



MERCEDES-EQ

Press Information

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The new EQB: family-size electric mobility

Contents

The main points at a glance

The EQB: the essential information and innovations 3

Family-size electric mobility

The EQB: all-electric compact SUV with up to seven seats 4

"The seven-seat design is a unique selling point in this class"

The EQB under the magnifying glass: a short interview with Product Manager Marius Philipp 7

Electro-aesthetics brimming with character

The EQB: the exterior design 8

Robust character meets rose gold

The EQB: the interior design 9

Versatile, well equipped and with space for up to seven

The EQB: the equipment features 10

Powerful and efficient duo as an opener

The EQB: the drive system 11

Anticipatory driving saves electricity and extends the range

The EQB: recuperation 13

A foretaste of what the future holds

The EQB: Navigation with Electric Intelligence 14

Relaxed, uncomplicated travel with transparency and planning certainty

The EQB: Mercedes me Charge 15

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Further information on the official electrical consumption 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 electrical 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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Strategies for a longer life and shorter charging stops	
The EQB under the magnifying glass: tips and tricks for charging	16
Extensive simulation and fine-tuning in the wind tunnel	
The EQB: aerodynamics.....	17
Sophisticated thermal management system with heat pump as standard	
The EQB: climate control.....	18
Systematic isolation and extensive insulation	
The EQB: low noise and vibration levels (NVH)	19
A true Mercedes in terms of passive safety	
The EQB: protection of occupants and other road users	20
Alert and quick to react	
The EQB: the driving assistance systems.....	21
Designed for driving stability and comfort	
The EQB: the suspension.....	23
Flexible, digital, efficient and sustainable	
The EQB under the magnifying glass: the production	24
Technical data	26

Descriptions and data in this press kit apply to the Mercedes-EQ European model range.
Details may vary from country to country.

The main points at a glance

The EQB: the essential information and innovations

Room for seven

The EQB offers five seats as standard and is optionally available as a seven-seater. It therefore offers space for many larger families and the most diverse transportation needs. This gives it an exceptional position among compact electric cars. The two seats in the third row can be used by people up to 5 feet 4 inches tall, child seats can also be fitted there.

Compact on the outside, spacious on the inside

The EQB (length/width/height: 184.4/72.2¹/65.6² inches) offers a generous amount of space thanks to having the long wheelbase of the GLB (111.3 inches)². The backrests of the seats in the second row can be adjusted in several stages as standard, and this row features longitudinal adjustments of up to 5.5 inches as an option.

The compact class becomes increasingly electric

After the EQA, the EQB represents the second all-electric compact car from Mercedes-EQ. At the same time, it will be the first purely electrically powered production vehicle from the Kecskemét plant in Hungary. The vehicles for China are produced in Beijing.

Customers have the choice

The range initially includes the EQB 300 4MATIC with 225 hp and the EQB 350 4MATIC with 288 hp. A front-wheel drive model will follow. A particularly long-range version is also planned.

Electro design aesthetics

The EQB interprets Mercedes-EQ's Progressive Luxury in an edgy and particularly characterful way. It features the characteristic Mercedes-EQ black panel grille with central star. A further distinctive design feature of the all-electric world of Mercedes-EQ vehicles is the continuous light strip at the front and rear.

Navigation with Electric Intelligence

The standard Navigation with Electric Intelligence contributes to the effortless handling of the EQB in everyday life. It calculates the fastest route to the destination, taking into account maximum charging power and the duration of possible charging stops. In addition, the Navigation with Electric Intelligence ensures that the high-voltage battery is brought to an optimal charging temperature before a planned charging stop, if required.

One year of Mercedes me Charge included

By means of high-quality certificates of origin, Mercedes-Benz guarantees that energy from renewable energy sources is fed into the grid for charging current sourced via Mercedes me Charge. With Mercedes me Charge, customers can access nearly 60,000 public places to charge in the USA, where Mercedes-Benz ensures subsequent compensation through green electricity. With the EQB, one year of Mercedes me Charge is included.

¹ Without outside mirrors

² Specification for five-seater

Family-size electric mobility

The EQB: all-electric compact SUV with up to seven seats

Stuttgart. Whether it's for a large immediate family or a small extended family: as a seven-seater, the new EQB offers space for family gatherings and a wide variety of transport needs. This gives it an exceptional position among compact electric cars. The two seats in the third row can be used by people up to 5 feet 4 inches tall, and child seats can also be fitted there. The new EQB will launch in Europe and China at the end of the year, followed by the US market launch in 2022. After the EQA, the EQB represents the second all-electric compact car from Mercedes-EQ. The powerful and efficient electric drive, clever recuperation and predictive Navigation with Electric Intelligence are just some of the features that link it to the EQA.

The electric initiative from Mercedes-Benz Cars is accelerating as fast as the Mercedes-EQ models themselves: with the EQA, EQB, the electric executive sedan EQE and the luxury sedan EQS, provide a total of four new models from Mercedes-EQ are being introduced in 2021. For 2021, Mercedes-Benz Cars expects to increase the xEV share to around 13 percent. In addition, mild hybrids with a starter-generator and 48-volt system continue to conquering the product range.

"With the new EQB we have designed an iconic electric SUV which incorporates the box forms of our off-roaders and projects them into the future. Its significant silhouette is combined with futuristic elements such as the black panel front to create the extraordinary look of this vehicle", says Gorden Wagener, Chief Design Officer of the Daimler Group.

For the U.S. market, the all-electric compact SUV will be launched as the EQB 300 4MATIC with 225 hp and as the EQB 350 4MATIC with 288 hp. The ranges according to WLTP are 419 kilometers in each case. Further variants to meet specific customer requirements will follow, including a particularly long-range version.

Generous space and variable, level boot

The EQB enriches the successful Mercedes compact car family and is closely related to two models in particular: to the EQA, whose advanced drive technology it shares, and to the GLB compact SUV. This is where the long wheelbase (111.3 inches), the spacious and variable interior and the optional third row of seats with two additional individual seats come from.

The dimensions of the five-seater: 184.4/72.2/65.6 inches (length/width¹/height), allowing for a generous amount of space. The headroom in the first row of seats is 40.7 inches, in the second it is 38.5 inches for the five-seater. At 3.4 inches, the knee space in the rear of the five-seater achieves a comfortable level. The backrests of the seats in the second row can be adjusted in several stages as standard, this row features longitudinal adjustment of 5.5 inches as an option. This enables increased capacity in the trunk for versatile use.

As an option, the EQB has a third row of seats comprising two extra individual seats. The seats offer people up to a height of 5 feet 4 inches a comfortable amount of space. Extensive safety features include retractable head restraints, seat belts with belt tensioners and force limiters on all outer seats and a side windowbag that also covers passengers in the third row. A total of up to four child seats can be fitted in rows two and three, plus one more in the front passenger seat. To increase luggage space, the third-row seats can be lowered flush into the load floor.

Electro design aesthetics brimming with character

The EQB interprets Mercedes-EQ's Progressive Luxury in an edgy and particularly characterful way. It features the characteristic Mercedes-EQ black panel grille with central star. A further distinctive design feature of the all-electric world of Mercedes-EQ vehicles is the continuous light strip at the front and rear. A horizontal

¹ Without outside mirrors

fiber-optic strip connects the daytime running lights of the full-LED headlamps, ensuring a high level of recognition both in daylight and at night. The inside of the headlamps is finished to a high level of quality, detail and precision. Blue color highlights within the headlamp reinforce the signature Mercedes-EQ appearance.

