

# The first ever BMW iX. Contents.



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All figures relating to drive system output, charging output, performance, energy consumption, emissions and operating range are provisional.

The electric power consumption and range figures are determined according to the European Regulation (EC) 715/2007 in the version applicable. They refer to vehicles in the German market. Where a range is shown, NEDC figures consider the different sizes of the selected wheels/tyres, while WLTP figures take into account the impact of any optional extras.

All values were calculated based on the new WLTP test cycle. Any NEDC values that are shown have been translated into equivalent NEDC measurements where appropriate. WLTP values are taken as the basis for determining vehicle-related taxes or other duties based (at least inter alia) on CO<sub>2</sub> emissions as well as eligibility for any applicable vehicle-specific subsidies. Further information on the WLTP and NEDC measurement procedures can also be found at [www.bmw.com/wltp](http://www.bmw.com/wltp).

Further information on official fuel consumption figures and specific CO<sub>2</sub> emission values of new passenger cars is included in the following guideline: 'Leitfaden über den Kraftstoffverbrauch, die CO<sub>2</sub>-Emissionen und den Stromverbrauch neuer Personenkraftwagen' (Guide to the fuel economy, CO<sub>2</sub> emissions and electric power consumption of new passenger cars), which can be obtained free of charge from all dealerships, from Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen and at <https://www.dat.de/co2/>.



# **The new BMW iX xDrive40 and new BMW iX xDrive50.**

## **A double dose of driving pleasure, fuelled by sustainable thinking.**

The BMW iX, whose market launch will get underway in late 2021, heralds a new age in mobility and focuses on a fresh interpretation of design, sustainability, driving pleasure, versatility and luxury. It is the first model based on a new, modular, scalable toolkit on which the future of the BMW Group will be built. Conceived from the outset for purely electric mobility, the iX sees BMW redefining the successful Sports Activity Vehicle (SAV) concept. It will adopt a dual-pronged approach to the task, with two variants of the electric motor offered from launch.

Currently in the final phase of series development, the BMW iX combines locally emission-free driving pleasure, sporting agility and a persuasive operating range with a character profile dedicated squarely to sustainability from the ground up. With its completely newly developed, precise and minimalist design, the BMW iX is the first representative of a trailblazing generation of cars poised to redefine the driving experience, the feeling of space inside and the relationship between vehicles and those on board.

The BMW iX will go into production at BMW Plant Dingolfing from the second half of 2021 as the BMW Group's new technology flagship. It brings together the company's latest developments in the strategic innovation fields of Design, Automated Driving, Connectivity, Electrification and Services. The expertise accumulated by the BMW Group over many years in the area of sustainability has been channelled into the product substance and manufacturing concept employed for the BMW iX. And the most exacting environmental compatibility requirements have been put in place throughout the value chain and for the full life cycle of the car. Key components of the all-encompassing concept include closely monitored raw materials extraction, the exclusive use of electricity from renewable sources in the production process and an extraordinarily high proportion of recycled materials.

Added to which, the electric motors for the BMW iX are marked out by a design principle which enables the use of rare earths to be avoided. The drive system features one electric motor on the front axle and another at the rear axle, and displays a level of efficiency which is both beyond that of any segment rival and further enhanced by optimised aerodynamics and intelligent lightweight design.

“Technology is driving the advances we need to tackle even the greatest challenges. This applies in particular to climate protection,” says Oliver Zipse, Chairman of the Board of Management of BMW AG. “We are in no doubt: mobility has to be sustainable if it is to represent a truly outstanding solution. For the BMW Group, premium mobility is not possible without responsibility.”

### **Fifth-generation BMW eDrive technology delivers stand-out efficiency and a long range.**

The electric motors for the BMW iX are – like the power electronics, charging technology and high-voltage batteries – the product of fifth-generation BMW eDrive technology. The BMW iX will be offered in two model variants from launch. In the BMW iX xDrive50, the electric all-wheel drive produces output of over 370 kW/500 hp and enables acceleration of 0 to 100 km/h (62 mph) in under 5.0 seconds. This dynamic flair shares the limelight with a range of more than 600 kilometres (373 miles) in the WLTP test cycle. The BMW iX xDrive40 has an output of around 240 kW (more than 300 hp) and completes the sprint from 0 to 100 km/h (62 mph) in a shade over 6.0 seconds. Its range (again, as per the WLTP cycle) is in excess of 400 kilometres (249 miles).

The instantaneous power delivery and majestic performance characteristics of the drive system are accompanied by outstanding efficiency reflected in WLTP combined electric power consumption figures of less than 21 kWh per 100 kilometres (62 miles) for the BMW iX xDrive50 and under 20 kWh per 100 kilometres (62 miles) in the case of the BMW iX xDrive40. (All figures relating to performance, energy consumption and range are predicted values based on the car’s current stage of development.)

The new charging technology of the BMW iX enables DC (direct current) fast charging with extremely high charging power. For example, the BMW iX xDrive50 can replenish its high-voltage battery at up to 200 kW – i.e. in ten minutes it can take enough energy on board to increase the car’s range by more than 120 kilometres (75 miles). The maximum charging capacity of the BMW iX xDrive40 is 150 kW, which means that plugging the car into a fast-charging station for ten minutes tops it up with sufficient energy for another 90 kilometres (56 miles) plus. In both model variants, the high-voltage battery’s charge can be increased from 10 to 80 per cent of its full capacity in under 40 minutes.

“We made a promise and we will deliver on that promise: the market launch of the BMW iX will get underway at the end of this year with a two-pronged approach – in the form of the BMW iX xDrive40 and BMW iX xDrive50,” says Pieter Nota, Member of the Board of Management of BMW AG, responsible for Customer, Brands and Sales. “Plus, our customers will now benefit from new additions to the range of vehicle functions that can be uploaded to their cars during ownership, and enjoy a seamless and extremely customer-oriented configuration process with personalised products and services.”

### **New technology toolkit underpins further advances towards automated driving.**

The new technology toolkit making its debut in the BMW iX also provides the platform for significant progress in the areas of automated driving and digital services. For example, the level of computing power has been developed to process 20 times the data volume of previous models. As a result, around double the amount of data from vehicle sensors can be processed than was previously possible.

“We are setting new industry standards with the technology in the BMW iX. The iX has more computing power for data processing and more powerful sensor technology than the newest vehicles in our current line-up, is 5G-capable, will be given new and improved automated driving and parking functions and uses the high-performing fifth generation of our electric drive system,” says Frank Weber, Member of the Board of Management of BMW AG, Development.

“All the innovations are impressive on an individual level. But only together can they make a real difference,” explains Oliver Zipse. “We are integrating technological progress – in all its complexity and interdependence – into inspirational and sustainable products.”

