



MERCEDES-EQ

Press Information

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The new EQE SUV: high-tech and luxury meet versatility

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More information on the official fuel consumption and the official specific CO₂ emissions of new passenger cars can be found in the "Leitfaden über den Kraftstoffverbrauch, die CO₂-Emissionen und den Stromverbrauch neuer Personenkraftwagen" [Guide on the fuel economy, CO₂ emissions and power consumption of all new passenger car models], which is available free of charge at all sales outlets and from Deutsche Automobil Treuhand GmbH at www.dat.de.

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The descriptions and information in this press kit apply to the international model range of Mercedes-Benz. Details may vary from country to country. Further information about the vehicles offered, including the WLTP figures, can be found for each country at <https://www.mercedes-benz.com>

The essential information and innovations

The new EQE SUV: the key points at a glance

Stuttgart. The EQE SUV is the multi-purpose variant of the EQE executive saloon. Like the latter, it is available with the essential innovations of the EQS and at the same time is more dynamic than the EQS SUV. The EQE SUV is one of the most spacious representatives of its class. Yet it is more compact than the EQE Saloon and, at 3030 millimetres, has a wheelbase that is nine centimetres shorter. The external dimensions are 4863/1940/1686 millimetres (length/width¹/height). As the fourth model after the two EQS and EQE Saloons as well as the EQS SUV, the EQE SUV uses the new all-electric platform.

Up to 590 kilometres² range

The modular drive concept enables the EQE SUV to offer a wide range of maximum total drive outputs from 215 to 300 kW. Depending on the vehicle equipment and configuration, the European vehicles can achieve WLTP ranges of up to 590 kilometres². In the EQE SUV, the lithium-ion battery consists of ten modules. In certain cases the innovative battery management software, which was developed in-house, can be updated over-the-air (OTA).

Extensive range of driving assistance systems

The current generation of driving assistance systems includes numerous functions that support the driver. The general standard equipment of the EQE SUV includes ATTENTION ASSIST, Active Brake Assist, Active Lane Keeping Assist, Parking Package with reversing camera and Speed Limit Assist. The status and activity of the systems are shown in a full-screen view in the assistance display in the driver's display. Further options are available in the Assistance Package and also the Driving Assistance Plus Package.

Particularly manoeuvrable and agile

The chassis of the new EQE SUV comprises a four-link suspension at the front and an independent multi-link suspension at the rear. Due to the comparatively short wheelbase of 3030 millimetres and the corresponding suspension tuning, it feels particularly agile and manoeuvrable even with the basic set-up. The AIRMATIC air suspension with ADS+ continuously adjustable damping is available as an optional extra. To increase ground clearance, the vehicle level can be raised by up to 30 millimetres³. In addition to the DYNAMIC SELECT programs of ECO, COMFORT, SPORT and INDIVIDUAL, the EQE SUV models with 4MATIC also boast the OFFROAD program for off-road driving. A rear axle steering system with a maximum steering angle of 10 degrees is available as an option.

Always up to date

The EQE SUV offers the possibility of activating additional vehicle functions via over-the-air technology (OTA) in a number of functional areas. This means that after purchase and having chosen the original new car configuration, some of the EQE SUV's equipment can be individually customised. The OTA functions are available in the Mercedes me Store, and the range will be successively expanded.

MBUX Hyperscreen on request

With adaptive software, the MBUX display and operating system makes personalised suggestions for numerous infotainment, comfort and vehicle functions. A highlight of the interior is the optional MBUX Hyperscreen. With the zero-layer design, the user does not have to scroll through submenus or give voice commands. Situational and contextual applications are offered at the top level in the field of view. With the MBUX Hyperscreen (optional extra), three displays merge almost seamlessly into one another to create a screen band over 141 centimetres wide. The front passenger in the EQE SUV has the option of a 12.3-inch OLED display with its own user interface. The system uses an intelligent, camera-based blocking logic that

¹ With conventional door handles. With flush-fitting door handles: 1918 mm.

² Data on electrical consumption and range are provisional and were determined internally in accordance with the "WLTP test procedure" certification method. So far there are no confirmed figures from an officially approved testing organisation, nor any EC type approval or certificate of conformity with official figures. There may be differences between the stated figures and the official figures.

³ Depending on the country

recognises if the driver is looking toward the front passenger display. If this is the case, the system automatically dims the dynamic content for security reasons (see separate chapter).

Clever route planning

When it comes to Navigation with Electric Intelligence, the name says it all. For on the basis of numerous factors it plans the fastest and most convenient route including charging stops. It also reacts dynamically to traffic jams or a change in driving style, for example. Navigation with Electric Intelligence is clever; it calculates the estimated charging costs per charging stop. Furthermore, the customer can edit the planned routes individually. They can edit the planned routes individually by adding in preferred charging stations along the route or excluding proposed charging stations.

Heat pump as standard

The EQE SUV features a sophisticated thermal architecture with a heat pump as standard. This makes the system work very efficiently: the waste heat from the electric drive (inverter and electric motor) and also the high-voltage battery can be used to heat the interior. This reduces drastically the draw on battery power for the heating system, thus increasing the range. Another pleasant and efficient function is pre-entry climate control. The THERMATIC automatic climate control system with two climate zones is fitted as standard, while the THERMOTRONIC with four zones is available as an option.

New sound experience

"Serene Breeze" is the name of the new, fourth soundscape that makes its debut in the EQE SUV. It offers a relaxed and natural sound. With the holistic sound staging, the paradigm shift from combustion engine to electric car becomes audible for the occupants in the Mercedes-EQ models. A variety of soundscapes allows for an individual acoustic set-up. An optional interior driving sound is available. This adjusts adaptively to the driving style.

Tailor-made charging rates

Since June 2022, Mercedes me Charge¹ has been offering three new charging tariffs in Europe that are tailored to individual driving performance. Mercedes me Charge S for occasional chargers, Mercedes me Charge M for normal chargers and Mercedes me Charge L for frequent chargers. With the introduction of the new, transparent tariff system, customers have access in part to fixed prices that apply regardless of the operator. With the Plug & Charge function, the EQE SUV can also be conveniently charged.

A host of high-tech features

DIGITAL LIGHT headlamp technology (special equipment) makes innovative functions possible, such as the projection of auxiliary markings or warning symbols onto the road. Another equipment highlight is ENERGIZING AIR CONTROL Plus. A HEPA (High Efficiency Particulate Air) filter cleans the incoming outside air at its very high filtration level. ENERGIZING COMFORT links together various comfort systems in the vehicle. The individual ENERGIZING COMFORT programmes enable a special feel-good programme depending on the mood or needs of the customer. This enhances physical comfort and performance while driving and during a break. The Dolby Atmos sound format[®] takes the audio experience in the EQE SUV to a new level.

Distinctive purpose design

The proportions of the EQE SUV combine function and aesthetics with the sporty character of the SUV. The new model, with its unmistakable purpose design, marks a turning point in its class. The overhangs and the front-end assembly have been kept compact. The wheels in sizes from 19 to 22 inches are positioned flush with the outer edge of the body and lend a commanding stance.

¹ In order to allow use of the Mercedes me connect service "Mercedes me Charge", a separate charging contract with a selected third-party provider is required for charging payment and billing purposes. A personal Mercedes me ID and agreement to the Terms of Use for the Mercedes me connect services are required for use of the Mercedes me connect services.

A great deal of aerodynamic fine tuning

The EQE SUV shares some aerodynamic measures with its model brothers. The underbody with its numerous aerodynamic details plays a central role in a very good C_d value from 0.25¹, which was achieved despite the large load volume and short rear overhang. But the dimensional concept with the flat windscreen, sweeping roof line and indents were also important factors.

MBUX Hyperscreen and leather-free equipment available

The EQE SUV is based on the large electric platform from Mercedes-EQ. On top of this it boasts an interior that has been consistently digitalised. The optionally available MBUX Hyperscreen implements this vision to impressive effect. The standard Electric Art interior does not make use of any leather at all.²

High level of passive safety

The principles of Integral Safety apply regardless of the type of drive system. Like all other Mercedes-Benz models, the EQS SUV therefore has a rigid passenger compartment, special deformation zones and state-of-the-art restraint systems. The European version of the EQE SUV can detect whether the rear seats are actually occupied. If a passenger in the rear is not wearing a seat belt, the driver receives a specific warning. The so-called occupant presence reminder can indicate children who may have been overlooked in the rear of the vehicle. In vehicles for Europe, Australia, New Zealand, USA and Canada, this system is on board as standard.

CO₂-neutral production as part of the eco-balance

Production of the EQE SUV will start at the Mercedes-Benz plant in Tuscaloosa, Alabama (USA) in December. The battery factory in nearby Bibb County supplies the batteries for this model as well as for the EQS SUV. Since this year, all of Mercedes-Benz's own passenger car and van plants worldwide have achieved CO₂-neutral production as part of their eco-balance - including the two Mercedes-Benz plants in Alabama.

¹ The EQE SUV achieves an outstanding C_d value of 0.25 with AIRMATIC, 19-inch wheel/tyre combination (optional equipment Code R17) and running-boards. Power consumption figures are provisional and were determined internally in accordance with the "WLTP test procedure" certification method. So far there are no confirmed figures from an officially approved testing organisation, nor any EC type approval or certificate of conformity with official figures. Differences between the stated figures and the official figures are possible.

² Leather-free equipment available from the beginning of 2023.

Key technical data

| | | EQE 350+ | EQE 350 4MATIC | EQE 500 4MATIC |
|--|--------------|--|-------------------|-------------------|
| Drive system and battery | | Rear-wheel drive | All-wheel drive | |
| Electric motor(s) | Type | Permanently excited synchronous motor(s) (PSM) | | |
| Output | kW | 215 | 215 | 300 |
| Torque | Nm | 565 | 765 | 858 |
| System voltage | Volts | 400 | | |
| On-board charger (standard/optional) | kW | 11/22 (USA: 9.6) | | |
| DC charging capacity, max. | kW | 170 | | |
| DC charging: max. range after 15 minutes ¹ (WLTP) | km | 220 | | |
| Vehicle | | | | |
| Length/width/height | mm | 4863/1940/1686 | | |
| Wheelbase | mm | 3030 | | |
| Turning circle (without/with rear axle steering, 10°) | m | 12.3/10.5 | | |
| Boot capacity, VDA ² | l | 520/580-1675 | | |
| Perm. trailer load | kg | 750 | 1800 | |
| Electric energy consumption and range³ | | | | |
| Electric energy consumption (WLTP) | kWh / 100 km | 21,8-17,7 | 22,5-18,5 | 22,7-19,0 |
| CO ₂ emissions (WLTP) | g/km | 0 | 0 | 0 |
| Range (WLTP) | km | 480-590 | 459-558 | 460-547 |

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More information from **Mercedes-EQ** is available at www.mercedes-benz.com.

Press releases and digital services for journalists and multipliers are available on our online platform

Mercedes me media at media.mercedes-benz.com and on our **Mercedes-Benz media site** at

group-media.mercedes-benz.com. You can also learn about current Mercedes-Benz Cars & Vans topics and events on our **Twitter channel @MB_Press** at www.twitter.com/MB_Press.