The function-oriented greenhouse with upright windshield helps to provide a comfortable interior. Circumferential and protective cladding elements structure the overall proportion. The muscular and smoothly modeled vehicle shoulder dominates the side view, which is further enhanced by the rise of the beltline. Outwardly positioned wheels give the EQB a powerful character and confident stance on the road. Exclusive to this model are light-alloy wheels in a bi- or tri-color design, up to 20 inches in size, in some cases with rose gold-colored or blue decorative trim.

The LED taillights merge seamlessly into the tapering LED light strip. This underlines the horizontal sense of width of the EQB in the rear view. The studded roof rails underline the high utility value of the new EQB.

The large body of the dashboard has a cut-out in the driver and passenger area. The driver faces a Widescreen Cockpit, with control and display via MBUX (Mercedes-Benz User Experience). The robust character of the interior is underlined by tubular elements in an aluminum look. They sit as handles in the doors, in the center console and in the instrument panel on the passenger side.

Depending on the design and equipment line, a spectacular backlit trim piece, seats and vehicle key provide clues to the electric character in the interior of the EQB. The instruments, with their electric car-specific displays, pick up on the same color scheme with rose gold-colored and blue highlights.

The EQB achieves a very good Cd value from 0.28. The frontal area A totals 2.53 m². Among the most important aerodynamic measures are the completely closed cooling air control system in the upper section, the aerodynamically efficient front and rear bumper, a very smooth, almost completely enclosed underbody, specially optimized Aero wheels and specifically adapted front and rear wheel spoilers.

Efficient driving pleasure and Navigation with Electric Intelligence

ECO Assist offers a recuperation process optimized to the particular situation. It incorporates navigation data, traffic sign recognition and information from the vehicle sensors into its efficiency strategy. Anticipatory driving saves power, thereby extending the range.

The standard Navigation with Electric Intelligence also contributes to the effortless handling of the EQB in everyday life. This calculates the fastest route to the given destination. On the basis of continual range simulations, the system makes allowance for any necessary charging stops as well as for numerous other factors, such as the topography and the weather. It is also able to react dynamically to changes, for instance in the traffic situation or personal driving style. In addition, the Navigation with Electric Intelligence ensures that the high-voltage battery is brought to an optimal charging temperature before a planned charging stop, if required.

Sophisticated charging technology, large network and compensation through green electricity

At home or at public charging stations, the EQB can be conveniently charged at up to 11 kW with alternating current (AC) using the onboard charger. The charging time required for a full charge depends on the available infrastructure and the country-specific vehicle equipment. Charging at a Mercedes-Benz Wallbox is considerably faster than at a domestic power socket.

And it is of course even faster at direct current (DC) fast-charging stations. Depending on the SoC (State of Charge) and the temperature of the high-voltage battery, the EQB charges at a corresponding charging station with a maximum power of up to 100 kW. The charging time is then just over 30 minutes from 10-80 percent SoC. For AC and DC charging, the EQB is equipped as standard in Europe and the USA with a CCS (Combined Charging Systems) connector in the right-hand side panel.

Via Mercedes me Charge, EQB drivers will be able to use one of the most extensive charging networks in the world: this currently comprises more than 530,000 AC and DC charging stations across 31 countries, including nearly 60,000 public places to charge in the USA. Mercedes me Charge allows Mercedes-EQ customers convenient use of the charging stations of various providers, while they also benefit from an integrated payment function with simple billing processes. With the EQB, one year of Mercedes me Charge is included.

In the U.S., Mercedes me Charge customers can charge green at every public charging station throughout the United States. High-quality guarantees of origin ensure that as much green power from renewable energies is fed into the grid as is withdrawn via Mercedes me charge.

Cooperative support for the driver and high level of crash safety

The EQB features intelligent driving assistance systems with cooperative support for the driver. Active Lane Keeping Assist and Active Brake Assist are fitted as standard. In many critical situations, the latter has the ability to prevent a collision or reduce its severity with autonomous braking. The system is also able to brake for stationary vehicles and crossing pedestrians at typical city speeds. The enhanced functions of the Driving Assistance Package include, for example, the turning maneuver function, the exit warning function alerting the driver to approaching cyclists or vehicles, and a warning when pedestrians are detected near crosswalks.

The EQB is also a true Mercedes when it comes to passive safety. Building on the robust bodysheet structure of the GLB, the body of the EQB was adapted to the special requirements of an electric car. The battery sits within a frame made out of extruded sections. This takes on a structural function which until now was maintained by the cross members in the underfloor. A battery guard in the front area of the battery is able to prevent the energy storage unit from being pierced by foreign objects.

Of course, the EQB had to pass the brand's usual extensive crash test program. Stringent requirements for the battery and all components carrying electrical current also apply.

The EQB in the global production network

Production of the EQB will start in September 2021 at two locations within the Mercedes-Benz Cars global production network: at the Hungarian Mercedes-Benz plant in Kecskemét for the global market and at the German-Chinese joint venture BBAC in Beijing for the local market. Preparations, including staff qualification processes and reconstruction work, have already commenced at the plants. The EQB compact SUV will be the first all-electric production vehicle from Hungary.

Since it commenced production in 2012, the Hungarian Mercedes-Benz plant has continually increased in importance within the global production network of Mercedes-Benz Cars. In addition to digital networking, the strengths of the compact car production network include direct exchange with the lead plant for compact cars in Rastatt, Baden-Württemberg.

The battery systems for the compact Mercedes EQ models currently produced in Europe are supplied by the Mercedes-Benz subsidiary Accumotive in Kamenz and by the battery factory in Jawor, Poland. Both factories were designed to operate as CO₂-neutral facilities from the outset.

"The seven-seat design is a unique selling point in this class"

The EQB under the magnifying glass: a short interview with Product Manager Marius Philipp

Marius Philipp has been a Product Manager at Mercedes-Benz since 2018 and is currently responsible for the compact car family including the EQA and EQB. After completing a dual study program in business administration, the 28-year-old started work in strategic volume planning at Daimler in 2014. The native Swabian loves outdoor activities.

The EQB is now the second all-electric compact car from Mercedes-EQ. Where are the similarities, where are the differences, compared to the EQA?

Philipp: The EQB is clearly more 'grown-up' and has a distinct character of its own. It is edgier, more angular and at the same time offers more utility and functionality. In terms of the efficient electric drive, it is of course closely related to the EQA, and it also has characteristic Mercedes-EQ design features such as the black panel front. And, as members of the successful Mercedes-Benz compact car family, the EQA and EQB also share many strengths, such as the advanced driving assistance systems and the intuitively operated MBUX (Mercedes-Benz User Experience) infotainment system.

The EQB's seven seats make it attractive as a car for family and leisure use. What is the typical user behavior?

Philipp: We have learnt from GLB buyers that the seven-seat feature is not always used, by any means, but that the third row of seats is more of a practical back-up: if a friend from kindergarten wants to come along on the spur of the moment, perhaps. In any case, seven seats are something really special in this class.

What is typically Mercedes about the EQB?

Philipp: The high level of safety, the exemplary noise comfort and the premium quality come to mind as the first virtues characteristic of the brand. The appeal and quality of the materials used in the interior of our compact cars are superb. It is not for nothing that the testing in the development phase is extremely strenuous and simulates a tough, long car life, but speeded-up.

What would "your" EQB look like if you configured it yourself?

Philipp: From my point of view, the Edition 1 with its unique rims is very well done. But of course everyone makes their own decision as to which color accents they want for their EQB. I would configure my EQB as the AMG Line, with 20-inch wheels and the Night Package, and choose cosmos black as the paint finish.