### **Fresh design for a new driving experience.**

The BMW iX is leading the way for a future generation of cars with which the company is redefining sustainability, driving pleasure and what it means to be premium. This trailblazing character is clearly expressed in the car’s design, which has been developed from the inside out. The BMW iX has therefore been created to provide quality of life and wellbeing for drivers and passengers. The clear and minimalist design of its exterior showcases a new form of mobility geared squarely to the needs of the vehicle’s occupants. Its interior offers those on board innovative options for using

the time during a journey – and enjoying relaxation, safety, security, and a new form of luxury in the process.

“The BMW iX shows how we can give new technologies a very modern and emotional design. The car is technologically complex, but it feels very clear and uncomplicated,” says Adrian van Hooydonk, Senior Vice President BMW Group Design. “The BMW iX offers a mobile living space in which people will feel at ease, where the car’s intelligence is only there when you need it.”



# Sustainability in product design and manufacturing.

## Monitored raw materials production, across-the-board green power for manufacturing, extensive use of recycled materials.

Alongside the electrically powered driving pleasure at the driver's fingertips, sustainability has also been an ever-present element of the BMW i brand character from day one. Making responsible use of resources throughout the value chain and minimising a product's carbon footprint at all stages of its life cycle underpin the trailblazing approach to premium mobility championed by BMW i. And this all-encompassing concept has been implemented more rigorously than ever in the development and production of the new BMW iX.

The powerful impetus provided by the BMW i brand in leading the way in this field has helped the BMW Group to stake a claim as the world's most successful and sustainable technology company in premium mobility. To achieve this, advances have been made across a wide variety of areas that affect the creation and use of vehicles from all the BMW Group's brands. Measures for optimising sustainability are defined for every model and cover all phases – from the production of raw materials through manufacturing and use to subsequent recycling.

The resulting carbon footprint is stated in a validation document endorsed by independent auditors. The certificate for the BMW iX xDrive40, for instance, shows its global warming potential is around 45 per cent lower than that of a Sports Activity Vehicle with a comparable diesel engine over 200,000 kilometres (approx. 125,000 miles) of use. Utilising green energy for production of both the battery cells and the vehicle and making increased use of secondary materials cuts CO<sub>2</sub> emissions by 18 per cent compared with vehicle production where these measures are not deployed.

“Rather than simply passing the buck to the supplier network, we take responsibility together with our direct suppliers,” explains Dr Andreas Wendt, Member of the Board of Management of BMW AG, responsible for Purchasing and Supplier Network. “In so doing, we tap into our many years of experience and create processes for attaining greater transparency and traceability.”

### **Raw materials production: monitored, transparent and certified.**

The sustainability targets for the BMW iX were set at a very early stage of vehicle development. Defining the appropriate measures requires detailed knowledge of the materials used and where they originate from or how they

were obtained. This includes the upstream production chains. The focal points on the purchasing side are compliance with environmental and social standards, respect for human rights, conservation of natural resources and reduction of CO<sub>2</sub> emissions. Measures for optimising sustainability were therefore established in consultation with suppliers, such as using recycled materials and harnessing renewable energy.

Besides an eco-friendly manufacturing process, consideration is also given here to the recyclability of the component in question and to health-related aspects. The material properties of all components are meticulously documented and verified at the BMW Group's materials laboratory. The checks also include ensuring that potentially allergenic materials, such as nickel, are not used in areas where they could be touched by customers.

This holistic approach to improving sustainability also embraces those technological developments that make it possible to reduce the use of critical materials, or even avoid them altogether. For instance, a design principle has been devised for the electric motors in fifth-generation BMW eDrive technology that dispenses with the need for rare-earth materials. Instead of the customary magnets for which these raw materials are needed, electromagnetic fields are used to ensure both instantaneous and precisely controllable actuation of the electric drive. The BMW Group has thereby capitalised on its industry-leading development expertise in the field of drive systems to enable it to produce electric motors irrespective of rare earth availability.

During development of the latest generation of battery cells, the proportion of cobalt contained in the cathode material was reduced to less than ten per cent. In addition, the BMW Group procures the cobalt required for this battery cell generation itself and then makes it available to the battery cell suppliers. The company can therefore ensure that environmental and sustainability standards are observed during the extraction and processing of cobalt and that there are no violations of human rights.

Although no cobalt from the Democratic Republic of the Congo (DRC) is being used in the battery cells for fifth-generation BMW eDrive technology, the BMW Group is involved in a pilot project there focusing on ecologically and socially sustainable mining of this raw material. The company, together with its supply chain partners, has commissioned the German Agency for International Cooperation (GIZ) to develop measures aimed at improving working and living conditions for both artisanal mine workers and the inhabitants of nearby communities. If the project is successful,

having cobalt supplied directly from the DRC could become an option for the BMW Group once more.

Lithium is another raw material that is vital for the production of high-voltage batteries but classified as critical. The BMW Group again sources this raw material directly before supplying it to battery cell manufacturers. This ensures complete transparency regarding the origin of the raw materials required for lithium-ion batteries. The lithium used in the high-voltage battery pack on board the BMW iX is mined from hard-rock deposits in Australia in accordance with the company's environmental and sustainability standards. The BMW Group has also commissioned two prestigious American universities to carry out a study into sustainable lithium extraction in Latin America. The aim of the study is to investigate the impact of lithium extraction on local water supplies.

### **Electricity from renewable resources for component and vehicle manufacture.**

Between 2006 and 2019, the BMW Group was able to lower CO<sub>2</sub> emissions from vehicle production by over 70 per cent. Compared with 2019 levels, the amount of CO<sub>2</sub> per vehicle is set to be reduced by a further 40 per cent by 2025 and 80 per cent by 2030. Since 2020, electricity generated entirely from renewables has been purchased externally for vehicle manufacture at all plants in the BMW Group's global production network. Only green hydroelectric power produced locally at the Isar and Lech rivers is used in the production of the BMW iX at BMW Group Plant Dingolfing and in the upstream component plants.

The manufacture of high-voltage batteries is an energy-intensive process. With a view to also minimising the carbon footprint in this area of vehicle manufacture, the BMW Group has secured commitments from all makers of battery cells for fifth-generation BMW eDrive technology to only use electricity from renewable sources. The aluminium casings for the electric drive system are likewise manufactured using purely green power.