Mercedes-Benz AG at a glance

Mercedes-Benz AG is responsible for the global business of Mercedes-Benz Cars and Mercedes-Benz Vans, with around 172,000 employees worldwide. Ola Källenius is Chairman of the Board of Management of Mercedes-Benz AG. The company focuses on the development, production and sales of passenger cars, vans and vehicle-related services. Furthermore, the company aspires to be the leader in the fields of electric mobility and vehicle software. The product portfolio comprises the Mercedes-Benz brand with the brands of Mercedes-AMG, Mercedes-Maybach, Mercedes-EQ, G-Class as well as products of the smart brand. The Mercedes me brand offers access to the digital services from Mercedes-Benz. Mercedes-Benz AG is one of the world's largest manufacturers of luxury passenger cars. In 2021 it sold around 1.9 million passenger cars and nearly 386,200 vans. In its two business segments, Mercedes-Benz AG is continually expanding its worldwide production network with around 35 production sites on four continents, while gearing itself to meet the requirements of electric mobility. At the same time, the company is constructing and extending its global battery production network on three continents. As sustainability is the guiding principle of the Mercedes-Benz strategy and for the company itself, this means creating lasting value for all stakeholders: for customers, employees, investors, business partners and society as a whole. The basis for this is the sustainable business strategy of the Mercedes-Benz Group. The company thus takes responsibility for the economic, ecological and social effects of its business activities and looks at the entire value chain.

¹ At DC fast charging stations with 500 amps based on WLTP range

² Without/with cargo position of the rear backrest

³ Data on electrical consumption and range are provisional and were determined internally in accordance with the "WLTP test procedure" certification method. So far there are no confirmed figures from an officially approved testing organisation, nor any EC type approval or certificate of conformity with official figures. Differences between the stated figures and the official figures are possible.

Interesting facts & figures

The new EQE SUV: at a glance

The electric motor on the rear axle is particularly powerful due to its **6-phase** operation: it has two windings with three phases each.

To recuperate, the driver does not need to press the brake pedal - pure **1-pedal** driving. Thanks to ECO Assist, the EQE SUV also decelerates automatically to a standstill when it detects vehicles ahead, for example at traffic lights.

The charging system is located above the rear axle of the EQE SUV. It can be used to charge the battery via the public mains supply with single-phase or three-phase alternating current and an optional charging capacity of up to **22 kW**.

Mercedes-Benz issues a battery certificate for its high-voltage batteries, and thus a performance guarantee to customers: **10 years** or a mileage of **250,000 kilometres** with a defined residual capacity.

The chassis of the new EQE SUV comprises a four-link suspension at the front and an independent multi-link suspension at the rear. Due to the comparatively short wheelbase of **3030 millimetres** and the corresponding suspension tuning, it feels particularly agile and manoeuvrable even with the basic set-up.

The AIRMATIC air suspension with ADS+ continuously adjustable damping is available as an optional extra. To increase ground clearance, the vehicle level can be raised by up to **30 millimetres¹**. Optionally, customers can opt for rear axle steering with a maximum steering angle of **10 degrees**.

Many aerodynamic measures contribute to the high aerodynamic efficiency of the EQE SUV. These include novel, patent-pending wheel spoilers in front of the front axle. The lower edges have **17 prongs** each. Together with other details such as a small apron and longitudinal ribs, they improve the flow of air to the front wheel.

With the holistic sound staging, the paradigm shift from the combustion engine to the electric car becomes audible in the Mercedes-EQ models. "Serene Breeze" is the name of the new, **4th** soundscape, which celebrates its premiere in the EQE SUV. It offers a relaxed and natural sound.

Mercedes me Charge is one of the largest charging networks worldwide: It currently comprises over **850,000 AC and DC charging points**, of which around **350,000** are in Europe. Mercedes me Charge enables its customers to charge green at public charging stations throughout Europe, the USA and Canada. Green Charging works by subsequently balancing a charging process with energy from renewable resources.

While conventional stereo systems usually have a left-right dynamic, Dolby Atmos can[®] use the entire range and create a **360-degree experience**.

The permissible trailer load for the models with all-wheel drive is up to **1800 kilograms**. With rear-wheel drive the EQE SUV is permitted to tow up to **750 kilograms**.

¹ Depending on the country

"Practical, dynamic and for an active lifestyle"

The new EQE SUV: short interview

As Chief Engineer, Dr Oliver Röcker is responsible for the large Mercedes-Benz and Mercedes-EQ vehicles. We spoke to the 41-year-old about the new EQE SUV and the future electric strategy.

Mr Röcker, the first EQS models have been in customer hands since the end of September 2021. How is the Mercedes-EQ flagship being received by buyers?

Röcker: The feedback we have received from the first EQS drivers is extremely positive. Customers rave about the ride comfort and the unique quietness of the interior. In addition, there is the large range. Not only have endurance tests by the trade press confirmed the large operating range with one battery charge, but customers are also achieving this range in everyday life.

The EQE SUV is the fourth model to use the new all-electric platform, following on from the EQS and EQE Saloons and the EQS SUV. What role does the EQE SUV play within this model family?

Röcker: The EQE SUV is the multi-purpose variant of the EQE executive saloon, available just like this latter model with the key innovations of the EQS yet at the same time more dynamic than the EQS SUV. In other words, a family member with the best qualities and for every occasion.

What are the main highlights of the EQE SUV for you?

Röcker: Our large Mercedes-EQ models are so full of innovations that I find it difficult to pick out individual highlights. Even I, as a technician, am always thrilled by the futuristic architecture of the interior with the MBUX Hyperscreen. But, as is typical of Mercedes-Benz, we didn't leave it at this visual "wow effect". With the camera-based blocking logic of the front passenger display, we have added a truly customer-centric technical innovation to the imposing screen band. This allows the front passenger to watch TV during a journey, for example, without distracting the driver. And so I could list many more large and small examples of the innovations in this model family - from A for the assistance systems to Z for zero layer.

Let's ask the question a little differently: if you were to buy an EQE SUV, what equipment would definitely have to be on board?

Röcker: Definitely the rear axle steering. I was involved in the development of this vehicle family and therefore knew on paper the effects that this speed-dependent steering of the rear wheels in the same or opposite direction has on the turning circle and vehicle stability. But when you experience in practice how manageable such an imposing vehicle becomes, it is extremely impressive. By the way, your question is still a bit "analogue": with the large Mercedes-EQ models, you don't have to make a final commitment to every detail of the equipment at the time of purchase. Some vehicle functions can also be activated later via over-the-air technology (OTA).

Can you give us an example please?

Röcker: Certainly. If the EQE is equipped with DIGITAL LIGHT, then the DIGITAL LIGHT with projection function can also be activated via OTA in the future. This allows auxiliary markings or warning symbols to be projected onto the road surface. Currently, this is already permitted throughout the European Union and the USA. Unfortunately, country restrictions still apply. We are currently in close contact with several approval authorities regarding other functions such as the pre-installation of the INTELLIGENT PARK PILOT, which will enable automated valet parking in accordance with SAE Level 4. This also illustrates how advanced the EQS and EQE are.

Let's talk about a key topic, the future: what's next for Mercedes' electric offensive?

Röcker: Last summer we announced our strategic move from "Electric First" to "Electric Only". In 2025, Mercedes-Benz will introduce three new electric architectures. We are preparing to go fully electric before the end of the decade - wherever market conditions allow. So the current model range from the EQA to the EQS SUV is just the beginning of a new era.

On the way to "Electric Only"

The new EQE SUV: commitment to sustainability

Mercedes-Benz is setting the course for an all-electric future: By the end of the decade, Mercedes-Benz intends to be ready to go all-electric - wherever market conditions permit. Thinking of tomorrow today: this claim has also been implemented in the new EQE SUV. Resource-saving materials such as secondary steel are used, for example. Mercedes-Benz looks at the entire value chain for all vehicle models, from development and the supplier network to its own production. Mercedes-Benz AG has had its climate protection targets confirmed by the Science Based Targets Initiative (SBTI). The company thus supports the Paris Climate Accord.

Nine important building blocks of the transformation towards sustainable mobility.

1. Electrified product portfolio

By the end of this year, Mercedes-Benz will offer battery-electric vehicles (BEVs) in all segments in which the brand is represented. From 2025, in accordance with the current plans, all new vehicle architectures will be exclusively electric. Customers will be able to choose an all-electric alternative to each model. The company is investing significantly more in research and development for this purpose. Between 2022 and 2030, a total of more than 40 billion euros has been earmarked for investment into battery-electric vehicles. The accelerated expansion of the range of electric vehicles will lead to a faster breakthrough of electric mobility. In 2025, Mercedes-Benz plans to introduce three all-electric architectures: MB.EA, AMG.EA and VAN.EA.

2. Transparent dialogue

Since 2005, Mercedes-Benz has been the first automotive company to subject its vehicles to the strict requirements of an environmental certificate in accordance with ISO guideline TR 14062. The TÜV-certified documentation is based on a comprehensive life-cycle assessment of the respective vehicle, in which many environmentally relevant details are documented. The Group's sustainability report has been providing information on this annually since 2006. The annual Sustainability Dialogue brings together over 200 representatives from the worlds of politics, business, science and society.

3. CO₂-neutral production as part of the eco-balance

Mercedes-Benz is integrating the all-electric Mercedes-EQ models into the ongoing series production of its global production network. Starting this year, eight Mercedes-EQ electric vehicles will roll off the production lines at seven locations on three continents. Since 2022, all Mercedes-Benz-owned passenger car and van plants worldwide have achieved CO₂-neutral production as part of their eco-balance - including the two Mercedes-Benz plants in Alabama. To this end, emissions generated in Mercedes-Benz vehicle production and in the energy supply of the plants are consistently reduced and, where possible, avoided altogether. The company relies on three strategic pillars for doing so: continuous increase in energy efficiency, use of green power and realisation of a sustainable heat supply. In addition, concrete CO₂ measures are agreed with suppliers.

4. Sustainable battery production as the goal

The local production of batteries is an important success factor for the electric offensive of Mercedes-Benz AG. It is crucial in order to be able to meet the global demand for electrified vehicles in a flexible and efficient manner. Their production plays an important role in the sustainable business strategy of Mercedes-Benz AG. For example, the Mercedes-Benz plant in Bibb County produces battery systems in a CO₂-neutral manner as part of its eco-balance. In addition, as part of strategic partnerships Mercedes-Benz has agreed to purchase battery cells manufactured in a CO₂-neutral manner.

5. Decarbonisation of the supplier network

The EQE SUV has bodyshell components made from 100 percent recycled steel from Salzgitter AG. This already reduces CO₂ emissions for the semi-finished product by more than 60 percent. In general, the supplier network is responsible for a considerable proportion of the value creation and is thus of crucial importance for the decarbonisation goals. The majority of suppliers, who account for almost 90 percent of the annual purchasing volume, have already signed an [Ambition Letter](#). In it, they declare their willingness to exclusively supply parts produced in a CO₂-neutral manner in the future. From 2039 at the latest, only production materials which have been produced as part of the eco-balance on a CO₂-neutral basis at all value creation stages will be allowed through the Mercedes-Benz plant gates. A supplier declining to sign the Ambition Letter will not be eligible for new supply contracts.