¹ The electrical consumption has been determined on the basis of Commission Regulation (EC) 692/2008

Electro-aesthetics brimming with character

The EQB: the exterior design

The EQB interprets Mercedes-EQ's Progressive Luxury in an edgy and particularly characterful way. It features the characteristic Mercedes-EQ black panel grille with central star. A further distinctive design feature of the all-electric world of Mercedes-EQ vehicles is the continuous light strip at the front and rear.

Key features of the front-end design:

- The progressive and width-accentuated black panel front makes for a confident appearance.
- A horizontal fiber-optic strip connects the daytime running lights of the full-LED headlamps, ensuring a high level of recognition both in daylight and at night.
- The inside of the headlamps is finished to a high level of quality, detail and precision.
- Blue color highlights within the headlamp reinforce the signature Mercedes-EQ appearance.
- The stretched hood has discreetly indicated power domes.

Key features of the side design:

- The EQB impresses with its balanced overall proportions, with short overhangs front and rear.
- The function-oriented greenhouse with upright windscreen makes the comfortable interior possible. Circumferential and protective cladding elements structure the overall proportion.
- The muscular and sensuously modeled vehicle shoulder dominates the side view, which is further enhanced by the rise of the beltline.
- Outwardly positioned wheels give the EQB a powerful character and confident stance on the road.
- Exclusive to this model are light-alloy wheels in a bi- or tri-color design, up to 20 inches in size, in some cases with rose gold-colored or blue decorative trim.
- The studded roof rails underline the high utility value of the new EQB.

Key features of the rear-end design:

- The LED taillights merge seamlessly into the tapering LED light strip. This underlines the horizontal sense of width of the EQB in the rear view.
- The number plate has been moved to the bumper, allowing for a beautifully shaped tailgate.
- The standard-fit reversing camera is integrated into the automatically pivoting Mercedes-Benz star.

Robust character meets rose gold

The EQB: the interior design

The robust character of the interior is underlined by tubular elements in an aluminum look. They sit as handles in the doors, in the center console and in the instrument panel on the passenger side. Depending on the design and equipment line, a spectacular backlit trim piece and rose gold-colored decorative elements on the air vents, seats and vehicle key provide clues to the electric character in the interior of the EQB. The instruments, with their electric car-specific displays, pick up on the same color scheme with rose gold-colored and blue highlights.

The large body of the dashboard has a cut-out in the driver and passenger area. The driver faces a Widescreen Cockpit, with control and display via MBUX (Mercedes-Benz User Experience).

MBUX can be individually configured with the help of various options. Key advantages of the system: the powerful computer, brilliant screens and graphics, customizable presentation, full-color head-up display, navigation with augmented reality and learning software and voice control activated by the keyword "Hey Mercedes".

The information in the instrument cluster and on the media display is easily legible on the large, high-resolution screens. An emotive presentation underlines the comprehensibility of the intuitive control structure and offers brilliant graphics in superb visual quality. The Mercedes-EQ tile in the media display can be used to call up menus relating to charging options, electrical consumption and energy flow. The right-hand display within the instrument cluster is a wattmeter rather than a rev counter. The upper section shows the percentage of power, the lower section the recuperation. The left-hand instrument can be used to show whether the destination can be reached without an interim charging stop. The colors change according to the driving situation: during a boost process, for example, the display changes to white.

Depending on mood, or to match the particular interior, the user has a choice of four different styles. The Progressive variant includes a special Mercedes-EQ color scheme:

- Modern Classic is the evolution of the classic display style in an elegant-light and exquisite materiality.
- Sport has a high-tech turbine look with sporty black/yellow contrasts.
- Progressive represents a modern interpretation of an instrument cluster in the digital display world. In the interests of reducing the display to what is strictly necessary and in order to allow focused intake of information, the display values of the round instruments for speed and power are displayed dynamically only in the required range in each instance. In the EQB, the color scheme here is pure blue/rose gold-colored.
- Discreet mode greatly reduces the information and thereby helps the driver to relax.

Versatile, well equipped and with space for up to seven

The EQB: the equipment features

The new EQB (length/width¹/height²: 184.4/72.2/65.6 inches) enriches the successful Mercedes compact car family and is closely related to two models in particular: to the EQA, whose advanced drive technology it shares, and to the GLB compact SUV. This is where the long wheelbase (111.3 inches), the spacious and variable interior and the third row of seats with two additional individual seats come from.

The amount of space is generous: the headroom in the first row of seats is 40.7 inches, in the second it is 38.5 inches for the five-seater. With 3.4 inches, the knee space in the rear of the five-seater reaches a comfortable level. The backrests of the seats in the second row can be adjusted in several stages as standard, and this row features longitudinal adjustment of 5.5 inches as an option.

As an option, the EQB has a third row of seats comprising two extra individual seats. The seats offer people up to a height of 5 feet 4 inches a comfortable amount of space. The variability in detail:

Variability	Five-seater	Seven-seater (option)
Second seat row	Seat backrest can be divided and folded with a 40:20:40 split	
	Multi-stage seat backrest angle adjustment	
	Seat row with longitudinal adjustment by 5.5 inches, seat with 40:60 split (option)	Seat row with longitudinal adjustment by 5.5 inches, seat with 40:60 split (standard)
		EASY-ENTRY function
Third seat row	-	Two retractable bucket seats

Color coding: Electric Art and Edition 1 with details specific to Mercedes-EQ

The extensive standard equipment of the EQB includes LED High Performance headlamps, THERMATIC automatic climate control, the Light and Sight Package³ and a folding armrest with two cup holders in the rear. Also included as standard are the intuitively operated MBUX (Mercedes-Benz User Experience) infotainment system and the Navigation with Electric Intelligence system.

¹ Without outside mirrors

² Specification for five-seater

³ Components: "Four light stones" overhead control panel (including spectacles compartment), interior light/reading light in the rear, touchpad light (front), reading lights, console up-light, vanity lights, signal and ambient light, signal courtesy lights, handle recess/ pull-handle lights, footwell lights, cupholder/storage compartment lighting, oddments tray lighting

Powerful and efficient duo as an opener

The EQB: the drive system

The EQB starts as the EQB 300 4MATIC with 225 hp and as the EQB 350 4MATIC with 288 hp. The ranges according to WLTP are 419 kilometers in each case. Further variants to meet specific customer requirements will follow, including a particularly long-range version.

An asynchronous motor is used at the front axle. The electric motor, a fixed-ratio transmission with differential, the cooling system and the power electronics form a highly integrated, very compact unit - the electric powertrain (eATS).

In addition, the EQB 300 4MATIC and EQB 350 4MATIC also have an eATS on the rear axle with a newly developed permanently excited synchronous motor. It is extremely compact in design. In a permanently excited synchronous motor, the rotor of the AC motor is fitted with permanent magnets. The magnets – and thus the rotor – follow the rotating alternating current field in the stator windings. The engine is referred to as synchronous because the rotor turns at the same rate as the magnetic field of the stator. The frequency is adapted to the speed demanded by the driver in the frequency inverters of the power electronics. The advantages of this design include high power density, high efficiency and high output consistency.

In the 4MATIC versions, the power demand between the front and rear axles is intelligently regulated 100 times per second, depending on the driving situation. The Mercedes-EQ philosophy is to optimize consumption by using the rear electric motor as often as possible, while the asynchronous motor at the front axle generates only minimal drag losses in partial-load operation.