In order to further reduce the CO<sub>2</sub> emissions arising from the production of aluminium components, the BMW Group is exploring new ways of sourcing this lightweight material. Since February 2021, the company has procured aluminium manufactured in the United Arab Emirates with the help of solar power. Electricity generated in a vast solar park located in the desert outside Dubai is used for producing the lightweight metal. The BMW Group plans to continue sourcing aluminium manufactured with green energy over the long term, enabling it to reduce carbon emissions by 2.5 million tonnes by 2030. The quantities of aluminium acquired using solar power cover nearly half the



annual requirements of the light metal foundry at BMW Group Plant Landshut, whose output includes the casings for the latest-generation electric motors fitted in the BMW iX.

**Careful material selection, high proportion of recycled materials.**

Besides the switch to green power, the other factor helping to make the manufacture of light-alloy components more sustainable in the BMW Group's production network is the ongoing increase in the proportion of secondary aluminium used. Targeted use of recycling methods for this high-grade lightweight metal can lead to a substantial reduction in the energy-intensive use of primary aluminium, which also generates high levels of CO<sub>2</sub> emissions when conventional manufacturing techniques are employed. The proportion of secondary aluminium used in manufacturing the castings for the BMW iX is up to 50 per cent.

The cabin of the BMW iX features carefully selected materials which are of high quality and also maximise the sustainability factor. The key elements here are conservation of resources, energy efficiency in manufacture and suitability for recycling. The only touch of chrome anywhere in the interior is found in the BMW badge on the steering wheel. The optional Clear & Bold specification includes a control panel on the centre console made from sustainably grown wood with the corresponding FSC certification. The Twist cloth forming part of the Loft Stone Grey interior appointments is made of natural wool fibres, while the leather upholstery is also notable for the extremely eco-friendly and material-efficient production method employed. An olive leaf extract is used to treat the leather instead of conventional tanning agents. This is obtained from the leaves gathered following the annual pruning of the trees in European olive groves.

The floor coverings and mats in the BMW iX are made from a synthetic yarn that is produced from recycled nylon waste material in a specially developed process. The source material for this includes fishing nets recovered from the sea along with worn flooring and residual waste from plastics manufacturing. These waste products are fed back into the reusable material cycle at a special facility in the Slovenian capital Ljubljana. For this, the material is first broken down into its chemical constituents and then processed to produce nylon granules. The resulting Econyl material forms the basis for making the floor coverings and mats in the BMW iX. As well as helping to preserve resources, the use of Econyl also serves to reduce climate-damaging emissions. The process for manufacturing the recycled plastic emits around 80 per cent less CO<sub>2</sub> than conventional production of petroleum-based nylon.

High-quality recycled material is also featured in a multitude of other components in the BMW iX. Recycled material accounts for over 20 per cent of the thermoplastic content in the vehicle as a whole. The substructure of the door panelling, the cowl panel cover, the bumper guides and the surround for the front apron, for example, are all made entirely from reused plastic. The cable ducts on the BMW iX are manufactured using between 60 and 100 per cent recycled plastic, while the tailgate panelling and the outer surfaces of the door panelling are both made up of around 30 per cent recycled material. Each BMW iX contains some 60 kilograms of recycled plastic in total.



# Drive system technology and model variants.

## The new BMW iX xDrive50 and new BMW iX xDrive40.

Two electric motors and four driven wheels bring a fresh new take on BMW's signature driving pleasure to the BMW iX. The outstanding efficiency of the drive units and cutting-edge battery cell technology give the car a long operating range and, by extension, exceptional everyday usability. And extremely powerful charging technology means that only short mid-journey stops are required to replenish the energy content of the high-voltage battery. The latest (fifth) generation of BMW eDrive technology provides an ideal platform for customers to enjoy every aspect of locally emission-free mobility in a premium car.

The car's operating range has been increased – in typically BMW fashion – through a high level of drive system efficiency and the high-voltage battery's optimised energy density, rather than with disproportionately large batteries. The latter would increase vehicle weight and therefore have an adverse effect on driving dynamics and electric power consumption. The drive system and battery technology in the BMW iX teams up with intelligent lightweight construction and aerodynamically optimised design to create an ideal overall package which delivers the sporting ability, leading-edge sustainability and impressive practicality for which the brand is renowned.

The drive unit and high-voltage battery included in this fifth generation of BMW eDrive technology are flexibly scalable in their power output and energy content, allowing them to be fitted in various different model variants. Two versions of the latest BMW eDrive technology will be available from the market launch of the BMW iX. In the BMW iX xDrive50, the two electric motors – one at the front axle and one at the rear – develop a combined maximum output of over 370 kW/500 hp. Range is in excess of 600 kilometres in the WLTP combined test cycle. That equates to more than 300 miles according to the EPA's FTP-75 test procedure. The BMW iX xDrive40 produces around 240 kW (over 300 hp) and a WLTP-calculated range of more than 400 kilometres (249 miles).

### **The drive system: highly integrated and superbly efficient.**

The fifth generation of BMW eDrive technology is centred around a drive unit which brings together the electric motor, power electronics and transmission as a highly integrated package within a single housing. This design approach enables a power density around 30 per cent greater than earlier electric drive

systems could offer. The highly integrated electric drive system topology is a key factor in the standout efficiency of the BMW iX. Added to which, it also allows a substantial reduction in the installation space required relative to the power the drive system produces.

The electric motors developed in-house by the BMW Group have an efficiency factor of 93 per cent in their latest version. They therefore not only better the figures achieved by current combustion engines (less than 40 per cent), but also outperform rival electric drive units. Their exceptional efficiency plays a key role in enabling the BMW iX xDrive50 to post combined electric power consumption of under 21 kWh per 100 kilometres (62 miles) in the WLTP test cycle and the BMW iX xDrive40 to record a figure of around 20 kWh per 100 kilometres (62 miles) in similar WLTP conditions. The electric motors in the BMW iX also stand apart with their super-fast power development, sporty performance profile and hushed serenity.

**Special motor concept: more dynamic appeal, less reliance on critical materials.**

The specific qualities of the electric motors are the result of a design which marks a fundamental departure from the technology normally found in competitor units. They work according to the principle of a current-excited synchronous motor. The excitation of the rotor in the BMW iX motors is not induced by fixed permanent magnets, but the feed-in of electric energy. This allows the rare earths required for magnetic components to be entirely avoided in the manufacture of the motors.

The power development of the drive system also benefits from its purpose-built design. The precisely controlled excitation of the rotor using electric power enables peak torque to be on tap immediately on pulling away. And – unlike with electric motors of conventional design – that torque is maintained over an extremely broad rev band.

The defining trait of the driving experience on board the BMW iX is, then, power development that is not only lightning fast but also unusually consistent, underscoring the car's brand-typical sporting excellence. The BMW iX xDrive50 posts acceleration of 0 to 100 km/h (62 mph) in under 5.0 seconds, while the BMW iX xDrive40 hits the same mark from rest in a touch over 6.0 seconds. The top speed of both model variants is an electronically governed 200 km/h (124 mph).