6. Raw materials from certified mining

Raw materials which are responsibly mined and processed form the basis of a sustainable, all-electric Mercedes-Benz vehicle fleet. Mercedes-Benz therefore has the complex supply chains of its battery cell suppliers audited according to OECD standards. In addition, Mercedes-Benz makes the "Standard for Responsible Mining" of the "Initiative for Responsible Mining Assurance" (IRMA) a key criterion for supplier decisions and contracts in raw material supply chains. In future, the company will only work with suppliers who agree to these requirements. The goal is for the company to exclusively source battery cells with cobalt and lithium from audited sources in the future¹.

7. Resource-conserving materials

EQE SUV components with a total weight of more than 70 kg are made partly from resource-saving materials (recyclates and renewable raw materials). These include, for example, grab handles with plastics from chemical recycling. In their production, fossil-based raw materials were replaced by biomethane and pyrolysis oil from recycled used tyres. What's special is that the used tyres come from Mercedes-Benz vehicles, among others. In this way, Mercedes-Benz is not only closing the materials cycle of used tyres. The recycling of secondary materials also reduces the use of fossil-based resources as well as the CO₂ footprint of the plastic. The innovative recycled plastic has the same properties as virgin plastic made from fossil-based raw materials.

8. Power made green

Since 2021 Mercedes-Benz has ensured a subsequent offset with green electricity when customers use Mercedes me Charge² to charge their cars in Europe. It is ensured that corresponding amounts of green electricity are fed into the grid for charged energy quantities after the actual charging process. In addition, incentives are created to invest in renewable energy systems. In the first year after the purchase of an EQE SUV, there is no basic fee for Mercedes me Charge.

9. Sustainable battery usage is the goal

Mercedes-Benz takes a holistic approach to the battery life cycle: re-use, remanufacture, recycle. When the traction batteries of the Mercedes-EQ fleet reach the end of their life on the road, it is far from over. As a subsidiary of Mercedes-Benz AG, Mercedes-Benz Energy based in Kamenz develops innovative energy storage solutions. Batteries from the car are connected to the grid as stationary energy storage units. The spectrum for large-scale storage applications from Mercedes-Benz Energy ranges from peak load balancing and black start (power plant start-up independent of the mains supply) to uninterruptible power supply (UPS). The company's focus is in particular on applications from the 2nd life and replacement parts storage unit sector. Only then does material recycling take place.

¹ For more information, see [here](#)

² In order to allow use of the Mercedes me connect service "Mercedes me Charge", a separate charging contract with a selected third-party provider is required for charging payment and billing purposes. A personal Mercedes me ID and agreement to the Terms of Use for the Mercedes me connect services are required for use of the Mercedes me connect services.

Powerful and efficient

The new EQE SUV: the electric drive

The modular drive concept enables the EQE SUV to offer a wide range of maximum total drive outputs from 215 to 300 kW. Depending on the vehicle equipment and configuration, the European vehicles can achieve WLTP ranges of up to 590 kilometres². In the EQE SUV, the lithium-ion battery consists of ten modules. The innovative battery management software, which was developed in-house, allows updates over the air (OTA). In this way, the energy management of the EQE SUV remains up-to-date throughout its entire life cycle.

All EQE SUVs have an electric drivetrain (eATS) on the rear axle. The versions with 4MATIC also have an eATS on the front axle. In the 4MATIC models, the Torque Shift function ensures intelligent, continuously variable distribution of drive torque between the rear and front electric motors and thus the use of the most efficient eATS in each case. The modular drive concept enables high overall performance and a long range.

To further increase the range, the electric motor at the front axle can be completely decoupled. This is carried out by what is known as the Disconnect Unit (DCU). The intelligent disconnection system works complete automatically, depending on the driving situation and the required output. At low loads the DCU switches into 4x2 driving mode, and both the electric motor and the relevant transmission at the front axle cease operation. This ensures that the drag losses otherwise normally experienced are largely eliminated.

The electric motors on the front and rear axles are permanently excited synchronous motors (PSM). On a PSM, the rotor of the AC motor is fitted with permanent magnets and therefore does not need to be supplied with power. The magnets – and thus the rotor – follow the rotating alternating current field in the stator windings. In the EQE SUV, Mercedes-Benz uses a so-called pull-in winding for a particularly strong magnetic field. The motor is referred to as synchronous because the rotor turns at the same rate as the magnetic field of the stator. The frequency is adjusted in the power electronics converters to the speed requirements of the driver. The advantages of this design include high power density, high efficiency and high power constancy. The motor on the rear axle is very powerful due to the six-phase design: it has two windings with three phases each.

Cooling: sophisticated thermal concept for high load capacity

Consistently high performance and multiple accelerations without a drop in power characterise the drive philosophy of the EQE SUV. This includes a sophisticated thermal concept with some special features. What is known as a water lance in the shaft of the rotor cools it from the inside. Other cooling elements in the cooling circuit are fins on the stator, a needle-shaped pin-fin structure on the inverter and a transmission oil cooler. This also brings more efficiency during cold driving, because the heat exchanger then serves to heat the transmission oil and thus reduces friction in the transmission.

Intelligent energy recovery: one-pedal driving to a standstill

The EQE SUV offers several variants of energy recovery by means of recuperation. In this process, the high-voltage battery is charged by converting the mechanical rotary motion into electrical energy during overrun or braking mode. The driver can manually select the deceleration in overrun mode in three stages (D⁺, D, D⁻) as well as the gliding function via shift paddles behind the steering wheel. Also available: D^{Auto}.

ECO Assist also enables situation-optimised recuperation; deceleration is so strong or weak that it ultimately results in the most efficient driving style. Recuperative deceleration is also used as far as possible for vehicles detected ahead until they come to a standstill, for example at traffic lights. The driver does not need to press the brake pedal for this; literally one-pedal driving.

Noise and vibration comfort: comprehensive measures

Even the design of the electric drivetrains (eATS) takes into account noise and vibration comfort, or NVH for short (Noise, Vibration, Harshness). The magnets are arranged inside the rotors in an NVH-optimised way (known as 'lamination'). This also reduces the use of rare earths. The shape of the winding, the so-called stator tilt, also ensures fewer vibrations, especially at low speeds. The coils in the stator are at an angle in relation to the permanent magnets of the rotor. Otherwise, what is known as cogging torque could occur. They would lead to slight but unpleasant vibrations when driving very slowly.

In addition, the eATS have a special foam mat all around as an NVH cover. The inverter cover has a sandwich construction of three metal and plastic layers. The eATS are doubly decoupled from the body via elastomer bearings: at the front axle opposite a supporting frame and this against the body, at the rear axle with a subframe.

Highly effective spring/mass components provide continuous sound insulation from the crossmember under the windscreen to the floor of the load compartment. Acoustic foams are inserted into many members during construction of the bodyshell.

The electric refrigerant compressor has an NVH cover as encapsulation. In the rear-wheel-drive EQE SUVs it is also soft-suspended, while in the 4MATIC models it is bolted directly to the front eATS. The operating strategy of the refrigerant compressor also contributes to the low noise level of the vehicle. Certain rpm ranges at which disturbing resonances may be audible when stationary or in a traffic jam are avoided or quickly passed through.

Charging components and functions: always connected

A latest-generation charging system sits above the rear axle of the EQE SUV. It can be used to charge the battery via the public mains with single-phase or three-phase alternating current and an optional charging capacity of up to 22 kW. In addition, intelligent wallboxes from national partners are available to customers in the individual markets. Mercedes-Benz also offers an installation service for these wallboxes. This includes a preliminary check of the installation conditions, detailed advice and installation.

A DC box with a charging capacity of up to 170 kW is fitted on board for (fast) charging via direct current. High charging currents can be maintained for a long time through temperature and charging management.

Three charging programmes are offered in the EQE SUV - Standard, Home and Work. In these, parameters such as departure time, climate control and maximum charge level can be preset. The Home and Work charging programmes can be activated based on location. This means that they are switched on automatically as soon as the vehicle is parked at a charging point at the positions stored in the system. The user is informed about this in MBUX. The EQE SUV also features the intelligent charging functions of ECO Charging (gentle programme for the battery) and charging interruptions. In Japan, the EQE SUV will also enable bidirectional charging, i.e. a flow of electricity in both directions ("smart grid").

Powerful cell chemistry meets intelligent software

The new EQE SUV: the traction battery

The scalability of the battery system in the new Mercedes-EQ models in the luxury and premium class enables different range and performance variants. In the EQE SUV, the lithium-ion battery consists of ten modules. In certain cases the innovative battery management software, which was developed in-house, can be updated over-the-air (OTA).

Battery development is a crucial factor in Mercedes-Benz's electrification strategy. After all, the battery is the heart of an electric car and makes a decisive contribution to, among other things, the range and thus the driving characteristics of the electric vehicle. With the EQS, a new generation of batteries with significantly higher energy density has been launched, from which the EQE SUV now also benefits. The new batteries set standards in terms of performance, efficiency and charging capacity.

They also meet the high Mercedes requirements in terms of safety, durability and sustainability. Mercedes-Benz issues a battery certificate for its high-voltage batteries, and thus a performance guarantee to customers: 10 years or a mileage of 250,000 kilometres with a defined residual capacity.

Comprehensive battery expertise

A team of experts at the Mercedes-Benz Battery Competence Centre developed the highly efficient batteries entirely in-house. The software for the intelligent management system was also developed and programmed in-house.

A lithium-ion battery with ten cell modules is installed in the EQE SUV. This generation of batteries takes a big step towards the sustainability of cell chemistry: the optimised active material consists of nickel, cobalt and manganese in a ratio of 8:1:1. This has reduced the cobalt content to less than ten percent. The continuous optimisation of recyclability is part of Mercedes-Benz's holistic battery strategy (for details, see separate chapter on sustainability). The aim is to be able to dispense entirely with materials such as cobalt through the use of innovative post-lithium-ion technologies.

Intelligent operating strategy

The battery is integrated into the EQE SUV's intelligent thermal management system with heat pump as standard. If the Navigation with Electric Intelligence is activated, the battery is preheated or cooled as needed while driving. As a result, the temperature at the charging point is in an optimal range for efficient charging. The desired temperature range of the battery is achieved with the aid of the cooling circuit and a PTC (Positive Temperature Coefficient) booster heater integrated into it.

Intelligent support in many situations

The new EQE SUV: the driving assistance systems

The general standard equipment of the EQE SUV with driving assistance systems¹ includes ATTENTION ASSIST, Active Brake Assist, Active Lane Keeping Assist, Parking Package with rear view camera and Speed Limit Assist. The status and activity of the driving assistance systems are shown in a full-screen view in the assistance display in the driver's display.

Additional driving assistance systems are included in the **Assistance Package**, which is available in conjunction with the Advanced Plus Package. These systems expand the range of functions:

- The Active Distance Assist DISTRONIC can maintain the preselected distance to vehicles in front on all road types - motorway, country road as well as in the city. The currently valid speed limit can be conveniently adopted as the set speed by pressing a button.
- From speeds above 60 km/h, Active Lane Keeping Assist uses a camera to detect when road markings or road edges are crossed, helping the driver to avoid leaving the driving lane unintentionally. If there is a risk of collision with detected road users in the adjacent lane, for example overtaking or oncoming vehicles, the system can also react with warnings and steering intervention.
- Blind Spot Assist can warn the driver visually and, when the direction indicator is activated, also audibly of lateral collisions if other road users are in the blind spot during or after the journey. With the exit warning, the Blind Spot Assist monitors the area around your own vehicle for about three minutes after the vehicle is parked and can warn of approaching vehicles or two-wheelers.