Technical data¹:

		EQB 300 4MATIC	EQB 350 4MATIC
Drive system layout		All-wheel drive	
E-machines front/rear axle	Type	Asynchronous motor (ASM)/ Permanently excited synchronous motor (PSM)	
Output (peak)	hp	225	288
Torque (peak)	Lb-ft	288	384
Top speed ¹	km/h	TBA	
Battery capacity, usable (NEDC)	kWh	66.5	
Combined consumption (NEDC)	kWh/100 km	16.2	16.2
Range (WLTP)	km	419	419
AC charging time ²	h	5:45	5:45
DC charging time ³ at quick-charging station	min	32	32

In overrun mode or during braking, the electric motors become alternators: their mechanical rotation is converted into electrical energy and used to charge the high-voltage battery - a process known as recuperation (for details see the section on "Recuperation").

The battery: part of the intelligent thermal management system

The EQB is fitted with a lithium-ion battery with a high energy density. It has a maximum voltage of 420 V and, with a nominal capacity of around 190 Ah, has a usable energy content of 66.5 kWh.

The battery is made up of five modules and is located underneath the passenger compartment in the middle of the vehicle. An aluminum housing as well as the body structure of the vehicle itself protect the component

¹ Electronically limited

² The charging times are for a 10-100% full charge at a wallbox or public charging station (AC connection with at least 11 kW, 16 A per phase)

³ The charging times are for 10-80% full charge at a DC rapid charging station with a supply voltage of 400 V, current at least 300 A.

from potentially touching the ground and against loose debris. The battery housing is part of the vehicle structure and thus an integral part of the crash concept.

The battery is part of the intelligent thermal management system of the EQB. To ensure that it is always kept within the optimum temperature range, it can be cooled or heated as required via a coolant-fed plate underneath the battery.

If Navigation with Electric Intelligence is activated, the battery may also be pre-heated or cooled while driving in order to ensure that it is within the ideal temperature window for a rapid charging station. On the other hand, if the battery is cold when the car reaches the rapid charging station, a considerable proportion of the charging capacity will initially be used simply to warm it up. The net effect is to optimize the charging time – important, as a means of significantly shortening the charging stop.

As for all other high-voltage batteries, Mercedes-Benz issues a battery certificate, thus providing a performance warranty. This is valid for eight years or a distance covered of 160,000 kilometers and guarantees a properly functioning high-voltage battery: the certificate also covers capacity loss in the battery.

Charging management: CCS charging socket for alternating current as well as direct current

At home or at public charging stations, the EQB can be conveniently charged at up to 11 kW with alternating current (AC) using the onboard charger. The charging time required for a full charge depends on the available infrastructure and the country-specific vehicle equipment. Charging at a Mercedes-Benz Wallbox is considerably faster than at a domestic power socket.

And it is of course even faster at direct current (DC) fast-charging stations. Depending on the SoC (State of Charge) and the temperature of the high-voltage battery, the EQB charges at a corresponding charging station with a maximum power of up to 100 kW. The charging time is then 32 minutes from 10-80 percent SoC. For AC and DC charging, the EQB is equipped as standard in Europe and the USA with a CCS (Combined Charging Systems) connector in the right-hand side panel.

Anticipatory driving saves electricity and extends the range

The EQB: recuperation

ECO Assist coaches the driver with messages when the accelerator can be released, for instance because a speed limit is approaching, and with functions such as gliding and specific control of recuperation. For this purpose, navigation data, traffic sign recognition and information from the intelligent safety assistants (radar and stereo camera) are linked and processed.

ECO Assist predictively computes the driving situation when deciding whether to drive with the lowest resistance or whether to recuperate. Examples include dips in the road, summits or speed limits ahead, which the system recognizes from the map data. It takes into account the course of the road (bends, intersections, roundabouts, hills), speed limits and distance to vehicles ahead in its driving recommendations and efficiency strategy.

Within the limits of the system, ECO Assist controls the overrun according to the situation as soon as the driver's foot leaves the accelerator. The driver is also given a visual prompt to do this: by showing a "foot off the accelerator" symbol in the media display (or if available, in the head-up display). At the same time, a diagram gives the driver the reason for the recommendation (i.e. "Intersection ahead" or "Hill ahead").

The EQB offers several variants of energy recovery by means of recuperation. In general terms the process involves recharging the high-voltage battery by converting the mechanical rotation in overrun mode or during braking into electrical energy.

The driver can select the recuperation function manually using paddles behind the steering wheel. The two paddles behind the steering wheel can be used to influence the recuperation level. The paddle on the left increases the level of recuperation, the paddle on the right reduces it. The driver can see the selected setting in the instrument cluster. The following recuperation stages are available: DAuto (situation-optimized recuperation via ECO Assist), D+ (gliding), D (weak recuperation) and D- (medium recuperation). If the DAuto function is selected, this mode is retained when the unit is restarted. To stop, the driver must engage the brake as normal, whatever the recuperation stage.

A foretaste of what the future holds

The EQB: Navigation with Electric Intelligence

Which way? And where is the next charging station? The classic responsibilities of a co-driver. In the new EQB, this job is handled by a series of intelligent assistants. Navigation with Electric Intelligence calculates the fastest route currently possible, taking into account various factors. If a charging stop is required, the driver will be directed to a charging station.

As far as Navigation with Electric Intelligence is concerned, the name says it all. It takes numerous factors into account in an intelligent way to plan the fastest route, including charging stops, and can even react dynamically to changes, for example to traffic hold-ups. While a conventional range calculator lives from past data, the Navigation with Electric Intelligence system in the EQB looks into the future.

The calculation of the route takes into account, for example, the electric range, the current electrical consumption, the topography of the proposed route (due to the energy requirement) and the temperatures along the way (due to the duration of the charge). Further factors include the traffic situation along the planned route, as well as the available charging stations to be found there and their capacity. The customer does not necessarily always have to take on board a full charge, but will be given a specific recommendation as to the required charging time at the charging station. The charging station stops will be planned in the way that is most favorable for the overall traveling time: in certain circumstances it may be that two brief charges at a higher charging capacity will be faster than one long charge.

If the range starts to become critical, the active range monitoring system will give advice such as "Air conditioning off" or "Select ECO mode". In addition, in ECO mode the system will calculate a more efficient driving speed with which the next charging station or the destination can be reached as planned, and display this in the speedometer. If DISTRONIC is activated, this speed will be set automatically. In this mode the system will also switch to an intelligent operating strategy for the ancillary consumers in order to reduce their power requirement and thus increase the range as the situation requires.

Route planning can be undertaken in advance in the Mercedes me App. Assuming this is then confirmed in the vehicle's navigation system before the journey starts, the route will be reloaded using this latest information. In principle, the data are updated before the start of each journey and then every two minutes.

The driver is also able to make individual adjustments to the Navigation with Electric Intelligence function. In the basic setting, for example, the battery capacity is exploited to a large extent. However, a personal safety buffer can be selected for the remaining range, so that the EQB will, for example, factor into the journey a desired SoC of at least 10 percent at the charging station or an SoC of 50 percent on arrival at the destination.

Relaxed, uncomplicated travel with transparency and planning certainty

The EQB: Mercedes me Charge

Mercedes me Charge allows Mercedes-EQ customers convenient use of the charging stations of various providers, while they also benefit from an integrated payment function with simple billing processes. With Mercedes me Charge, customers can charge with a clear ecological conscience, since Mercedes-Benz ensures a subsequent offset with green power. With the EQB, one year of Mercedes me Charge is included.

Green power, that is to say electricity from renewable resources, is a significant factor in the life cycle of an electric car as a means of preventing CO₂ emissions. This is because around 50 percent of the carbon footprint of a battery-electric vehicle is generated in the use phase, based on the current EU electricity mix, in other words as a result of charging processes that involve the generation of CO₂.