The drive power produced by the motors is in each case channelled via a single-speed transmission – installed in the same housing – to the front and rear wheels along the shortest possible path. As well as improving

the overall efficiency of the drive system, this also enhances the agility, traction and directional stability of the BMW iX to noticeable effect. The centrally controlled electric all-wheel drive links up with the chassis control systems to enable extremely rapid and precise metering of drive power according to the driving situation, the road conditions and the driver's wishes.

**Adaptive recuperation of energy during a journey can be adjusted to the situation at hand.**

Adaptive and individually regulated recuperation of braking energy allows the efficiency of the drive system in the BMW iX to be further increased. Intelligently connected drive management means the intensity of the brake energy recuperation can be adapted to the road situation, as detected by data from the navigation system and the sensors used by the driver assistance systems. When approaching a junction, for example, the degree of recuperation can be increased, while at the same time feeding energy back into the high-voltage battery and strengthening the deceleration effect.

On the open road, meanwhile, the coasting function enhances comfort and efficiency, the car "freewheeling" with no drive power whenever the driver takes their foot off the accelerator. Adaptive adjustments according to the driving situation are also carried out when the navigation system's route guidance function is not activated, precise control of the adaptive recuperation enabling instantaneous responses to changes in the driving situation. For example, activating the turn signal indicator while coasting immediately initiates recuperation. But when approaching junctions with traffic lights, Brake Energy Regeneration is cancelled if the lights turn from red to green.

Adaptive recuperation is one of the standard settings activated when the driving position D is engaged using the selector lever on the centre console. Alternatively, the driver can choose a high, medium or low Brake Energy Regeneration setting in the iDrive menu to apply across all driving situations. In driving position D, the new BMW iX pulls away at minimal speed as soon as the brake pedal is released, increasing comfort when manoeuvring and in stop-start traffic. And activating driving position B with the selector lever generates the one-pedal feeling characteristic of the BMW Group's electric vehicles by providing particularly strong recuperation.

**High-voltage battery: optimised energy density, increased range.**

The fifth-generation BMW eDrive technology also includes a high-voltage battery with state-of-the-art battery cell technology. The gravimetric energy density of the lithium-ion battery has been increased by around 20 per cent

again over the previous-generation battery. And the latest generation of the high-voltage battery also displays superlative qualities when it comes to performance capability, charging and discharging, durability and safety. Its mass to storage capacity ratio is exceptionally good, too. The high-voltage batteries in the BMW iX are cased in aluminium and positioned low down in the vehicle floor as an integral component of the body.

The latest advances made in the field of battery technology are the result of many years of relentless research and development work. The BMW Group has been producing modules and batteries for vehicles with electrified drive systems since 2013. The company can call on immense reserves of expertise and experience when it comes to both battery cell technology and the manufacture of model-specific high-voltage batteries. The BMW Group has carried out underlying research in the fields of cell chemistry and cell design, enabling it to give precise specifications – geared to the particular requirements of use in electrified vehicles – to external battery cell producers.

The prismatic battery cells supplied by these companies are grouped into modules at the assigned BMW Group production plant. An independently developed modular system enables flexible arrangement of the modules in model-specific high-voltage batteries. The BMW iX xDrive50 is fitted with a battery with a gross energy content of over 100 kWh at BMW Plant Dingolfing. The battery unit for the BMW iX xDrive40 has a gross energy content of more than 70 kWh.

A fully integrated liquid cooling system for the high-voltage battery ensures optimal temperature control both in highly dynamic driving situations with a high power requirement and when rapid-charging from a direct current charging station. In low outside temperatures, the excess heat generated by the drive unit is used to warm up the high-voltage battery while on the move. The batteries for the BMW iX are covered by a warranty valid for eight years or up to 160,000 kilometres (99,400 miles).

### **Combined Charging Unit for fast charging at up to 200 kW.**

Alongside the standalone design principle of the electric motors and the optimised high-voltage batteries, new charging technology is also part of fifth-generation BMW eDrive. The Combined Charging Unit (CCU) in the BMW iX enables an extremely high level of flexibility when it comes to using charging stations of different types. It therefore makes refuelling the car with electric power a quick and easy process across all international car markets. The CCU also supplies consumers connected to the 12V on-board power supply of the BMW iX – such as the lighting, audio system and air conditioning – with electric energy. It brings together the functions of the voltage transformer,

charging electronics and power distribution, plus the management systems for the drive, high-voltage and charging functions of the drive unit and high-voltage battery into a single package. This highly integrated platform is therefore a key player in creating the unparalleled electric driving experience in the BMW iX.

Topping up the high-voltage battery from a conventional domestic power socket or a Wallbox enables alternating current (AC) single-phase and three-phase charging at up to 11 kW. Using this method, the BMW iX xDrive50 can recharge its battery from totally empty to 100% in under eleven hours. The BMW iX xDrive40 requires less than eight hours to charge its battery from empty to full capacity.

A significantly higher charging output and the shorter charging times this enables can be accessed by plugging the car into a DC fast-charging station. The BMW iX xDrive50 can charge its high-voltage battery at up to 200 kW. So when hooked up to a charging station offering this output – of the type found on many major transport routes – it can take enough energy on board in just ten minutes to increase the car's range by more than 120 kilometres (75 miles). The maximum charging capacity of the BMW iX xDrive40 is 150 kW, which means that plugging the car into a fast-charging station for ten minutes tops the car up with sufficient energy for another 90 kilometres (56 miles) or more. In both model variants, the high-voltage battery's charge can be increased from 10 to 80 per cent of its full capacity in under 40 minutes.



## **Exterior design.** **Clearly signposting a new era in Sheer Driving Pleasure.**

The BMW iX is cut from the mould of a modern SAV but with a new, reduced design language front and centre. The imposing design of its exterior is shaped by a small number of precise lines and gives the car a powerful, robust and clearly defined appearance. It shines the spotlight on the functional attributes of the BMW iX as a locally emission-free model and an experience space delivering comfortable mobility both in day-to-day use and over longer journeys.

Here, the character-rich presence of the BMW iX exudes a new kind of poise and authority – the product of fully electric all-wheel drive, a sustainability-infused feeling of luxury inside the spacious cabin, and innovative technology with which the BMW iX leads the way in automated driving.