The **Driving Assistance Plus Package** is also offered as an optional extra, for example as part of the Premium Package. This comprises:

- A new feature is the intersection start-off function, which provides additional safety when moving off at intersections with cross traffic. The system uses intuitive arrows in the driver's display to indicate from which direction cross traffic is approaching. If the driver nevertheless attempts to drive off, an audio-visual collision warning is triggered. The vehicle is prevented from moving off by automatically applying the brake. The driver can cancel this at any time by fully depressing the accelerator pedal.
- Active Steering Assist helps the driver to follow the lane. Special features include lane detection at low speeds additionally with 360° camera, very high availability and cornering performance on rural roads and improved lane centring on motorways. Depending on the situation, a driving position which is off the centre of the lane (e.g. formation of an emergency lane, but also orientation via the edge of the carriageway on rural roads without centre markings) can be used.
- Active Lane Change Assist cooperatively assists the driver in changing to the adjacent lane. A lane change to the right or left is only assisted if the sensors detect that the adjacent lane is separated from the present lane by broken lane markings, and no other vehicles are detected in the relevant danger zone.
- Active Emergency Stop Assist brakes the vehicle to a standstill in its own lane if it recognises that the driver is no longer responding to the traffic situation for a longer period.

¹ The driving assistance and safety systems from Mercedes-Benz are aids and do not relieve drivers of their responsibility. The driver should take note of the information in the Owner's Manual and observe the system limits which are described therein.

- The Active Brake Assist with cross-traffic function can use the sensors installed in the vehicle to register whether there is a risk of collision with vehicles in front or crossing or oncoming vehicles. If a collision is imminent, the system can warn the driver visually and audibly. If the driver's braking is too weak, it is also possible to support the driver by increasing the braking torque according to the situation and to initiate emergency braking if there is no reaction from the driver.
- Evasive Steering Assist can assist the driver when seeking to avoid another road user detected by the system in a critical situation. In the new EQE, in addition to standing and crossing pedestrians, longitudinal pedestrians and vehicles as well as cyclists can also be taken into account. The speed range is up to 110 km/h, support is also provided on inter-urban routes.
- Active Lane Keeping Assist (see above).
- Active Blind Spot Assist can give a visual warning – and if the indicators are operated, also an audible warning – of potential side collisions at speeds exceeding around 10 km/h. If the driver ignores the warnings and still tries to change lanes, the system can take corrective action by one-sided braking intervention at the last moment at speeds over 30 km/h. When the vehicle is stationary, the exit warning function can warn against exiting because a vehicle (or even a bicycle) is passing within the critical area.
- PRE-SAFE® PLUS can take action in the event of an imminent rear-end impact. The system warns the driver of the vehicle following behind by activating the rear hazard warning lights with increased frequency. In addition, the preventive PRE-SAFE® occupant protection measures, including the reversible belt tensioners, are triggered. If the vehicle is stationary, PRE-SAFE® PLUS locks the brakes. Reducing forward motion can significantly reduce the loads acting on occupants, including the risk of whiplash.
- As only a limited crumple zone is available in a side impact, PRE-SAFE® Impulse Side (availability depending on selected equipment) can move the affected driver or front passenger away from the danger even before the crash as soon as the system detects that a side-on collision is immediately imminent. For this purpose, air chambers in the side bolsters of the front seat backrest are inflated in fractions of a second.

High levels of driving dynamics and handling

The new EQE SUV: the suspension

The chassis of the new EQE SUV comprises a four-link suspension at the front and an independent multi-link suspension at the rear. Due to the comparatively short wheelbase of 3030 millimetres and the corresponding suspension tuning, it feels particularly agile and manoeuvrable even with the basic set-up. The AIRMATIC air suspension with ADS+ continuously adjustable damping is available as an optional extra. To increase ground clearance, the vehicle level can be raised by up to 30 millimetres¹. In addition to the DYNAMIC SELECT programs of ECO, COMFORT, SPORT and INDIVIDUAL, the EQE SUV models with 4MATIC boast the additional OFFROAD program for off-road driving. A rear axle steering system with a steering angle of up to 10 degrees is also available as an option for great manoeuvrability in the city and agility over land.

The optional AIRMATIC air suspension responds particularly sensitively. It combines air suspension bellows with adaptive ADS+ dampers whose characteristics can be varied at each individual wheel fully automatically, in both the compression and rebound stages. While driving, a sophisticated sensor system and algorithms set the dampers according to the quality of the road to ensure that, for example, the sensation of driving over a bump with just one wheel is not transmitted to the entire axle and the interior. Spring and damper are combined in one strut on the front axle.

This level control is part of AIRMATIC. It keeps the ground clearance constant irrespective of the vehicle load, but also makes changes when needed. To increase ground clearance, the vehicle level can be raised by up to 30 millimetres¹. This is possible up to a speed of 80 km/h. The body can be raised by 30 mm¹ at the touch of a button below 60 km/h, above 70 km/h it is automatically lowered back to normal level. Furthermore, in the COMFORT and SPORT programs, the body is automatically lowered by 10 and 20 mm, respectively, at speeds above 120 km/h to reduce wind resistance and increase driving stability. If the vehicle speed drops below 80 km/h, the body level returns to the initial position.

As manoeuvrable as a compact car: both axles can do the steering

Thanks to rear axle steering (optional extra), the EQE feels as manoeuvrable as a compact car in the city. The steering angle at the rear axle is up to ten degrees. The turning circle is reduced from 12.3 to 10.5 metres with rear axle steering.

The interaction between the front axle and rear axle steering was designed so that the steering offers agile response and requires little effort when driving in the city and on country roads. At the same time, a very high level of stability is achieved. This results in e.g. small side-slip angles and a high level of yaw suppression. At high speeds, the focus is more on stability, though without compromising precision and responsiveness. This added value is achieved by the integrated actuation of steering and brakes (ESP®), and considerably improves driving safety as a result.

DYNAMIC SELECT: with off-road drive program

The driver can change the characteristics of the drive, ESP®, suspension and steering using DYNAMIC SELECT. In addition to ECO, COMFORT, SPORT and INDIVIDUAL, the 4MATIC versions of the EQS SUV feature OFFROAD, a further mode specifically for off-road driving. Overall, the accelerator pedal curve is much flatter in this case. When equipped with AIRMATIC, the vehicle level is raised by 25 mm. At speeds above 70 km/h,

¹ Depending on the country

the vehicle lowers to normal level. If the speed falls below 50 km/h, the vehicle is raised again. Two versions of the OFFROAD driving mode, with and without ESP®, can be selected:

In the OFFROAD driving mode with activated ESP®, little slip is permitted on the potentially spinning wheels. In this way, significantly fewer tracks are left behind on a wet meadow, for example. This is achieved through torque balancing between eATS and ESP®. The pressure in the control system thus matches the torque at the wheel exactly. When articulated in the terrain, a kind of pre-filling takes place. This means that the unloaded wheel is already supplied with pressure in the wheel brake during the rebound phase in order to prevent it from spinning.

The aim of the OFFROAD driving mode with ESP® OFF is to allow sufficient slip, but still make the vehicle safe to control. A lot of wheel slip, for example, is helpful to get enough propulsion on sand - the vehicle burrows forward. The control thresholds of the ASR traction control system are significantly widened here. Even in potentially critical situations, such as turning around on a dune, when the momentum is not enough to reach the top, the driver always has full torque available. Power is sufficiently available from the eATS.

The off-road programme works with significantly more slip. The slip is reduced via the steering angle so that the vehicle remains steerable. Downhill Speed Regulation (DRS) is now realised via the iBooster and not via a hydraulic unit (ESP®) as in the models with combustion engine. As a result, DRS now regulates much more quietly and even more smoothly.

The default setting is the COMFORT driving mode. The selection is acknowledged by audible and visual feedback. The desired driving mode is shown as the status and depicted on the central display.

Activating additional functions after buying a new car

The new EQE SUV: over-the-air technology (OTA)

The EQE SUV offers the possibility of activating additional vehicle functions via over-the-air technology (OTA) in a number of functional areas. This means that after purchase and the original new car configuration, some of the EQE SUV's equipment can be adapted according to personal preferences. The OTA functions are available in the Mercedes me Store, and the range will be successively expanded.

If the EQE SUV is equipped with DIGITAL LIGHT, then DIGITAL LIGHT with projection function can also be activated via OTA¹. This enables the projection of auxiliary markings or warning symbols onto the road surface². If equipped with a trailer coupling and 360° camera, the Trailer Manoeuvring Assist can be subsequently activated via OTA. It facilitates rearward manoeuvring with the car/trailer combination by automatically controlling the steering angle on the towing vehicle up to a speed of 7 km/h and up to a gradient of 15 percent. Other OTA options include Traffic Sign Assist, MBUX Augmented Reality Navigation and ENERGIZING COMFORT/ENERGIZING COACH. The new soundscape "Serene Breeze" (see chapter on Sound Experiences) can also be unlocked using over-the-air technology.

The Individualisation Package is also available in the Mercedes me Store. It comprises:

- The additional Sound Experience "Roaring Pulse". It is reminiscent of powerful elements such as large-volume combustion engines, turbines and the forces of nature.
- Several entertaining mini-games for the front passenger such as Sudoku, Pairs and Shuffle Puck
- More coming-home/leaving-light animations such as "Brand World".
- Emotional and individual modes such as Romance mode.

Two **digital safety functions** allow the handling characteristics of the EQE SUV to be adapted for specific target groups. In both modes not only is the maximum speed restricted, but the acceleration capacity is also reduced:

- In beginner driver mode, the driving characteristics are deliberately more gentle. The drive program C is automatically activated, the drive programs Sport and Individual are locked. The maximum speed is limited to approx. 120 km/h, ESP-OFF cannot be activated.
- The valet mode is intended for use by service personnel such as hotel staff. The characteristics are similar to the beginner driver mode. A maximum of approx. 80 km/h is possible. Personal profile data such as the home address or "last destinations" are protected from unauthorised access.

The main user activates and deactivates these programs via their personal profile, which is protected with a PIN and/or biometric recognition, or conveniently via the Mercedes me App from the smartphone. The modes cannot be activated while driving, but only when the vehicle is stationary.

Independently of these new functions, it is also possible to update most of the control units in the vehicle via OTA. This technology saves the customer time, as there is no need to visit a workshop for this purpose. Furthermore, many functions of their vehicle can be updated. The explicit consent of the user is always a precondition for OTA updates. Mercedes-Benz relies on mobile radio technology and the communication module installed in the vehicle because of the high security standard.

¹ Not available at market launch.

² Country restrictions apply.

