating to vehicle emissions, fuel economy and safety; the resolution of pending governmental investigations or of investigations requested by governments and the outcome of pending or threatened future legal proceedings; and other risks and uncertainties, some of which are described under the heading “Risk and Opportunity Report” in the current Annual Report or in the current Interim Report. If any of these risks and uncertainties materializes or if the assumptions underlying any of our forward-looking statements prove to be incorrect, the actual results may be materially different from those we express or imply by such statements. We do not intend or assume any obligation to update these forward-looking statements since they are based solely on the circumstances at the date of publication.