### **Muscular SAV proportions, reduced surface design.**

With its exterior dimensions, the BMW iX combines the functionality of the BMW X5 with the dynamism of the BMW X6 and the visual impact of the BMW X7. The result is a distinctive re-imagining of the powerful proportions of a large BMW SAV. The BMW iX is comparable with the BMW X5 in length and width, and is almost the same height as the BMW X6 on account of its flowing roofline. The size of its wheels, meanwhile, brings to mind the BMW X7. A wheelbase measuring exactly 3,000 millimetres and wide tracks at both the front and rear axle provide the ideal platform for chassis tuning which reconciles luxurious long-distance comfort and sporty cornering characteristics. The car's standalone design language also optimises aerodynamic efficiency, which has a positive effect on range.

The powerful appearance of the BMW iX is also underscored by the simplified design of its surfaces. The minimalist use of character lines and generously shaped surfaces conjure an aura of supreme assurance. The crisp lines, clear structure and almost rectangular contours around the wheel arches contribute to an imposing body design. And the reduced design language steers the eye onto precisely constructed details which accentuate the sophisticated character, brand identity and optimised aerodynamics of the BMW iX.



### **Front end: expressive, vertical kidney grille serves as an intelligence panel.**

The front-end design of the BMW iX imbues it with eye-catching presence. The signature BMW visuals – a joint production of distinctive BMW kidney grille and equally familiar twin headlights – have been newly interpreted with a dash of futuristic style. At the centre of the front end stands the prominent, vertically emphasised kidney grille whose surface has a three-dimensional pyramid structure.

Since the electric drive system of the BMW iX requires only a small amount of cooling air, the kidney grille is completely blanked off. Its role has duly turned digital and here it functions as an intelligence panel. Camera technology, radar functions and other sensors are integrated seamlessly into the grille behind a transparent surface. The heating elements and cleaning system for the sensors are also embedded in the grille front.

### **High-tech construction and a shining light for intelligent mobility.**

Developed and produced at the BMW Group's LuTZ lightweight design and technology centre in Landshut, the kidney grille for the BMW iX presents a technologically lavish advertisement for intelligent mobility. In order to guarantee the greatest possible precision when using the radar sensor mounted behind the kidney grille, a nanoscale vacuum-based coating process is employed in its manufacture. Here, the two-colour finish and visible 3D effect are produced by vaporisation using laser technology and by a plasma-fired application technique in a high vacuum. A combination of the laser-based method developed specially for production of the kidney grille on the iX and a precisely defined combination of material and layer thickness optimise radar performance and ensure an appearance as classy as it is familiar.

An additional polyurethane coating reduces the kidney grille's susceptibility to damage. The self-healing effect of its surface repairs minor scratches, for example – within 24 hours at room temperature or through a five-minute supply of warm air.

### **Trailblazer for automated driving functions.**

The BMW kidney grille has reinvented itself as an innovative and multifunctional high-tech interface for the advanced driver assistance systems with which the BMW iX paves the way for automated driving. The driver assistance systems available for the current BMW Group models already stand out with a level of functionality beyond that of any segment rival. And the new technology toolkit making its debut in the BMW iX creates the platform for the ongoing development of these systems over the long term.

Significant computing power, a system of sensors with exceptional capability, and continuous optimisation with the help of artificial intelligence and Data-Driven Development provide new ways of improving the driver's experience of the car even more extensively in the future when it comes to comfort and safety. Further developed and additional functions can be imported into the car via Remote Software Upgrade. This is a convenient way of keeping the car and its software technologically up to date at all times.

“The BMW iX leads the way in automated driving functions, being the BMW Group's first vehicle to offer automated driving and parking functions from a new technology toolkit,” explains Frank Weber. “This toolkit has huge potential with its computing power and standout sensor systems, and will allow us to steadily expand the functionality of the car.”

### **LED headlights with matrix function and BMW Laserlight.**

The slimmest headlight units ever to feature on a series-produced model from BMW provide a fresh and extremely minimalist take on BMW's familiar four-eyed face. The daytime driving lights have a new design as two-dimensional strips along the upper edge of the headlight units – and fit effortlessly into the imposing design language of the exterior. This gives the headlights a totally new appearance in daylight and emphasises the assured presence of the front end. The daytime driving light strips include the turn indicator function.

The BMW iX is fitted as standard with full-LED headlights. The darkened light fixtures are set well back into the inner sections of the headlights and therefore only become visible when switched on. The fixtures in each headlight unit team up to generate both low and high beam.

The latest generation of BMW Laserlight is available as an option, teaming Adaptive LED Headlights with matrix function and a new type of Laserlight module. This headlight variant also generates low and high beam from both the outer and inner light sources. The matrix function of the BMW Selective Beam high beam increases visibility range and, at the same time, avoids dazzling other road users.

The bonnet of the BMW iX, with its pronounced three-dimensional sculpting, extends all the way up to the headlights and BMW kidney grille. All of the bonnet lines converge dynamically on the kidney grille and the BMW logo above it. The roundel has a functional component, serving as the filler neck for the washer fluid sent to the windscreen and rear window wipers. It opens and closes again – once the fluid has been topped up – with a gentle push. The bonnet does not have an opening mechanism for use by the customer;

the driver system technology and power electronics below the surface can only be accessed by workshop technicians.

### **Side view: clear surface structuring, precise lines.**

When the BMW iX is viewed from the side, its reduced design language accentuates the modern and very distinctive styling of the all-electric SAV. The cutting-edge and minimalist surface sculpting creates an athletic body whose uncomplicated appearance is highlighted by its small number of precise lines. The almost rectangular contours of the front and rear wheel arches are a head-turning element of the exterior design. They adopt one of the original design features of the BMW X family and underscore the car's powerful stance.

A hallmark exterior design element of BMW i cars in the side window graphic and transition into the rear end appears here in updated form. The tapering of the window graphic towards the rear and the forward-slanting C-pillar underline the dynamic lines of the car's silhouette. The "stream flow" of converging lines mimics the airflow along the flanks of the car. On the BMW iX, this distinctive graphic takes the form of a black surface connecting the rear side windows and rear window, and carries the inscribed model badge.

### **Doors with handles integrated flush into their surfaces and frameless windows.**

The clear proportions of the BMW iX are showcased particularly effectively when viewing the car from the side. The design of the doors enhances the impression of a muscular vehicle body. A small number of character lines bring structure to their surfaces, increasing their visual size. The door openers are embedded flush into the door surfaces and are finished in a contrasting colour. The electric door openers, which are operated at the press of a button, and the optional Soft Close function enable easy entry and exit. Indirect illumination of the handle recesses provides them with a high-class backdrop. With the latest generation of the optional Comfort Access system, the doors lock or unlock automatically as the owner approaches or walks away from the car. The required signal is sent to the car using the radio remote control or the BMW Digital Key (via the customer's smartphone).