Personalised content, impressively presented

The new EQE SUV: MBUX (Mercedes-Benz User Experience) and MBUX Hyperscreen

With adaptive software, the MBUX display and operating system makes personalised suggestions for numerous infotainment, comfort and vehicle functions. A highlight of the interior is the optional MBUX Hyperscreen. With the zero-layer design, the user does not have to scroll through submenus or give voice commands. Situationally and contextually, applications appear at the top level in the field of view. This relieves the driver of quite a number of operating steps. Mercedes-Benz has completely integrated many music streaming providers into the MBUX infotainment system with the "Online Music"¹ service. The integration of ZYNC gives passengers a seamless digital entertainment experience tailored to the EQE SUV.

Supported by artificial intelligence, the MBUX system proactively displays the right functions at the right time for the user. The system reacts to changes in the surroundings and the user behaviour and permanently optimises itself. The so-called zero layer offers the user dynamic, aggregated content from the entire MBUX system and associated services at the top level of the MBUX information architecture.

The navigation app is in the centre of the screen unit with its full range of functions. Over 20 other functions – from ENERGIZING COMFORT to birthday reminders and suggestions for the to-do list – are automatically offered with the help of artificial intelligence when they are relevant to the customer. The user can accept or reject the respective suggestion with just one click. Here are three example use cases:

- When approaching a charging station that allows Plug & Charge, the Charging module appears automatically. The driver can then start charging immediately.
- If someone always calls one particular friend on the way home on Tuesday evenings, in future they will always receive a suggestion regarding this particular call on this day of the week and at this time. A business card appears with their contact information and – if this is stored – their photo. All the suggestions from MBUX are linked with the profile of the user.
- If the user regularly switches on the heating of the steering wheel in addition to the seat heating, for example, this is suggested to them as soon as they activate the seat heating.

Hey Mercedes: very powerful voice assistant

The "Hey Mercedes" voice assistant is highly capable of dialogue and learning by activating online services in the Mercedes me App. Moreover, certain actions can be performed even without the activation keyword "Hey Mercedes". These include taking a telephone call. "Hey Mercedes" also explains vehicle functions, and, for example, can help when asked how to connect a smartphone via Bluetooth or where the first-aid kit can be found.

If compatible home technology and household devices are present, they can also be networked with the vehicle thanks to the smart home function and controlled from the vehicle by voice. "Hey Mercedes" can also detect occupants audibly. Once the individual voice characteristics have been learned, this can be used to access personal data and functions by activating a profile.

Online music: music streaming with millions of songs to choose from

With the "Online Music" service, Mercedes-Benz has now fully integrated the major music streaming services – Spotify, Amazon Music and Apple Music – into the MBUX infotainment system. MBUX allows access to the personal user profile with the linked music providers. This allows customers to seamlessly access their favourite songs and playlists and discover millions of songs as well as curated playlists.

¹ In order to be able to use the Online Music service, customers will require a separate personal contract with a selected streaming provider. Furthermore, a certain data volume is necessary.

Personalisation is simple and convenient

A personal profile can be created directly in the EQE SUV and synchronised with the existing profile data of the Mercedes me account. By scanning a QR code with the Mercedes me App, the vehicle is automatically connected to the Mercedes me account.

Personal preferences such as a favourite radio station and preselected settings can be transferred to any seat via the personal Mercedes me profile. Up to seven different profiles with a total of around 800 parameters are possible in the vehicle. The ambient lighting can be individually set by remote configuration, e.g. from home. As the profiles are stored in the cloud as part of Mercedes me, the profiles can also be used in other Mercedes-Benz vehicles featuring the new generation of MBUX.

In addition to the classic input of a PIN, a special authentication procedure ensures a high level of security. Fingerprint, face and voice recognition are combined. This allows access to individual settings or verification of digital payment processes from the vehicle.

MBUX Hyperscreen: a great drive-in cinema

With the MBUX Hyperscreen (optional extra), three displays merge almost seamlessly into one another to create an impressive screen band over 141 centimetres wide: driver's display (screen diagonal: 12.3 inch), central display (17.7 inch) and front passenger display (12.3 inch) appear as one visual unit.

The selected display style is shown uniformly on all screens; and the brightness is homogeneously adapted to the lighting conditions in the interior. The control panels for the automatic climate control system are located in the lower area of the central display. These remain permanently displayed so that the driver and front passenger can directly adjust the temperature and ventilation.

For particularly brilliant display quality, OLED technology is used for the central and front passenger displays. Their individual pixels are self-luminous; non-actuated image pixels remain switched off, which means that they appear deep black. The active OLED pixels, on the other hand, radiate with high colour brilliance, which also results in pronounced contrast values.

The central and front passenger displays also provide haptic feedback. When a finger touches certain spots on the touchscreen, actuators (eight in the central display, four in the front passenger display) trigger a perceptible vibration of the glass cover. The user thus feels pulses on the smooth surface, which give the impression of a mechanical switch. Another operating aid that will be familiar from high-quality consumer electronics products is the force feedback of both displays. Different levels of pressure on the glass change the response. For example, MBUX then jumps to another menu level.

The 12.3-inch OLED display with separate interface makes the journey more interesting and entertaining for the front passenger. The system uses intelligent, camera-based blocking logic that detects if the driver is looking at the front passenger display (see separate chapter).

ZYNC: seamless digital entertainment experience in the car

Whether it's news, sport, shows or films – most people stream and watch their favourite content on their mobile device or television. The interior of a Mercedes-Benz, however, makes it possible to enjoy an immersive cinematic experience that goes well beyond mere playback. The size, the format and the position of the screens, as well as the arrangement of the loudspeakers, for instance, can all be individually configured to suit. Mercedes-Benz Group AG has entered into a partnership with the technology company ZYNC based in California. The ZYNC platform focuses exclusively on the prevailing situation in a vehicle interior and can be seamlessly integrated into the Mercedes-Benz hardware as well as into current and future operating systems. It all serves to maximise the audiovisual experience, interaction and user-friendly operation.

ZYNC offers video streaming, on-demand content, interactive experiences, local video programmes, sport, news, games, and much more besides, via a single user interface. More than 30 streaming services from well-known global, regional and local partners are already available, while further partners and channels are continually being integrated. Most of these channels are already included and do not require an additional subscription. In order to be able to use ZYNC, an active Mercedes-Benz me Account with MBUX Entertainment Package is required. This is currently available for one year free of charge from the original booking and can subsequently be renewed upon payment of a fee via the Mercedes me Portal (country-specific variations possible).

Always keeping the driver's gaze in view

The new EQE SUV under the magnifying glass: the blocking logic of the front passenger screen

The front passenger in the EQE SUV has the option of a 12.3-inch OLED display with its own user interface. In Europe and in a growing number of countries, the front passenger is able to watch dynamic content such as video streaming or TV while the vehicle is on the move. The system uses an intelligent, camera-based blocking logic that recognises if the driver is looking toward the front passenger display. If this is the case, the system automatically dims the dynamic content for safety reasons.

First, the seat occupancy recognition registers whether someone has taken a seat next to the driver. If this is the case, the touch surface of the display can be used from the front passenger seat. If, on the other hand, the front passenger seat is not occupied, the screen becomes a digital decorative image. The customer can choose from various motifs, including a starry sky, i.e. the Mercedes-Benz pattern.

During the journey, the front passenger can watch dynamic content such as a streamed video or TV on their screen. To ensure that the driver is not distracted from what is happening on the road, a camera-based blocking concept prevents him/her from watching the film. A camera in the driver's display tracks the driver's eyes and thus records his or her gaze.

The intelligent system can distinguish whether the driver is looking at the front passenger screen or the outside mirrors. This takes into account, for example, how the driver steers and how often and for how long he/she looks over to the front passenger side. If the driver looks at it for longer than about two seconds, the front passenger screen is dimmed so that the content is not visible.

Intelligent glimpse into the future

The new EQE SUV: Navigation with Electric Intelligence

When it comes to Navigation with Electric Intelligence, the name says it all. For on the basis of numerous factors it plans the fastest and most convenient route including charging stops. It also reacts dynamically to traffic jams or a change in driving style, for example. Navigation with Electric Intelligence is clever; it calculates the estimated charging costs per charging stop. Furthermore, the customer can edit the planned routes individually. They can edit the planned routes individually by adding in preferred charging stations along the route or excluding proposed charging stations.

While a conventional range calculator relies on past data, the Navigation with Electric Intelligence system looks to the future. The energy demand is computed for the calculation of the route. The topography, route, ambient temperature, speed, heating and cooling requirements are all taken into account. Further factors include the traffic situation along the planned route, as well as the available charging stations to be found there, their capacity and payment functions. Calculation takes place in the cloud and is combined with on-board data.

The customer does not necessarily always have to take on a full charge, but will be given a specific recommendation as to the required charging time at the charging station. The charging station stops are planned in the way that is most favourable for the overall travelling time: under certain circumstances, two short charging stops with a higher charging capacity can be more advantageous than charging once for a long time. In addition, Navigation with Electric Intelligence automatically adjusts the vehicle's charging settings and optimises them for fast charging along the route.

MBUX displays whether the available battery capacity is sufficient to return to the starting point without charging. Charging stations along the route that have been added manually are given preference in the route calculation. Proposed charging stations can be excluded. The system calculates the estimated charging costs per charging stop.

If there is a risk of not reaching the destination or the charging station with the selected settings, Active Range Monitoring issues the prompt to activate ECO driving functions. In addition, the driving speed for reaching the next charging station or the destination is calculated and displayed in the speedometer. Under the menu item "Range", the driver can switch off various energy consumers to increase the range and activate the ECO driving functions to support a more efficient driving style.

Efficient use of waste heat from the powertrain

The new EQE SUV: climate control

The EQE SUV features a sophisticated thermal architecture with a heat pump as standard. Another pleasant and efficient function is pre-entry climate control. The THERMATIC automatic climate control system with two climate zones is fitted as standard, while the THERMOTRONIC with four zones is available as an option.

A heat pump – a familiar concept from domestic heating systems – transports the warmth from a low to a higher temperature level. In this way, "cold thermal energy"¹, which occurs frequently in electric vehicles in particular, can be accessed for heating the interior.

Thanks to the heat pump, the system works very efficiently: the waste heat from the electric drive (inverter and electric motor) and also the high-voltage battery can be used to heat the interior. This reduces drastically the draw on battery power for the heating system, thus increasing the range.

But the other functions of the intelligent thermal management also support the occupants in many ways. Did you know that...

... the pre-entry climate control works using target values? This means that if the driver enters his/her departure time directly via MBUX or via the Mercedes me App and the vehicle is at a charging station, the EQE SUV is air-conditioned to the preset temperature at the start of the journey. The driver can do this either individually for each journey and every stretch of the journey, or with the help of a weekly profile. Pre-entry climate control is also activated automatically for five minutes as soon as the vehicle is unlocked using the key.

... the EQE SUV automatically switches to recirculation mode when the system detects via GPS that the vehicle is passing through a tunnel or when the air quality sensor registers corresponding values? The comfort function ensures that the side windows and sunroof close if necessary in recirculation mode and then move back to their original position.

... the automatic climate control system offers ECO and ECO+ modes in addition to the comfort setting? With ECO, the operation of the climate control system, with reduced heating and cooling capacity, is still possible without restrictions. In ECO+ mode, only the fan and, if necessary, the waste heat from the eATS are used. The HV components compressor and heater, on the other hand, remain switched off. ECO and ECO+ reduce the energy consumption of the climate control functions, so minimising the impact on the vehicle's range.