How Green Charging works: to promote the use of electricity from renewable energies, Mercedes-Benz uses guarantees of origin to 'green' the charging process, whose quality is defined by an eco power label. This ensures that an equivalent amount of electricity from renewable resources is fed into the grid to compensate for the charging of an electric vehicle. Amounts of energy used for charging are thus offset with green power after the actual charging process, also creating incentives to invest in renewable energy plants.

With the EQB, one year of Mercedes me Charge is included. Mercedes me Charge customers will enjoy Green Charging at all public charging points during this period at no extra charge.

The worldwide charging network continues to grow

Mercedes me Charge is one of the world's largest charging networks and is expanding all the time: it currently comprises around 530,000 AC and DC charging points worldwide, with nearly 60,000 public places to charge in the USA.

Customers can charge at any station and only one contract is necessary with Mercedes me Charge. A further advantage of Mercedes me Charge is the intelligent payment function with simple billing processes. The customer chooses the preferred payment method only once. Every charging process is then automatically debited – including abroad. The individual charging processes are clearly listed in a monthly invoice.

Authentication at the charging stations can be provided in three different ways with Mercedes me Charge: via the Mercedes me App, via the vehicle's media display, or via the Mercedes me Charge charging card.

Strategies for a longer life and shorter charging stops

The EQB under the magnifying glass: tips and tricks for charging

Every driver of an electric car can help to extend battery life, make charging stops more pleasant while optimizing travel time. Here are some important tips and tricks:

1. **Use pre-entry climate control during charging:** This saves range, because the energy required to keep the battery and interior at the right temperature is covered by the charging current. The standard pre-entry climate control system in the EQB can be programmed directly via MBUX or via the Mercedes me App. Important to know: you can drive more efficiently with heated seats than with warm air from the climate control system.
2. **Don't fill up completely:** For physical and chemical reasons, the charging rate decreases as the battery approaches its full capacity. Therefore, when DC fast charging, it usually makes sense to charge the battery with a fast charger only up to 80 percent or according to the required range. This is also good for the battery life.
3. **Take time over your pit stop:** Electric cars should only be charged quickly during a journey if it is really necessary. Constant fast charging with high charging powers can have a negative effect on the life of the battery.
4. **Hand control to the co-pilot:** If possible, always activate Navigation with Electric Intelligence. This is because it takes numerous factors into account in an intelligent way to plan the fastest route, including charging stops, and can react dynamically to changes such as traffic jams. And if the remaining range is getting tight, it can give tips on how to gain a few additional miles.
5. **Avoid extreme temperatures:** If batteries are exposed to intense heat or severe cold, their charging capacity quickly decreases. If possible, you should therefore not park your electric car in the blazing sun in summer, but in the shade. In winter, a garage is ideal for parking and charging. In addition, it is advisable in winter to charge the battery directly after a journey, before the battery has had time to cool down.
6. **Keep it half-full:** If the vehicle is not going to be used for an extended period, for example due to you being away on a long-distance trip, it should be parked with a medium charge level. This slows down the loss of charge in the battery.
7. **Seek information in advance:** The Mercedes me App offers many helpful functions related to charging. These include a filter option that allows the charging points to be sorted according to criteria such as availability or charging capacity. When deciding where to charge the EQB, photos as well as a rating function can help. The likelihood over the course of the day of a particular charging point being busy is also determined on the basis of a probability calculation and displayed.

Extensive simulation and fine-tuning in the wind tunnel

The EQB: aerodynamics

The EQB achieves a very good value with a C_d value from 0.28. The frontal area A totals 2.53 m². Among the most important aerodynamic measures are the completely closed cooling air control system in the upper section, the aerodynamically efficient front and rear aprons, a very smooth, almost completely enclosed underbody, specially optimized Aero wheels and specifically adapted front and rear wheel spoilers.

The aerodynamic development of the EQB was largely undertaken digitally. The ensuing measurements undertaken in the wind tunnel confirmed the high quality of the numerical simulation. The EQB builds on the very good aerodynamic basis of the GLB. A new aerodynamic setup was necessary due to the new bumpers and the resulting different diffuser angle. Airflow separation at the front wheels has been reduced by the shape of the bumper and the design of the wheel spoilers with their wedge-shaped profiles, which were specially developed for the EQB.

The underbody paneling is also new. As an electric vehicle the EQB has no need for a transmission tunnel, exhaust system and fuel tank, these being replaced by a smooth-surfaced battery. The air flow along the underside of the body is guided virtually unimpeded from the front bumper over the engine compartment paneling and three main floor panels through to the similarly enclosed rear axle and diffuser trim. Due to the longer wheelbase compared to the EQA and the slightly different battery position, the EQB has an additional trim piece in the main floor. This closes the gap between the battery and the axle fairing. In general, a lot of attention has been paid to details: the ribs that give strength to the underfloor paneling, for example, all run front to back.

The cooling-air intake is also to a design specifically for an electric vehicle: since the EQB has less need of cooling than a car with a combustion engine, it was possible to completely leave off the upper section of the cooling-air intake. The lower section features adjustable radiator shutters.

The aerodynamic measures at a glance:

- Aerodynamic design of front and rear bumpers
- Wheel spoilers with wedge-shaped profile at the front, wheel spoilers at the rear
- Cooling-air control system in the lower section of the front bumper, smooth panel enclosing upper air intake
- Improved sealing of the radiator area to ensure efficient use of the cooling air
- Sealing in the vicinity of the headlamps
- Aerodynamically and aeroacoustically optimized outside mirrors
- Large roof spoiler, side spoilers and air flow break-away edges in the tail lights
- Optimized underbody paneling concept including large trim panels enclosing engine compartment, main floor, rear axle, diffuser and spring links
- Additional paneling behind the battery to improve the flow around the rear axle for the larger wheelbase of the EQB
- Aerodynamically optimized wheels (many enclosed surfaces, minimal concavity, openings in the inner section) and tires for all sizes of wheel.

Sophisticated thermal management system with heat pump as standard

The EQB: climate control

With automatic climate control as standard, the EQB offers the same high level of climate comfort as every Mercedes-Benz. For this it features a sophisticated thermal management system with a heat pump as standard. With its numerous innovative details, such as the reuse of the waste heat from the electric drive system, the system is configured for exceptional efficiency and thus maximum range. Pre-entry climate control also ensures that EQB drivers have no need to scrape the windscreen in the morning, nor to climb into a freezing cold vehicle. And even in hot summer temperatures, the interior is cooled to a pleasant level before starting a journey.

It is possible to set the pre-entry climate control for the interior of the EQB before starting. This function is controlled directly via MBUX or via the Mercedes me App. Making use of pre-entry climate control during the charging process helps to preserve range, since the energy requirement is supplied through the charging current and does not impinge on the range.

Pre-entry climate control uses target values as a basis. This means that when the driver enters a departure time, the EQB is pre-conditioned to the preset temperature in time for 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. When pre-entry climate control, which can run for a maximum of one hour, starts or comes to an end, the driver receives a corresponding push notification.

In ECO mode the system will also switch to an intelligent operating strategy for the ancillary consumers. This reduces the power requirement, thereby increasing the range to suit the particular situation.

Efficient thermal architecture reduces energy requirement

The EQB features a sophisticated thermal architecture that includes a heat pump as standard. The system operates very efficiently: the waste heat from the electric drive system (inverter and electric motor) can be used to heat the interior. This reduces drastically the draw on battery power for the heating system, thus increasing the range.