Doors with frameless windows are making their debut in a large BMW SAV. Only previously seen on BMW coupés, this construction underlines the sporting character of the BMW iX and brings a flowing appearance to the side window graphic as a whole. The High-gloss Black trim for the B-pillars provides an attractive contrast against the body colour. Three layers of sealing around the doors provide excellent acoustic comfort.

### **Aerodynamically optimised exterior mirrors, black body edging.**

The innovative design of the exterior mirrors on the BMW iX helps to reduce wind noise and optimise aerodynamics and all-round visibility. The super-slim mirror bases attach to the lower edge of the side window surround, removing the need for the classical mirror triangle at the front of the side windows.

The mirror caps are painted in body colour and bordered at their lower edge by the mirror base in High-gloss Black, creating an attractive colour contrast. The slim geometry of the mirrors and precisely positioned aero lips enhance aeroacoustics. The turn indicators, which measure only around two millimetres in width and are integrated into the exterior mirrors behind glass covers, produce an extremely consistent light.

Among the design features familiar from classical BMW X models is the black surround at the lower edge of the body. On the BMW iX this extends a long way up and forms a band around the whole of the car, from the front apron along the flanks into the rear. The charging socket is located in the same place as the fuel filler neck on conventionally powered BMW models – i.e. behind a flap on the right-rear wheel arch.

### **Rear end: modern, minimalist, eye-catching.**

The character of the BMW iX is also faithfully reflected in the design of the rear end. The modern and minimalist design of the generously sized surfaces generates an expressive appearance which accentuates the powerful stature and width of the BMW iX particularly keenly. The minimalist design language with a small number of joints and character lines exudes an aura of clarity and sophistication. The aerodynamics of the BMW iX are further enhanced by the flow of air over the roof all the way to its trailing edge, and by a diffuser element in the rear apron.

The tailgate has no separation joints and extends across the whole of the rear, showcasing the expressive surfacing to particularly vivid effect. The rear-view camera is integrated unobtrusively into the black ring of the large BMW logo positioned in the centre of the tailgate. The camera lens is cleaned automatically by a water spray system which extends as required from behind the surface of the roundel.

### **Extremely slim rear lights with striking design.**

The single-piece rear lights are set neatly into the tailgate, which sweeps a long way into the flanks. Like the headlights, the rear lights have a slimmer design than on any previous series-produced BMW Group vehicle. All of the light functions use LED technology. The light fixtures are integrated directly into the three-dimensional lens cover mouldings, creating an extremely bold appearance. The L shape familiar from other BMW models is reprised in

a modern interpretation within the single light strip housing both the rear lights and brake lights, and also comprising the horizontal turn indicators, which only become visible when active.

The reversing light and rear fog lights are located along with the reflector in a likewise extremely slim strip in the rear apron's diffuser. Secondary light units positioned at the outer edges of the car beyond the tailgate opening include turn indicators, rear lights and brake lights, ensuring that the relevant light signals are still visible when the tailgate is open.

### **Shy tech for the exterior: subtly integrated technology.**

As well as the intelligence panel in the BMW kidney grille, the BMW iX also has an array of other likewise discreetly positioned cameras and sensors – used by the driver assistance systems to make life easier for the driver in monotonous or unclear situations on the road – that espouse the principle of “shy tech”. For example, the distance measurement sensors are integrated inconspicuously into the black body edging at the front and rear of the car.

The flush-fitted door openers and the rear-view camera with cleaning system integrated into the BMW badge on the tailgate are examples of shy tech at work. The underlying principle here is that the technology stays in the background and only becomes apparent as and when the relevant functions are called into action.

### **Accents in BMW i Blue identify sustainability.**

The basic BMW iX has numerous design accents which sport the signature blue shade adopted by BMW i and therefore indicate the presence of an electric drive system and sustainable vehicle concept. As well as the blue circle of the BMW logo on the bonnet and tailgate, these elements also include blue accents in the outer areas of the bumper, which visually emphasise the optimised air ducting in the front end. A blue accent strip in the side skirts references the presence of the high-voltage battery positioned low down in the floor section of the BMW iX.

In the lower section of the rear apron, two blue trim elements positioned to the outer edges stand out from the standard black surfaces. They border the separate light units and the diffuser element, and highlight both the excellent aerodynamic attributes of the BMW iX and its electric drive system. Where the exhaust tailpipes of conventionally powered models would normally extend out to the rear, these accents make a powerful statement for sustainable mobility.

### **Expressive individuality: Sport package and BMW Individual Exterior Line Titanium Bronze.**

The BMW iX will be offered as an option with a Sport package. For its first public appearance, the purely electrically powered SAV will adopt the Cashmere Silver metallic paint shade from the extensive selection of exterior colours – or the BMW Individual paint finish Aventurine Red metallic if the Sport package is fitted.

The Sport package gives the electrically powered SAV an aura of great potency. The classic front-end look of three very large air intakes has been re-thought. Large, triangular “shields” at the outer edges of the front apron guide the onrushing air to the Air Curtains, optimising the flow of air around and through the car body.

Added to which, the bordering at the lower edges of the body, the specially moulded side skirts and the integrated door handles are in High-gloss Black. The central section of the wrap-around trim band is painted in body colour in both the front and rear apron. The inserts framing the diffuser element low down in the rear apron are painted in body colour in place of the standard blue paint finish. Another exclusive feature are the eye-catching rear lights with smoked glass. And the Sport package for the BMW iX also includes aerodynamically optimised 21-inch light-alloy wheels in double-spoke design with Midnight Grey finish, plus Sport brakes with blue-painted callipers.

The BMW Individual Exterior Line Titanium Bronze finish can be ordered as an option. Also available in conjunction with the Sport package, its carefully selected colour accents lend the BMW iX a particularly exclusive aura. The three-dimensional structural elements within the BMW kidney grille, the door openers, the lower edging of the side windows – which extends into the D-pillar – and the inserts in the outer areas of the rear apron have surfaces in Titanium Bronze. From any angle, this creates a sophisticated impression exuding modern luxury.

# Aerodynamics and intelligent lightweight design. Innovative in form and structure.



For years now, the BMW Group has been helping to reduce fuel consumption and emissions to great effect with Efficient Dynamics. In the BMW iX, this strategy has been implemented in a visionary format that defines the vehicle's character, encompassing not just the ultra-efficient electric drive system, but also measures for optimising its aerodynamic properties and weight. Reduced air resistance and intelligent lightweight design are both contributory factors to the all-electric SAV's impressive range.