... several sensors ensure that the air in the interior is cooled or heated as required? In addition to indoor and outdoor temperatures, they also record the position of the sun. To prevent misted-up windows, a sensor in the base of the inside mirror measures the temperature of the window surface and the interior humidity. In addition, a humidity sensor is used to determine the humidity of the intake air. Thanks to this strategy, the energy demand of the system can be reduced in A/C mode with dry ambient air and no cooling requirement - a gain in efficiency. At the same time, this helps to prevent the passengers from suffering from dry eyes.

¹ Temperatures just a few degrees above zero which are not perceived as warm

Four different soundscapes for a special acoustic experience

The EQE SUV: the Sound Experiences

"Serene Breeze" is the name of the new, fourth soundscape that makes its debut in the EQE SUV. This new sound, which can be activated later if desired, sounds relaxed and close to nature. With the holistic sound staging, the paradigm shift from the combustion engine to the electric car becomes audible in the Mercedes-EQ models. A variety of soundscapes allows for an individual acoustic set-up. An optional interior driving sound is available. This adjusts adaptively to the driving style.

If the Burmester® 3D surround sound system is fitted, the EQE SUV features the two soundscapes Silver Waves and Vivid Flux. Silver Waves is a sensuous and clean sound. Aimed at EV enthusiasts, Vivid Flux is crystalline, synthetic yet humanly warm. These Sound Experiences can be selected or switched off on the central display.

Two additional soundscapes can be unlocked using over-the-air technology:

- "Roaring Pulse" fits the character of the SUV particularly well. This Sound Experience is reminiscent of powerful machines, and is sonorous and extroverted.
- "Serene Breeze" offers a relaxed sound that is close to nature. The sound character picks up on the theme of wellness and unfolds an independent, unagitated interaction mechanism in the driving sound. The result is a symphonic blend of natural sound and sublime soundtrack.

Driver and passengers are already greeted acoustically when approaching the vehicle and when getting in. A corresponding aura sound also accompanies the exiting and locking of the EQE SUV. Also part of the particular soundscape is the driving sound, which is reproduced by the speakers in the interior. It stirs emotions and inspires. At the same time, the driving sound is interactive, as it responds to a good dozen parameters such as the accelerator position, speed or recuperation. The amplifier of the Burmester® surround sound system uses intelligent sound design algorithms to compute the sounds in real time, and these are then played through the speakers.

The algorithms and sounds for the sound design are created in-house at Mercedes-EQ. In addition to physicists, the interdisciplinary team also includes sound designers, media designers and mechatronics specialists. In the acoustics laboratory, which is completely shielded from outside noise and vibrations, they work on the sound of the Mercedes-EQ model family. The sound experts determine which emotions the soundscapes evoke in real traffic during test drives. The mobile listening tests take place with interactive demonstrator vehicles, including at the Immendingen Test and Technology Centre (PTZ).

The experts used musical composition techniques such as harmony. The soundscape varies as the result of many sound dimensions. The sound design interacts with the vehicle. The multisensual experience stands at the interface between comfortable calm and a precise, emotionally styled response to driving and driver behaviour.

Tailor-made charging tariffs and green electricity

The new EQE SUV: Mercedes me Charge

Since June 2022, Mercedes me Charge¹ has been offering three new charging tariffs in Europe that are tailored to individual driving performance. Mercedes me Charge S for occasional chargers, Mercedes me Charge M for normal chargers and Mercedes me Charge L for frequent chargers. With the introduction of the new, transparent tariff system, customers have access in part to fixed prices that apply regardless of the operator. With the Plug & Charge function, the EQE SUV can also be conveniently charged.

Mercedes me Charge offers access to one of the largest charging networks worldwide: It currently comprises over 850,000 AC and DC charging points, of which around 350,000 are in Europe. Mercedes me Charge enables its customers to charge green at any public charging station throughout Europe, the USA and Canada. With Green Charging, a charging process is subsequently offset by energy from renewable resources. This ensures that third-party providers feed the corresponding amounts of green energy into the grid after the charging process. High-quality guarantees of origin verifiably certify the origin of the energy.

Green electricity is defined by the EKO energy eco-label, which is provided by certified energy production plants. In addition, incentives are created to invest in renewable energy generation plants. Mercedes me Charge also includes over 1800 charging points that run exclusively on green electricity. These are part of the IONITY fast charging network, co-founded by Mercedes-Benz in 2017, located along Europe's major roads.

Mercedes me Charge L pays off for frequent chargers

Anyone who purchases an EQE SUV and has registered with Mercedes me Charge will initially be placed on the Mercedes me Charge L tariff. This tariff is interesting for customers driving long distances who charge more frequently on the road and prefer fixed and predictable costs. In the first year, these new car buyers still do not have to pay a monthly basic fee.

In general, Mercedes me Charge customers benefit from the integrated payment function with automatic invoicing. The customer chooses the preferred payment method only once. The individual charging processes are clearly listed in a monthly invoice.

Plug & Charge – simpler and more convenient charging

With the Mercedes me Charge function Plug & Charge, the EQE SUV can be charged even more conveniently at Plug & Charge-enabled public charging points: when the charging cable is plugged in, the charging process starts automatically; the customer does not have to authenticate himself/herself additionally. The vehicle and the charging station communicate directly via the charging cable.

Plug & Charge is available not only at more than 1800 IONITY fast charging stations in Europe, but also at more than 700 Aral pulse charging stations in Germany. Mercedes-Benz and the operators of the charging stations are continuously working on the rollout of Plug & Charge to further charging stations. Whether a charging station is Plug & Charge-capable can be seen by viewing the charging station details on the display of the EQE SUV and also in the Mercedes me App. It is also possible to search for specific suitable charging stations.

¹ In order to allow use of the Mercedes me connect service "Mercedes me Charge", a separate charging contract with a selected third-party provider is required for charging payment and billing purposes. A personal Mercedes me ID and agreement to the Terms of Use for the Mercedes me connect services are required for use of the Mercedes me connect services. Country restrictions apply.

Intelligent light assistance and comprehensive wellness programme

The new EQE SUV: the equipment highlights

DIGITAL LIGHT headlamp technology (special equipment) makes innovative functions possible, such as the projection of auxiliary markings or warning symbols onto the road. Another equipment highlight is ENERGIZING AIR CONTROL Plus. With this, a HEPA (High Efficiency Particulate Air) filter cleans the incoming outside air at its very high filtration level. ENERGIZING COMFORT links together various comfort systems in the vehicle. The individual ENERGIZING COMFORT programmes enable a special wellness set-up depending on the mood or needs of the customer. This enhances physical comfort and performance while driving and during a break. The Dolby Atmos sound format® takes the audio experience in the EQE SUV to a new level.

DIGITAL LIGHT has a light module with three extremely powerful LEDs in each headlamp, whose light is refracted and directed by 1.3 million micro-mirrors. The micro-mirrors occupy the area of a thumbnail. A control unit with a powerful graphic processor uses an HDMI-like connection to generate a continuous video stream to the mirrors.

The beam, divided into 1.3 million pixels, makes absolutely precise light distribution possible. Highbeam Assist Plus is highly accurate when masking out oncoming traffic or traffic signs. The light-dark boundaries and the light distribution of all other adaptive light functions are also displayed with significantly improved precision, which optimises illumination in fog, motorway or city light, for example. Based on data from the navigation maps, the topographic light takes driving up and down hills into account, especially crests and dips. These assistance functions are special features¹:

- Warning of recognised roadworks by projecting an excavator symbol onto the road surface
- Aiming a spotlight at pedestrians detected at the roadside as a warning
- Traffic lights, stop signs or no-entry signs are pointed out by projecting a warning symbol onto the road surface
- Assistance on narrow road lanes (roadworks) by projecting guiding lines onto the road surface
- Indication of the start of cooperative lane change
- Warning and directional guidance when Lane Keeping Assist or Blind Spot Assist detects a hazard

With **ENERGIZING AIR CONTROL Plus**, Mercedes-Benz is thinking holistically about air quality in the EQE SUV. The system is based on filtration, sensors, a display concept and air conditioning. The HEPA (High-Efficiency Particulate Air) filter has a very high filtration level to trap fine particles, microparticles, pollen and other substances entering with the outside air. An activated carbon coating reduces sulphur dioxide and nitrogen oxides as well as odours in the interior. The interior air filter of this optional feature was submitted by Mercedes-Benz in 2021 for "OFI CERT" ZG 250-1 certification from the Austrian Research and Testing Institute (OFI) with respect to viruses and bacteria, which it duly received.

Using pre-entry climate control, it is also possible to clean the interior air before getting into the vehicle. The fine-particle values outside and inside the vehicle are also displayed in the climate line. If the quality of the outside air is low, the system can also recommend closing the side windows or sunroof, as well as automatically switching to air-recirculation mode.

The EQE SUV's active fragrancing system, which is part of the AIR-BALANCE Package, also appeals to the sense of smell. A special fragrance was composed for the new electric model: Hibiscus and lemongrass characterise No.6 MOOD hibiscus.

¹ Due to the approval regulations, the availability and scope of functions may be restricted depending on the market.

The holistic "Fit & Healthy" approach of **ENERGIZING COMFORT** makes it possible to experience the various comfort systems by touch input or voice command and bundles them together in programmes to create worlds of experience. At the same time, the system creates a matching atmosphere in the interior – for example, invigorating in case of fatigue or relaxing in case of an elevated stress level. The **ENERGIZING COMFORT** offering in the EQE SUV includes

- the programmes Refresh, Warmth, Vitality, Joy and Well-being,
- the three **ENERGIZING NATURE** programmes Forest Glade, Sound of the Sea and Summer Rain
- as well as training and **ENERGIZING** tips.

During a break in the journey, e.g. at a rest stop or charging station, the Power Nap programme can also be selected. The programme has three phases – falling asleep, sleeping, waking up – and can increase the driver's performance and give them new energy.

The **ENERGIZING COACH** suggests an appropriate fitness or wellness program based on vehicle and trip data. It also factors the information about sleep quality and stress level into its intelligent algorithm if the driver has a suitable wearable.

The Dolby Atmos sound system® takes the audio experience in the EQE SUV to a new level. Individual instruments or voices in the studio mix can be positioned all around the listening area. A new kind of sound animation thus becomes possible: this is because while conventional stereo systems usually have a left-right dynamic, Dolby Atmos® can use the entire space and create a 360-degree experience.

Sporty, robust SUV character featuring purpose design

The EQE SUV: the exterior design

The proportions of the EQE SUV combine function and aesthetics with the sporty character of the SUV. The new model, with its unmistakable purpose design, marks a turning point in its class. The overhangs and the front-end assembly have been kept compact. The wheels in sizes from 19 to 22 inches are positioned flush with the outer edge of the body and lend a commanding stance.

Key features of the front-end design:

- The front is combined into a black panel unit and consistently continues the face of the new generation of Mercedes-EQ vehicles.
- As an optional extra, the black panel front is also available with the Mercedes-Benz pattern, a three-dimensional star pattern.
- The concise daytime running light signet interprets the brand's characteristic flare. LED High Performance headlamps are standard, DIGITAL LIGHT is available as an optional extra.
- The simulated underguard gives the front a robust character. Depending on the equipment, it features a high-gloss chrome or dark finish. An air intake is integrated into the component.