A heat pump – a familiar concept from domestic heating systems – transports the warmth from a low to a higher temperature level. This means that "cold thermal energy"¹, which occurs particularly frequently in electric vehicles, can be used to heat the interior. An overview of the operating mechanism of the EQB's heat pump:

- Efficient reheating with air recirculation: a high proportion of recirculated air means that less (fresh) air has to be heated. To reduce the tendency for the windows to mist up, the vehicle cools the recirculating air, thereby removing moisture. The heat extracted is fed back into the interior via the water-cooled condenser and the heat exchanger. In other words, the heat is recycled.
- Use of waste heat from the electric powertrain: see above.
- Use of waste heat from the high-voltage battery: if the temperature of the battery rises above a defined threshold value, the waste heat can be used to heat the interior.

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

Systematic isolation and extensive insulation

The EQB: low noise and vibration levels (NVH)

The development goal for the EQB was to create a balance between noise and ride comfort at a high level. A particular focus of this work was on the noise from the drive system and the integration of the electric powertrain. Components with a relevance to NVH were configured accordingly during the digital development phase, checked in the hardware phase on test rigs and only then integrated into the vehicle. As when a house is built, efforts were concentrated first on the platform and then on the interior insulation, since the isolation or immediate encapsulation of the electric drive unit is demonstrably more effective than damping measures in the interior. The acoustic insulation measures include an enclosed passenger compartment, efficient damping systems on the metal surfaces and acoustically effective trim elements.

The single-speed transmission that forms an integral part of the electric powertrain at the front axle (eATS) operates particularly smoothly thanks to the improved microgeometry of the gearing. NVH measures on the electric powertrains were incorporated into the EQB at an early stage of component development. The power electronics unit, for example, was reinforced and secured firmly to the housing.

In an electrically powered vehicle, the low-frequency background noise associated with a combustion engine is missing, which means that high-frequency noises can become more apparent. The front and rear axle drives of the EQB have therefore been isolated at several points. Components such as the supporting frame at the front axle, the rear-axle subframe and even the rubber bushings were developed in tandem with the digital development phase and continually optimized. These efforts ensure that no irritating noises are perceptible inside the vehicle.

Ancillary components, too, were significantly improved with respect to noise and vibration comfort. The air-conditioning compressor, for example, together with the front powerpack, was isolated from the supporting frame by means of rubber-bonded metal elements. In order to reduce structure-borne sound, the air-conditioning pipes were modified to follow the rigid elements in the bodyshell, and the bearing points isolated as far as possible. In addition, the operating strategy of the air-conditioning compressor avoids engine speeds that could have a detrimental impact on the noise level in the interior. This has no effect on climate comfort.

Low road noise thanks to targeted improvements in rigidity and an ingenious bearing concept

In order to reduce road and tire noise, the engineers introduced a compact, shear-resistant integral mount which has significantly increased the introductory rigidity at the guide bearing of the front axle. The subframe of the multi-link rear axle is furthermore elastically isolated by rubber bushings. The front subframe connection is integrated into the C-ring structure and therefore has the necessary rigidity for isolation. A cross-member is integrated into the multifunction recess to increase the introductory rigidity of the rear subframe connection.

Low road and tire noise is an important factor in terms of ride comfort, particularly when driving on country roads. As well as on the configuration of the bodyshell structure and the sound insulation, development work focused on the dynamic transmission characteristics of the various axle components and elastomer bearings. The redesigned front axle subframe allows the connection rigidity for the suspension strut and brake to be significantly increased. Subframe mounts are used in all instances for the rear axle. In conjunction with the reinforcements introduced at the various connection points, this reduces the intrusion of noise. The bearing concept used in the case of the multi-link axle allows greater longitudinal vibration damping, while the dynamic transmission in a vertical direction remains limited.

A true Mercedes in terms of passive safety

The EQB: protection of occupants and other road users

Building on the robust bodysell structure of the GLB, the body of the EQB was adapted to the special requirements of an electric car. The battery sits within a frame made out of extruded sections. A battery guard on the front of the battery is able to prevent the energy storage unit from being pierced by foreign objects. Of course the EQB had to pass the brand's usual extensive crash test program. Stringent requirements for the battery and all components carrying electrical current also apply. As a true family car, the EQB can accommodate up to four child seats in rows two and three (optional), plus another on the front passenger seat.

The accident safety of the EQB has been validated at the Mercedes-Benz Technology Centre for Vehicle Safety (TFS). In this state-of-the-art crash center, prototypes with large electric batteries were also tested under stringent crash conditions. The black panel front end was also tested with regard to its fracture behavior in order to comply with the requirements for pedestrian protection.

In all aspects of the vehicle configuration that are relevant in an accident, the legal requirements were further bolstered by internal testing requirements and test criteria derived from the findings from real-life accident scenarios. One example of this work is the roof-drop test, which Mercedes-Benz uses to check the rigidity of the roof, an important factor in a rollover accident, for example. In the roof-drop test the body falls from a height of 20 inches at a slight incline onto the roof structure, so that initially only one of the two A-pillars is affected.

Individual aspects of accident safety were tested in component tests undertaken with the battery in the development center. The test criteria included, for instance, the reaction of the battery under a shock load or if pierced by a foreign object.

Safety concept for the high-voltage system: automatic shut-off in a crash situation possible

The extensive experience of Mercedes-Benz with high-voltage drive systems has led to a multi-stage safety concept. The high-voltage system can be automatically switched off in a crash, reversibly or irreversibly depending on the accident severity. Another feature of this comprehensive safety concept is that the charging process is automatically curtailed if an impact is detected when the car is stationary at a rapid-charging station (DC charging). In addition to this independently functioning monitoring system, the EQB is equipped with a special disconnection point which can be used by the rescue services to switch off the high-voltage system.

Family car: installation of up to five child seats possible

The most important restraint system is the seat belt. The driver and front passenger are provided with three-point seat belts with pyrotechnic belt tensioners and belt force limitation. In conjunction with the PRE-SAFE® system (optional extra), the front seats are also equipped with electrically reversible seat belt tensioners. The two outer seats in row two are each fitted with a three-point seat belt with reel tensioner and belt force limiter. The middle belt in this row is a standard three-point automatic belt. The optional third bench seat with two additional individual seats has extendable head restraints and seat belts with belt tensioners and force limiters.

A total of up to four child seats can be fitted in rows two and three, plus one more in the front passenger seat.

The new EQB is equipped with driver and front passenger airbags, a driver kneebag and window airbags as standard. The window airbags cover the first, second and optional third row of seats. They extend a long way forward as far as the A-pillar, thus offering particularly high protection potential. Thorax-pelvis side airbags in the front are likewise standard, and available as optional equipment for the second row.

Alert and quick to react

The EQB: the driving assistance systems

The EQB features intelligent driving assistance systems with cooperative support for the driver. The enhanced functions of the Driving Assistance Package include, for example, the turning maneuver function, the exit warning function alerting the driver to approaching cyclists or vehicles, and a warning when pedestrians are detected near crosswalks.

Included as standard on board are Active Lane Keeping Assist and Active Brake Assist. In many situations the purpose of the latter is to prevent a collision by autonomous braking, or to mitigate its consequences. The system is also able to brake for stationary vehicles and crossing pedestrians at typical city speeds and even to prevent collisions, depending on the situation.

In certain situations, the EQB is able to drive in partially automated mode. To do this, it keeps a close eye on the traffic situation. Improved camera and radar systems allow it to see far ahead. The EQB also uses map and navigation data for assistance functions. For example, Active Distance Assist DISTRONIC as part of the optional Driving Assistance Package is able to provide route-based support to the driver in numerous situations, and to predictively and conveniently adjust the speed, i.e. when approaching bends, intersections or roundabouts. In doing so, it interacts with ECO Assist. Also on board, for example, is Active Emergency Stop Assist.