The car's handling qualities and the level of comfort inside the cabin likewise benefit from the reduction in drag and the bodywork structure with its aluminium spaceframe and pioneering Carbon Cage. Precise channelling of the airflow lowers the driving noise produced by the BMW iX even further. One notable difference compared to conventionally powered BMW X models is the positioning of the A-pillars much further forwards. The extremely compact design of the eDrive technology paves the way for the resultant shortening of the front end and the extra space this brings inside the BMW iX. The intelligent material mix, with a variety of materials employed exactly where their specific properties can be utilised to best effect, is unique in this segment. The selective use of high-strength steels, aluminium, thermoplastics and carbon fibre-reinforced plastic (CFRP) results in a weight-minimised body structure of exceptional rigidity. Together with the superb aerodynamics, the intelligent material mix helps to endow the iX with remarkably composed, relaxed driving characteristics combined with instant, precise response to every movement of the accelerator and turn of the steering wheel.

## **Optimised aerodynamics increase range.**

Fully capitalising on the benefits provided by the all-electric drive system and meticulously implementing proven measures from the past has served to optimise the aerodynamic properties of the BMW iX, which in turn has a positive impact on both its performance and range. The low aerodynamic drag can be attributed not just to the remarkably streamlined body finished in the new design language, the tapered glasshouse, flush-fitting door openers, extremely slender exterior mirrors and precisely crafted aero edges, but also to a host of other measures besides. As a result, the BMW iX boasts outstanding aerodynamics for its class, with a drag coefficient ( $C_d$ ) of just 0.25.

The bespoke aerodynamics elements for the front end, rear end, underbody and wheel areas alone add over 65 kilometres (40 miles) to the car's range. Some 25 kilometres (approx. 16 miles) of this can be attributed to the third-generation active air flap control at the front of the vehicle, which directs cooling air to the drive units and brake system as and when required. In normal driving situations, both the BMW kidney grille and the air intakes at the bottom of the front apron are completely blanked off. This default setting allows the air to flow around the vehicle unhindered, thereby significantly reducing aerodynamic drag. The electronically controlled air flaps are only ever fully opened in the rare case that the maximum amount of cooling air is required. The flaps can be adjusted gradually, allowing cooling air to be directed efficiently to the brake air ducts and drive components in carefully metered quantities.

On models with the Sport package, the largely closed air flaps are complemented by precisely engineered apertures in the outer areas of the front apron that further optimise the airflow along the vehicle. These vertically arranged Air Curtains divert the airstream in such a way that it flows along the faces of the wheels without generating any of the customary turbulence. Meanwhile, the way in which the glasshouse tapers towards the tail combines with specially designed air deflectors to reduce aerodynamic drag at the rear as well. Here, vertical Air Blades either side of the rear window and the roof spoiler together form a sharp aero edge that minimises the amount of vacuum produced behind the vehicle and its negative impact on aerodynamics. The combined benefits of the Air Curtains and Air Blades extend the car's range by approximately 15 kilometres (9 miles).

Another drag-reducing feature on the BMW iX is the sealing of the underbody to maximum effect. Spanning the largest area between the front and rear axle is the smooth aluminium casing of the high-voltage battery located low down in the vehicle floor. At the front end, streamlined displacement elements purposefully direct the oncoming air past the wheels to prevent adverse turbulence. And airflow along the rear is smoothed by the large rear axle cover and the rear apron's diffuser. Besides this, all other underbody components have also been meticulously optimised in terms of their aerodynamic impact. Overall, the aerodynamics measures for the underbody of the BMW iX account for around 10 kilometres (6 miles) of its long range.

#### **Lower air resistance and weight: Air Performance Wheels.**

The BMW iX rides as standard on 20-inch light-alloy wheels with an aerodynamically optimised design. Their mostly enclosed surfaces bring about an effective reduction in the amount of air turbulence produced around the wheels. The Air Performance Wheels – optionally available in



21-inch and 22-inch formats – help to reduce drag in a very innovative way. The BMW Group is the world's first carmaker to use this groundbreaking wheel design, which unites optimised aerodynamic properties with all the elegance of a V-spoke aluminium wheel. They weigh about 15 per cent less than conventional light-alloy wheels with an aerodynamically enhanced design, further adding to the efficiency of the BMW iX.

The Air Performance Wheels comprise an aluminium base wheel with customised inserts between the spokes that give them a flat design, especially on the outside of the wheel, resulting in far smoother airflow. Range is increased by as much as 15 kilometres (9 miles) courtesy of the Air Performance Wheels.

The dimensions of the base wheel ensure it meets all the structural challenges involved in transferring dynamic driving forces to the road. Meanwhile, inserts with a high-class finish are responsible for achieving the necessary aerodynamic impact, while also offering additional scope for customising the wheels. The Air Performance Wheels can be specified as an option for the BMW iX in a choice of three 21-inch and two 22-inch variants.

**Intelligent material mix: perfect combination of weight reduction and maximum rigidity.**

The aluminium spaceframe construction used for the body structure of the BMW iX is another first for its segment. The materials selected and manufacturing processes employed are both precisely matched to the requirements of each specific component in order to increase body rigidity and crash safety while keeping weight as low as possible.

The cutting-edge mix of materials for the bodyshell includes CFRP and high-performance thermoplastics, along with high-strength steels and aluminium. With its targeted use of different materials, sometimes in combination with one another, the innovative design of the supporting structures and the wide array of production techniques used in the process, the BMW iX once again showcases the BMW Group's unrivalled technological expertise in the field of intelligent lightweight design for the automotive sector.

**Carbon Cage: lightweight design that makes a visible and measurable difference.**

Remarkably light yet extremely torsion-resistant CFRP components in the body's side, rear and roof areas form a key element of the safety concept for the BMW iX passenger cell. At the same time, the car's agility is given a further boost by the resulting weight optimisation. The CFRP components

for the side frame, rain channels, roof frame, cowl panel and rear window frame together form a 'Carbon Cage' featuring for the first time in the BMW iX body. The BMW Group has employed its many years of experience in working with this high-tech lightweight material – amassed during production of the BMW i models and the current BMW 7 Series, for example – to use CFRP intelligently to reinforce the body while also saving weight. The Carbon Cage has evolved from the Carbon Core used in the 7 Series and allows the fascinating qualities of this high-tech material to be appreciated visually as well.

Fitting a lightweight CFRP side frame instead of a conventional steel part shaves several kilograms off the vehicle's weight. The cowl panel and rear window frame components are manufactured from continuous fibre-reinforced thermoplastics (CFRTP) using an all-new method. Together, they constitute a particularly effective lightweight design measure. The innovative blend of materials forms the basis for an exceptionally slim profile that adds to the sense of spaciousness in the cabin. What is more, brackets for control units, washer fluid lines and wiring harnesses can also be incorporated into these components. The CFRTP construction increases stiffness while also achieving a weight saving of some five kilograms compared to similar elements made of steel.