Key features of the side design:

- The side windows have a generous, dynamically running chrome surround in a 3D design.
- The exterior mirrors sit on the vehicle shoulder for aerodynamic and aeroacoustic reasons.
- Flush-fitting door handles are available as an optional extra.
- A running board is optionally available, which also offers aerodynamic advantages. On EQE SUVs without this option, a three-dimensional chrome trim divides the lower area.
- The service flap for the washer fluid is located on the side of the left wing.
- The SUV-typical wheel arch claddings are retained in black, as are the side sill panels, which emphasises the dynamic silhouette.
- The large wheels in sizes ranging from 19 to 22 inches, together with the muscular shoulder area, give the EQE SUV a sporty, robust character.

Key features of the rear-end design:

- Flowing surfaces and smooth transitions dominate at the rear and even visually conceal the luggage compartment sill.
- The light strip at the rear is continuous.
- The interior of the innovatively designed LED lights has the shape of a curved and illuminated 3D helix.
- The reversing camera is hidden behind the star, protected from dirt.
- Depending on the design and equipment line, a visual chrome underguard sits in the black surroundings of the lower bumper.

High aerodynamic performance with many detailed measures

The new EQE SUV: aerodynamics

After the EQS Saloon, EQE Saloon and EQS SUV, the EQE SUV is already the fourth Mercedes-EQ to be based on the modular architecture for large electric vehicles. The EQE SUV shares some aerodynamic measures with its model brothers. The underbody with its numerous aerodynamic details plays a central role in a very good C_d value from 0.25¹, which was achieved despite the large load volume and short rear overhang. But the dimensional concept with the flat windscreen, sweeping roof line and indents were also important factors.

Many aerodynamic measures result in the high aerodynamic efficiency of the EQE SUV. These include novel, patent-pending wheel spoilers in front of the front axle. With a serrated lower edge, small apron and longitudinal ribs, numerous details contribute to improving the flow of air to the front wheel.

Special aero-claddings were developed for the aerodynamically optimised wheels. Depending on the equipment, these wheel trims mean an improvement of up to two C_d points compared with an aero-wheel without inserts. The optionally available running board drops down in the non-visible area on the underside. This has a positive influence on the airflow to the rear wheels and results in a measurable aerodynamic advantage.

Wheel spoilers also sit in front of the rear axle which have an apron on the inside. Special cladding spoilers in the area of the rear side wall have a very large influence on the aerodynamic performance. They direct the airflow around the rear wheels. Depending on the rim size, the cladding spoilers on the EQE SUV are installed in two lengths.

The underbody panelling has striking details such as the jagged turbulators in the front section. They prevent displacement of the underbody airflow. The flow is directed downwards from the wheel arches. In addition, the underbody panelling on the EQE SUV has been supplemented with a thrust arm covering and a spring link covering. The latter is designed with a slope that directs the airflow from the battery to the diffuser. The diffuser angle of the rear diffuser has been optimised in the wind tunnel.

The side spoilers and roof spoiler on top of the rear moves the end of the roof edge back. In combination with the stronger constriction, this offers aerodynamic advantages. Even the tail lights have an integrated edge that functions as a spoiler. These details result in an aerodynamically advantageous rear end with sharp airflow break-away edges.

The following is an overview of the details of the aerodynamic development:

- Aerodynamically favourable dimensional concept
- Aerodynamically optimised wheels in all sizes, in the 19-inch entry size with aero-claddings, and equally aerodynamically optimised tyres with improved geometry
- Cooling air control system
- Continuous seals in the front area, e.g. between service flap, black panel, headlamps and light strip
- Streamlined design of the A-pillar and water trap for better visibility of the outside mirrors even in adverse weather conditions
- Wheel spoilers at front and rear

¹ The EQE SUV achieves an outstanding C_d value of 0.25 with AIRMATIC, 19-inch wheel/tyre combination (optional equipment Code R17, Continental ContiEco Contact 6Q MO tyres) and running-boards. Power consumption figures are provisional and were determined internally in accordance with the "WLTP test procedure" certification method. So far there are no confirmed figures from an officially approved testing organisation, nor any EC type approval or certificate of conformity with official figures. Differences between the stated figures and the official figures are possible.

- Special cladding spoilers in the rear side wall in front of the wheels
- Spoiler integrated into tail lights
- Side spoilers and roof spoiler at the top of the rear end
- Extensive underbody panelling

Extensive sealing and insulation measures reduce wind noise

In an electric car without the usual level of drive noise, occupants often perceive wind noise more clearly. The aeroacoustic behaviour is therefore all the more important. Lots of fine-tuning in the details: in order to reduce or prevent low-frequency noises that can be perceived as reducing comfort, numerous cavities in the car body were filled with acoustically effective foam, for example.

The high-frequency components of wind noise have also been reduced in the EQE SUV through improved seals on the windscreen mount and on the outside mirrors. The aeroacousticians paid special attention to the seals of the transitions between the five side windows.

The optional Acoustic Comfort Package further enhances noise comfort. This includes acoustically effective laminated glass on the windscreen and the side windows of the driver and passenger doors. On the panoramic roof, various wind deflectors, covers and seals with improved geometry ensure low noise levels despite the large roof opening.

Airy, spacious, variable

The new EQE SUV under the magnifying glass: dimensional concept

The EQE SUV is one of the most spacious representatives of its class. Yet it is more compact than the EQE Saloon and, at 3030 millimetres, has a wheelbase that is nine centimetres shorter. The external dimensions are 4863/1940/1686 millimetres (length/width¹/height).

The space offered by the five-seater is very generous thanks to intelligent packaging based on the large electric platform. The headroom in the first row of seats is 1007/1002 millimetres, in the second row it is 1001/1000 millimetres (figures without/with sliding sunroof). The subjective feeling of the high level of spaciousness is also confirmed by the elbow width of 1540 millimetres on the driver's side. At 1030 millimetres, legroom in the rear boasts a comfortable level.

The volume of the luggage compartment is 520 litres as standard. The backrests of the rear seats can be split in a 40/20/40 ratio. When the rear seat backrests are folded down completely, the load volume is basically 1675 litres with roof-high loading. Diagonally, the loading dimension is 882 millimetres - a top value in this class.

If desired, the variability can be increased: if the rear seat backrests are set about 10 degrees steeper in the optional cargo position, the load volume is 580 litres. In addition, this optional extra allows the rear seat backrests to be split in a 40/20/40 ratio. The smaller part in the middle can be folded down separately, so that a through-loading space is available and the two outer seats can still be used.

¹ With conventional door handles. With flush-fitting door handles: 1918 mm.

Avant-garde architecture with a special atmosphere

The new EQE SUV: the interior design

The EQE SUV is based on the large electric platform from Mercedes-EQ. On top of this it boasts an interior that has been consistently digitalised. The optionally available MBUX Hyperscreen implements this to impressive effect.

The entire instrument panel here is a single piece, the ultimate widescreen. The high-resolution screens merge seemingly seamlessly under the shared glass cover. The graphic appearance of their MBUX content is perfectly coordinated. The MBUX Hyperscreen is integrated into the instrument panel in minimalist fashion. Only a fine frame in silver shadow, a vent band and a narrow leather ledge enclose the MBUX Hyperscreen. The vent band spans the entire width at the top and is very slim at the same time. These extreme proportions, together with the glass wave of the MBUX Hyperscreen, create the avant-garde architecture of the cockpit.

The dominant outer vents feature a turbine design. They deliberately play on the theme of hyperanalogue through the contrast between high-tech precision mechanics and digital, glass display world. The intricately designed turbine blades distribute the airflow efficiently.

The front section of the centre console joins the instrument panel, bridging the open space in between in a visual reference to the new drive architecture – due to the electric powertrain, no transmission tunnel is necessary. Flowing leather surfaces with intricate seam dressings create a modern and luxurious impression in combination with the generously sized real wood cover. At the same time, there is plenty of stowage space available.

The base model without MBUX Hyperscreen has a slightly different centre console. There is a soft armrest in the rear section. It is first visually interrupted before the line is continued into the floating central display. The smooth transition from 3D in the centre console compartment to 2D on the touchscreen is seamless, i.e. without interrupting the glass-look design.

The Electric Art equipment line includes luxury seats with lavishly crafted covers. The comfort-oriented seats meet high demands with form-following, customised perforations in different layouts. In combination with the AMG Line interior, the customer gets SUV sports seats with more pronounced seat side bolsters. Alternatively, comfort seats are optionally available with the AMG Line interior.

The vent band from the cockpit is visually continued in the front doors. A floating control cluster with integrated door opener and seat controls takes over the functional interpretation of formerly purely decorative elements. The door centre panel develops in a sensual, dynamic movement from the vertical surface into the horizontal and thus integrates the armrest seamlessly. The front section of the armrest is designed as a metallic high-tech element that can be used as a free-floating grab and pull handle and contains the power window switch. In the dark, this floating, avant-garde aesthetic is particularly impressive thanks to an ambient light corona.

A special welcome & goodbye scenario¹ has been developed for the Mercedes-EQ models, which is also coordinated with the ambient lighting.

¹ Available in combination with the Burmester® surround sound system

Colour & trim: avant-garde and tradition for a special ambience

Avant-garde as well as traditional materials and colours give the interior a special atmosphere. The sophisticated, delicate NEOTEX structure combines the look of nubuck leather and high-tech neoprene. It can be found on the instrument panel, the armrest and the AMG Line seats.

Five coordinated colour combinations in the interior emphasise the generous sense of space. The EQE SUV is immersed in a progressive and luxurious colour scheme of warm and cool tones that emphasise the sculptural and sensual design. For example, warm, modern balao brown is combined with technoid-looking neva grey and biscay blue/black. The colour rosé gold, derived and evolved from the electric coil, emphasises the design of the vent band and is used as a contrasting colour.

The innovative trim parts make a key contribution to the aesthetics in the EQE. A hybrid trim element brings together the warmth of wood with the technical coolness of real aluminium. The trim in an anthracite 3D relief-look finish, on the other hand, features fine metal pigments. The laser-cut trim element backlit with the Mercedes-Benz pattern also creates a special ambience. The star pattern is lasered into the plastic trim and is adaptively backlit.

The standard steering wheel of the Electric Art interior is made of a high-quality man-made leather. Of course, it also meets the high demands of Mercedes-Benz in terms of feel and technical properties such as thermal behaviour. Leather-free alternatives are also used for the seat covers, door panels and centre console.¹

UX design: multiple display styles and modes to choose from

The functional content and the operating structure are adapted to electric driving. Visually, all graphics are designed in a new colour scheme of blue/orange throughout. The classic cockpit display of the two round dials has been reinterpreted with a digital light sabre in a glass lens. All content relevant to driving can be accessed between the round dials.

The appearance of the screens can be individualised with three display styles (Discreet, Sporty, Classic) and three modes (Navigation, Assistance, Service).

¹ Leather-free equipment available from the beginning of 2023.