The Driving Assistance Package (optional) includes:

- Active Distance Assist DISTRONIC with the functions:
 - braking for stationary vehicles,
 - extended automatic restarting in traffic jams in conjunction with Active Parking Assist and navigation,
- Active Steer Assist with the functions:
 - Active Emergency Stop Assist – with automatic unlocking and emergency call to the Mercedes-Benz Emergency Call Centre when the vehicle comes to a stop (depending on country),
- Active Speed Limit Assist with reaction to changing speed limits in conjunction with Traffic Sign Assist, route-based speed adjustment ahead of bends, roundabouts, toll booths, intersections and before joining/exiting highways, expressways – in conjunction with Live Traffic Navigation, also speed reduction when approaching the end of a traffic jam,
- Evasive Steering Assist,
- Active Lane Keeping Assist,
- Active Blind Spot Assist,
- Active Brake Assist with turning maneuver and cross-traffic function,
- PRE-SAFE® PLUS: can detect a potential rear impact. If the danger of a collision persists, the system can also firmly apply the brakes of the stationary vehicle, minimizing the risk of whiplash injuries by reducing the forward jolt caused by an impact from the rear.

Already in its purely advisory version, at low speeds the Blind Spot Assist is capable of warning of vehicles, including bicycles, in the danger area. When the vehicle is stationary the system can indicate to you before you get out, via a visual warning in the outside mirror that a vehicle is driving past within the critical area. If the driver or rear-seat passenger uses the door handle at this moment, an additional acoustic warning sounds and the ambient lighting in the door flashes red. The passing road user must be moving at a speed exceeding 4 mph at the time. The exit warning function of Blind Spot Assist is available when the vehicle is stationary, and for up to three minutes after switching off the ignition. When on the move, Active Blind Spot Assist, which is part of the Driving Assistance Package, is also able to react to vehicles in the blind spot and in critical areas with active braking intervention.

Traffic Sign Assist: posted speed limits and any potential no-overtaking signs are displayed for the current section of the route through image recognition and information from the navigation system's digital road map. The vehicle speed is compared with the speed limit. When the driver selects the appropriate settings, a visual/visual-acoustic warning signal is issued any time the speed limit is exceeded. No-entry restrictions are also recognized. Furthermore, the system warns of pedestrians detected in the area of pedestrian crossings.

Designed for driving stability and comfort

The EQB: the suspension

As standard, the EQB features a comfort suspension with steel springs, and all versions feature a multi-link rear axle. The suspension with Adaptive Damping System (option) offers the driver the possibility of choosing their preferred damping characteristics.

The EQB features a MacPherson suspension at the front axle. The wheels are guided by control arms below each wheel center, the MacPherson struts and two tie rods. The wishbone is forged from aluminum. This reduces the unsprung masses. The steering knuckles are made of cast aluminum.

All EQBs have a sophisticated four-link rear axle. The three transverse links and one trailing arm at each rear wheel are configured for maximum driving stability, ride comfort and longitudinal/lateral dynamics. The rear axle is supported by a subframe, which is isolated from the body shell by rubber bearings.

Two suspension variants: optional Adaptive Damping System

The EQB has a comfort suspension with steel springs as standard. A suspension with Adaptive Damping System is available as an option. This offers the driver the possibility of selecting the damper characteristics on an individual basis via the driving program. A valve in each of the four shock absorbers is electronically actuated to control the oil flow. The damping characteristics are changed by regulation of the oil flow. The Comfort program comes into its own especially when traveling at low speeds, for example on a gravel road.

Several sensors constantly monitor the suspension status, driving situation and driving style of the driver, and adjust the damping at each wheel. They also provide information about the drive system, recuperation and braking system, steering, and the driving assistance systems. The damping is specifically stiffened during acceleration, braking or steering maneuvers to reduce pitching and body roll, and to improve wheel loads and the ground contact of the tires.

More traction: 4MATIC all-wheel drive

The EQB 300 4MATIC and EQB 350 4MATIC are both equipped with all-wheel drive. The 4MATIC system uses Torque Shift: the distribution of the torque is adjusted 100 times per second as required on a continuously variable basis between the two electric units at the front and rear axles. If the driver does not call for the full output, the motor that is not needed will be completely switched off in order to reduce the base load. In a low load range therefore, the reliance will be on the rear axle with the more efficient, permanently excited synchronous motor (PSM). Higher performance requirements will be met through the additional activation of the asynchronous motor (ASM) on the front axle.

In order to ensure maximum traction and driving stability even on snow and ice, the operating strategy reacts to spinning wheels and adjusts the torque distribution accordingly. Since the two motors are controlled independently of each other, a loss of traction on one axle does not preclude torque being sent to the respective other axle – similar to a conventional central differential lock.

Flexible, digital, efficient and sustainable

The EQB under the magnifying glass: the production

Production of the EQB will start in September 2021 at two locations within the Mercedes-Benz Cars global production network: at the Mercedes-Benz plant in Kecskemét, Hungary, for the global market and at the German-Chinese joint venture BBAC in Beijing for the local market there. Mercedes-Benz is aiming for the leading position in electric drives and vehicle software. The systematic electrification of the entire product portfolio is a central component of the strategic focus "Ambition 2039" and a basic prerequisite on the way to CO₂ neutrality. By as soon as 2022, the portfolio will include eight fully electric Mercedes-EQ models.

Since it commenced production in 2012, the Hungarian Mercedes-Benz plant has continually increased in importance within the global production network of Mercedes-Benz Cars. Alongside digital networking, the strengths of the production network also include in particular the direct dialogue with the lead plant for the compact cars in Rastatt, Baden-Württemberg.

The EQB compact SUV will be the first purely electrically powered production vehicle from Hungary. The CLA, CLA Shooting Brake and A-Class are already produced there, including the versions with plug-in hybrid drive. Modern Industry 4.0 technologies distinguish all the production locations of Mercedes-Benz Cars, and these are being constantly developed further. This enables the plants to respond to changing customer wishes with maximum flexibility. In addition, the focus is firmly on new digital solutions and sustainability. Here are some technological highlights of the Mercedes-Benz plant in Kecskemét:

- In the body shop, the front and rear doors of the compact models are built in what are known as flex cells. Modular, exchangeable stations make it possible to switch between models within a very short time.
- The Mercedes-Benz plant in Kecskemét relies on automatically guided vehicles (AGV), among other things, to transport parts about. These move the wheel arches - and even entire body shells - of the compact models within the body shop between the individual production lines. This improves both efficiency and safety in the workplace.
- Instead of forklifts, special roller platforms are used in the assembly hall. Irrespective of the material container, these carry the material into the assembly shop as flexible logistical trains using fixed routes. Around 99 percent of the assembly operations in Kecskemét are already forklift-free.
- Modern data transfer processes are gradually replacing all paper documentation. This includes for example the documentation accompanying each vehicle on the line, and the verification records for internal processes.

By as soon as 2022, all company-owned Mercedes-Benz passenger car and van plants worldwide will produce in a CO₂-neutral manner. The Mercedes-Benz plant in Kecskemét even started purchasing CO₂-neutral electricity in 2020. To improve energy efficiency, the entire exterior and interior lighting system has also been converted to LED lighting units.

Batteries for the EQBs currently manufactured in Europe come from Kamenz and Jawor

The batteries for the Mercedes-EQ electric vehicles are supplied by a global battery production network with factories on three continents. Local battery production is a key success factor for Mercedes-Benz's electric initiative.

The battery systems for the EQA and EQB currently in production in Europe come from the Mercedes-Benz subsidiary Accumotive in Kamenz, Saxony, and from the battery factory in Jawor, Poland. Both factories were designed to operate as CO₂-neutral facilities from the outset.