Designed for many eventualities

The new EQE SUV: passive safety

The principles of Integral Safety apply regardless of the type of drive system. Like all other Mercedes-Benz models, the EQE SUV therefore has a rigid passenger cell, special deformation zones and modern restraint systems. The European version of the EQE SUV can detect whether the rear seats are actually occupied. If a passenger in the rear is not wearing a seat belt, the driver receives a specific warning. The so-called occupant presence reminder can indicate children who may have been overlooked in the rear of the vehicle. In vehicles for Europe, Australia, New Zealand, USA and Canada, this system is on board as standard.

The fact that the EQE SUV is based on an all-electric architecture also opened up new design possibilities for its safety concept. This made it possible to select the appropriate installation space for the battery in a crash-protected area in the underbody. And because there is no large engine block on board, the behaviour in a frontal crash could be modelled even better. In addition to the standard crash tests, the car's performance in various additional load situations was verified and extensive component tests carried out at the [Vehicle Safety Technology Centre](#) (TFS). The particular focal points in an SUV include partner protection and roof strength.

Safety structure: Accident protection is not a question of the powertrain concept

The bodyshell of the EQE SUV is largely made of different types of steel. Reinforcements made of high-strength steel are used in the main floor. Press-hardened steel reinforcements are intelligently integrated into the bodyshell structure and combined with high-strength, hot-formed steel components. The hot-formed steels in the A and B-pillars are partially annealed in the flange areas, i.e. they feature special thermal aftertreatment there. In the event of a crash, this can prevent the formation of cracks. This is how the stringent Mercedes-Benz crash requirements are met.

Frontal impact

To ensure that the front end of the EQE SUV absorbs the energy as evenly as possible, a large crossmember connects the two longitudinal members. As in every Mercedes-Benz, the cross-connection not only serves as self-protection, but is also a key component for the protection of other road users. Deformable crash boxes are attached to the crossmembers, so enhancing the ease of repair in the event of minor damage.

In a severe frontal impact, depending on the accident constellation, two longitudinal members made of high-strength steel absorb the main energy. A supporting role is played by an upper load path on the shock-absorber strut tower and a lower load path along the integral carrier. The integral carrier made of steel not only accommodates the eATS components, axle components and the steering gear, but also plays this key role in the event of a crash. In case of severe deformations, the wheels form an additional load path, whereby they can move towards the rear and are braced against the sill and/or sidewall. The geometry and strength of the sills have been designed for this accordingly. Honeycomb deformation elements are installed between the integral carrier and the battery housing, which can limit the force on the battery housing. The battery housing itself is extremely rigid and allows for relatively little deformation, so that the cells inside are not damaged. Reinforcing structural components have been additionally integrated into the front area of the underbody with minimal overlap for the load case.

Side impact

In principle, in a side impact only a very small deformation path is available. High-strength structures in the EQE SUV therefore serve to protect the occupants, but also the battery. Alongside the doors with their reinforcements, the sidewall structure also comprises the pillars, the side roof frame and the side members/sills. Cross-reinforcements in the underbody as well as the very rigid battery housing contribute to the high stability in a side impact. The sills are made of steel and feature a shell design, with an additional

aluminium profile inserted. For a side impact, the sills are specifically designed to be deformable in order to avoid critical damage to battery modules as far as possible.

Rear impact

The EQE SUV is also equipped for rear impacts. As with the front-end assembly, a crossmember with bolted-on crash boxes helps to distribute the impact energy from a one-sided load to both longitudinal members. Thanks to the specific design of the structural components and the rear axle carrier, the requirements in relation to battery safety have also been fulfilled.

Rollover

In the event of a rollover, it is particularly important that sufficient headroom is maintained and measures are taken to prevent heads from potentially swinging out. At Mercedes-Benz, strict survival space requirements apply worldwide as part of the company's philosophy of Real-Life Safety. For the EQE SUV, these were validated by roof-drop tests and roof indentation tests, among others. This means that even the stringent requirements of both the IIHS (Insurance Institute for Highway Safety) and the American legislator for roof compression resistance can be met. In these tests, a pressure plate is applied to the roof structure on the A-pillar above the windscreen on the driver's side and then on the front passenger side. The vehicle roof must withstand a compressive force that can reach up to four times the vehicle weight.

High-voltage system: automatic shutoff in the event of serious accidents

The battery, high-voltage (HV) cables and other HV components have been designed and protected in such a way that they meet Mercedes-Benz's high safety requirements in the event of an accident.

The multi-stage protection concept of the high-voltage (HV) system has already been proven in the other Mercedes-EQ models. In case of danger, it can be automatically switched off and disconnected from the battery. A distinction is made between a reversible and an irreversible shutoff. A reversible shutoff can take place in the event of minor frontal collisions. Afterwards, it is possible to reconnect the high-voltage system by pressing the start button again.

If the vehicle does not detect a fault during the system check with insulation measurement initiated by this, the EQE SUV therefore remains manoeuvrable. Only in the event of severe frontal collisions, in which the vehicle is usually no longer drivable anyway, is the high-voltage system irreversibly switched off. It can no longer be activated without repair. This also applies to collisions from the side and in rollovers when the triggering of the restraint systems is reached. The HV system is also irreversibly switched off in the event of a severe rear-end collision. When shutting down, there is a provision to ensure that within a few seconds there is no residual voltage in the high-voltage system outside the battery that could cause injury.

In addition, disconnection points are also provided for the rescue forces, where they can deactivate the high-voltage system themselves.

A special feature is that the sensor system of the airbag control unit remains active even during the charging process. If an impact of a certain severity is detected while the vehicle is connected to a charging station, the EQE SUV can automatically interrupt the charging process.

Acoustic ambient protection: special sound as a warning for pedestrians

The acoustic ambient protection (standard) is an artificially generated vehicle noise. This makes it easier for pedestrians to perceive the EQE SUV at low speeds. One sound generator each is located in weatherproof locations behind the cooling module and at the rear in the underbody. An EQ-specific sound is generated up to a vehicle speed of approx. 30 km/h. Initially it becomes louder and higher as the speed increases. This change allows conclusions to be drawn about the driving status (braking/acceleration).

Above 20 km/h, the volume is then already gradually reduced, since the vehicle can then be perceived by its tyre and wind noise. If the speed drops from a higher speed back down to 30 km/h, the sound is faded in again. When reversing, an intuitively recognisable interval tone sounds regardless of the speed.

Sophisticated restraint systems

In addition to driver and front passenger airbags, a knee airbag on the driver's side is also standard. It can protect the legs from contact with the steering column or instrument panel in a severe frontal crash. This is to prevent or mitigate injuries.

The standard window airbags can reduce the risk of head impact with the side window or penetrating objects. In the event of a serious side-on collision, the window airbag on the side of the impact extends from the A- to the C-pillar like a curtain over the front and rear side windows. If a rollover is detected, the window airbags can be activated on both sides.

To meet new rating requirements, the vehicles are also equipped with a centre airbag. This is integrated into the backrest of the driver's seat towards the centre console. It can position itself between the driver and the front passenger in the event of a severe side impact, depending on the direction of the impact, the severity of the accident and the occupancy status.

Pyrotechnic belt tensioners and force limiters are standard on all outer seats. There are optional side airbags for the second seat row. They cover the chest area of the occupants in the outer rear seats in the event of a severe side impact and can therefore supplement the protection provided by the standard window airbags.

The EQE SUV has i-Size child seat attachments as standard on the two outer seats in the second row. With two anchors each between the seat backrest and the seat cushion, corresponding child seats can be installed particularly quickly and securely. Top-tether attachment points on the rear of the rear seat backrests provide additional support.

Warnings: if the belt is not worn and children and animals are forgotten

The European version of the EQE SUV not only has a seat belt status indicator for the rear, but also a sophisticated seat belt warning system. It warns when the seat is occupied and the seat belt is not fastened, thus providing even more effective protection against unbelted passengers. For this purpose, there are also special mats in the seats of the second row. They can tell whether any passengers are sitting there.

The occupant presence reminder can help to indicate children or animals that may have been overlooked in the rear of the vehicle. It activates and deactivates automatically if by a rear door being open for a longer period it can be assumed that, for example, small children could get in or out.

When the vehicle is switched off, the driver receives the text message "Do not leave persons or animals behind" on the driver's display if the system has activated automatically beforehand. The customer has the option to deactivate the system. An indicator light shows the status of the system.

PRE-SAFE® system: precautionary protection as standard

The PRE-SAFE® preventive occupant protection system comes as standard in the EQE SUV. Together with the familiar precautionary measures in the event of a potential frontal and rear-end crash, PRE-SAFE® Impulse Side (available in conjunction with the Driving Assistance Plus Package) forms a kind of virtual crumple zone that extends around the vehicle.

As there is only a limited crumple zone available in a severe side impact, PRE-SAFE® Impulse Side can move the affected driver or front passenger away from the danger towards the centre of the vehicle even before the crash as soon as the system detects an impending side collision. For this purpose, air chambers in the side bolsters of the front seat backrest are inflated in fractions of a second.

Highly flexible and comprehensively digitised

The new EQE SUV: production

As of the end of August the Mercedes-Benz Tuscaloosa, Alabama (USA) plant is responsible for the production of the EQS SUV, and just a few months later, in December, the production of the new EQE SUV starts. The battery factory in nearby Bibb County supplies the batteries for both electric SUV models from Mercedes-EQ. Since this year, all of Mercedes-Benz's own passenger car and van plants worldwide have achieved CO₂-neutral production as part of their eco-balance - including the two Mercedes-Benz plants in Alabama.

The Mercedes-Benz plant in Tuscaloosa has been the production site for large SUVs bearing the three-pointed star since 1997. The EQE SUV will be integrated into the ongoing series production at the Mercedes-Benz Tuscaloosa plant.

The Tuscaloosa plant uses the latest digital, sustainable, efficient and flexible production methods and follows the blueprint of Factory 56 in Sindelfingen, Germany, which symbolises the future of Mercedes-Benz car production. Thanks to early investments in flexible production and the use of the state-of-the-art digital production ecosystem MO360, Mercedes-Benz is currently already in a position to produce all-electric vehicles in large quantities. MO360 obtains real-time information from the most important production processes and IT systems of the approximately 30 Mercedes-Benz passenger car plants worldwide, and integrates important software applications.

Local battery production is a key success factor for Mercedes-Benz's electrification initiative. The battery factory in nearby Bibb County, which opened in March 2022, produces the battery systems for the EQS SUV and EQE SUV on an approximately 300-metre-long production line with more than 70 work stations. In a fully digitalised production process, a large number of components are assembled into a complete system, including the cell modules and the so-called EE compartment for the intelligent integration of the power electronics. The battery of the EQE SUV is based on a modular architecture that is also used in EQS, EQS SUV and EQE. When running at full capacity, up to 600 employees working in two shifts produce a six-digit number of batteries annually.

Mercedes-Benz has invested more than seven billion dollars overall in Alabama since the 1990s. This includes one billion dollars in the construction of the new battery factory in Bibb County, in the logistics centre and in the flexibilisation of the production sites. At present, Mercedes-Benz U.S. International (MBUSI) employs a workforce of about 4500 and in addition secures some 11,000 more jobs at suppliers and service providers in the region. Since 1997, about four million vehicles have rolled off the assembly line at the plant in Tuscaloosa. In 2021 alone, it was some 260,000 SUVs. About two thirds of the annual production output is exported, making MBUSI one of the biggest vehicle exporters in the USA.