Major electric vehicle initiative: six new Mercedes-EQ start-ups between now and 2022

Mercedes-Benz is aiming for the leading position in electric drives and vehicle software. The systematic electrification of the entire product portfolio is a central component of the strategic focus "Ambition 2039"

and a basic prerequisite on the way to CO₂ neutrality. By as soon as 2022, the global product portfolio will include eight fully electric Mercedes-EQ models. They are produced at seven locations on three continents.

In May 2019, production of the **EQC** was integrated into ongoing series production at the Mercedes-Benz plant in Bremen. Just a few months later, the German-Chinese production joint venture Beijing Benz Automotive Co. Ltd. (BBAC) started production of the EQC for the local market in China. 2020 saw the start of production of the electric premium-class people carrier, the **EQV** in Vitoria, northern Spain.

The **EQA** celebrated its world premiere on January 20, 2021 as the first fully electric derivative of the compact cars. The EQA represents the gateway into the all-electric vehicle world of Mercedes-EQ. The EQA is produced in Rastatt and at the German-Chinese production joint venture Beijing Benz Automotive Co. Ltd. (BBAC) in Beijing for the Chinese market.

On May 12, 2021, production of the **EQS** electric sedan started in Factory 56 at the Mercedes-Benz Sindelfingen plant - in a flexible, digital, efficient and sustainable process. In the new S-Class range, the EQS is the stand-alone, fully electric member and is the first to use the new electric architecture for electric vehicles in the executive and luxury segment at Mercedes-Benz. In Factory 56, the S-Class, the Mercedes-Maybach S-Class and the EQS are all produced on the same line, in a fully flexible manner. Factory 56 embodies the future of production at Mercedes-Benz and sets new standards for automotive manufacturing.

In addition, the Mercedes-Benz plant in Bremen will start production of the **EQE** executive sedan in the second half of 2021, followed shortly afterwards by the Beijing plant. The EQE thus adds to the purely electric portfolio of the two plants. The Beijing plant will then produce a total of four Mercedes EQ models for the local market.

The Mercedes-Benz plant in Tuscaloosa (USA) is preparing for production of the **EQE SUV and EQS SUV** in 2022, which will in future be produced on the same line together with SUVs with conventional and plug-in hybrid drive systems.

The smart completes the electric Mercedes-Benz Cars portfolio with three further models. The **smart EQ fortwo** and **smart EQ fortwo cabrio** (are produced in Hambach, France, and the smart EQ forfour is manufactured in Novo Mesto, Slovenia. The next generation of smart electric vehicles will be produced in the joint venture smart Automobile Co., Ltd. in China. The joint venture is a collaboration between Mercedes-Benz AG and the Zhejiang Geely Group (Geely Holding).

And Mercedes-Benz is also going electric in the small van segment: the Concept EQT provides concrete indications for what will be the first premium vehicle for families and leisure-oriented private customers in the small van segment: the T-Class and its all-electric variant.

EQB 300 4MATIC

Drive system and battery		
Drive system layout		All-wheel drive
Electric motor(s):	Type	Front axle: Asynchronous motor (ASM), Rear axle: Permanently excited synchronous motors (PSM)
Output (peak)	hp	225
Torque (peak)	Lb-ft	288
Battery type/usable energy content (WLTP)	kWh	Lithium-ion/66.5
Rated voltage	V	367
Recuperation capacity, max.	kW	190
AC charging capacity, max. (onboard charger, standard/optional)	kW	11
AC charging time ² , three-phase (11 kW)	h	5:45
DC charging capacity, max.	kW	100
DC charging time ³ at quick-charging station	min	32
DC charging ⁴ : range after 15 minutes (WLTP)	km	approx. 140
Suspension		
Front axle	MacPherson suspension with spring strut and transverse control arm, coil springs, twin-tube gas-filled shock absorbers, stabilizer bar	
Rear axle	Multi-link, coil springs, gas-pressure shock absorbers, stabilizer	
Brake system	Internally ventilated disc brakes at the front, electric parking brake, ABS, Brake Assist, ESP*	
Steering	Electrically assisted rack-and-pinion power steering system	
Dimensions and weights		
Number of doors/seats		5/7
Length/width/height ⁵	in	184.4/72.2/65.6
Wheelbase	in	111.3
Turning circle	ft	38.4
Cd value from/Frontal area	-/m²	0.28/2.53
Performance, consumption and range		
Acceleration 0-100 km/h	s	8.0
Maximum speed	km/h	160
Max. range (WLTP)	km	419

¹ As at 11 August 2021; the electricity consumption (and data based on this) were determined on the basis of Regulation 692/2008/EC according to NEDC and Regulation 2017/1151/EU according to WLTP

² The charging times are for a 10-100% full charge at a wallbox or public charging station (AC connection with at least 11 kW, 16 A per phase)

³ The charging times are for 10-80% full charge at a DC quick charging station with a supply voltage of 400 V, current at least 500 A.

⁴ At DC fast charging stations with 500 amps based on WLTP range

⁵ Figure for seven-seater: 1706 mm

EQB 350 4MATIC

Drive system and battery		
Drive system layout		All-wheel drive
Electric motor(s):	Type	Front axle: Asynchronous motor (ASM), Rear axle: Permanently excited synchronous motors (PSM),
Output (peak)	hp	288
Torque (peak)	Lb-ft	384
Battery type/usable energy content (WLTP)	kWh	Lithium-ion/66.5
Rated voltage	V	367
Recuperation capacity, max.	kW	190
AC charging capacity, max. (onboard charger, standard/optional)	kW	11
AC charging time ² , three-phase (11 kW)	h	5:45
DC charging capacity, max.	kW	100
DC charging time ³ at fast charging station (DC)	min	32
DC charging ⁴ : range after 15 minutes (WLTP)	km	approx. 140
Suspension		
Front axle	MacPherson suspension with spring strut and transverse control arm, coil springs, twin-tube gas-filled shock absorbers, stabilizer bar	
Rear axle	Multi-link, coil springs, gas-pressure shock absorbers, stabilizer	
Brake system	Vented disc brakes at the front, electric parking brake, ABS, Brake Assist, ESP*	
Steering	Electrically assisted rack-and-pinion power steering system	
Dimensions and weights		
Number of doors/seats		5/7
Length/width/height ⁵	in	184.4/72.2/65.6
Wheelbase	in	111.3
Turning circle	ft	38.4
Cd value from/Frontal area	-/m²	0.28/2.53
Performance, consumption and range		
Maximum speed	km/h	160
Max. range (WLTP)	km	419

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About Mercedes-Benz

Mercedes-Benz USA (MBUSA), headquartered in Atlanta, is responsible for the distribution, marketing and customer service for all Mercedes-Benz products in the United States. MBUSA offers drivers the most diverse lineup in the luxury segment with 15 model lines ranging from the sporty A-Class Sedan to the flagship S-Class and the Mercedes-AMG GT R. MBUSA is also responsible for Mercedes-Benz Vans in the U.S. More information on MBUSA and its products can be found at www.mbusa.com and www.mbvans.com.

¹ As at 11 August 2021; the electricity consumption (and data based on this) were determined on the basis of Regulation 692/2008/EC according to NEDC and Regulation 2017/1151/EU according to WLTP

² The charging times are for a 10-100% full charge at a wallbox or public charging station (AC connection with at least 11 kW, 16 A per phase)

³ The charging times are for 10-80% full charge at a DC quick charging station with a supply voltage of 400 V, current at least 500 A.

⁴ At DC fast charging stations with 500 amps based on WLTP range

⁵ Figure for seven-seater: 1706 mm

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