The CFRP used in the side frame and at the rear end lends an added visual flourish to the BMW iX: the carbon components' striking fibre structures clearly stand out in the entrance area and when the tailgate is open, providing a further reminder of the car's high-tech character. And the multi-layered arrangement of the carbon fibres creates a three-dimensional feel.



## **Interior design.** **More space for enjoying quality of life and personal well-being.**

“We designed the BMW iX from the inside out,” says Domagoj Dukec, Vice President BMW Design. “In the process, we took particular care to create a modern, warm and minimalist interior design with a very spacious feel.”

Vast amounts of room, a top-quality selection of materials, newly developed seating and the extraordinary expanse of the panoramic glass roof combine to immerse all five seats inside the BMW iX in a luxurious lounge-style ambience. The all-new architecture of the BMW iX cabin underpins a perfectly clear and straightforward functionality that revolves entirely around the needs and emotions of the driver and their fellow occupants. The drive concept means there is no centre tunnel, adding to the open, airy feel while also allowing extra legroom in the front and rear, sufficient space for storage facilities, and a centre console crafted to look like a high-quality piece of furniture.

### **Where people take centre stage and intelligent technology fades into the background.**

The technology aboard the BMW iX is deployed intelligently, only manifesting itself when it is actually required. This makes it intuitive to use rather than seeming overly complex. The interior design conveys a sense of safety and familiarity and engenders a new type of bond between occupants and vehicle.

The displays and controls are all stripped down to the essentials, further reinforcing the impression of an uncluttered cabin offering a place of relaxation. The shy tech approach for the interior can be seen in a number of features, including speakers integrated out of sight, intricately styled air vents, heated surfaces and the discreet recessing of the BMW Head-Up Display’s projector into the instrument panel so it is almost invisible. The hexagonally shaped steering wheel, a rocker switch for gear selection and the BMW Curved Display – which forms part of the next-generation BMW Operating System – clearly advertise the futuristic form of driving pleasure on offer.

### **Clearly structured surfaces for a generous sense of space.**

An ambience of modern luxury sets the tone for both the front and rear compartments of the BMW iX interior. The minimalistic design language and clearly structured surfaces give the cabin an exceptionally spacious feel.

The door panel layout features a distinctive diagonal split using different colours and materials. The door pull handles have been sleekly integrated into the diagonal accent strip that also houses the button for activating the electric door opening function. Buttons for adjusting the seat position are located at the top of the front door shoulders, where they are ergonomically arranged in the form of a seat. The panel of buttons for the memory function is positioned directly alongside. The passenger-side armrest also incorporates a compartment for holding a mobile phone. Meanwhile, the audio system's midrange speakers embedded beneath the door panels' fabric trim are hidden from sight yet make a very audible impact on the enjoyment of the journey.

### **Newly developed seats with integral head restraints.**

If the optional Loft trim is specified, the seat surfaces are adorned with a diagonal pattern of materials and colours combining high-quality textile and microfibre fabrics. The asymmetric styling and quilting composed of triangular, square and pentagonal sections give the seats their very modern appeal. Contrast stitching on the seat surfaces adds a further highly distinctive touch. The remaining equipment variants offer a choice of seat upholsteries in Sensatec and Exclusive Natural leather.

The surface of the leather used for the seats and instrument panel is treated with a natural olive leaf extract, thereby avoiding any production residue that is harmful to the environment, while also giving the leather a particularly high-quality yet natural look. The sustainability-focused approach applied when selecting raw materials and production methods has also resulted in the use of FSC-certified wood and a high proportion of recycled plastics for the surfaces of the door panels, seats, centre console and floor panelling.

The newly developed seats for the driver and front passenger have integral head restraints for a distinctly sporty appearance. For the first time in a model from the BMW Group, there is the option of integrating speakers into the seat structure. The sound sources positioned beneath the surface in the head restraint and lumbar areas further enrich the acoustic experience inside the BMW iX and are another example of shy tech at work. Besides the seats' extensive multi-way electric adjustment, there is also the option of seat heating, seat ventilation and a massage function. The seat belt straps are available in a choice of black or BMW i Blue.

### **Lounge-style ambience in the rear compartment.**

The bench seat in the rear has been designed for three passengers. The two outer seats also feature integral head restraints, while the centre seat has a head restraint that can be folded down to improve the view to the rear. The omission of the centre tunnel means that everyone in

the second row enjoys extremely generous legroom. The open sense of space this creates combines with the broad bench seat extending into the door areas to reinforce the lounge-style feel and increase passenger comfort. A Travel & Comfort system integrated into the front seats can be used by occupants in the rear to attach coat hooks or hold tablet devices. A pair of USB-C ports can also be found in each of the front head restraints.

The rear seats can likewise be specified with a heating function and with built-in head restraint speakers as an option. The rear backrest also has a 40:20:40 split, allowing the amply proportioned luggage compartment to be expanded as required by folding down individual sections.

### **Slim instrument panel, freestanding BMW Curved Display.**

The BMW iX interior's modern, spacious feel is further helped by the slim instrument panel, which is covered in Sensatec as standard with the option of either microfibre fabric or Natural leather tanned with olive leaf extracts. In the Loft Stone Grey specification, the precise graduation of colour from light to dark areas reinforces the impression of an extremely lightweight design.

The instrument panel's geometry rises up towards the front, turning it into the perfect stage for the futuristic, fully digital screen grouping in the iX. The BMW Curved Display, making its production vehicle debut, is held in place by a supporting structure that is concealed from the occupants' view, so it appears to be standing freely in the cockpit. It has a magnesium housing and a frameless, single-piece glass surface. The high-quality display technology using anti-reflective glass also makes it possible to dispense with the customary binnacle for shielding the readouts from sunlight, giving the cockpit area a remarkably tidy and airy appearance.

“The BMW iX is the first model from the BMW Group to feature the impressive high-resolution Curved Display, which is far larger and sharper than the displays in our current models,” remarks Frank Weber. “As a result, the BMW iX interior points the way ahead for cockpit design in future BMW models.”

The curving, one-piece display that serves as the central control element reinterprets the traditional driver-centric design of BMW cockpits in visionary form. This has involved bringing together the 12.3-inch Information Display and the Control Display with its screen diagonal of 14.9 inches to form a single unit angled towards the driver. The interlinked, driver-focused display ensemble optimises how information is shown and makes the display's intuitive touch control even simpler to use. At the same time,

the Control Display section can still be clearly seen and easily operated by the front passenger.

The Curved Display in the BMW iX teams up with the next-generation BMW Operating System to deliver a totally new graphics experience. The instrument cluster offers new, completely customisable display options that provide the driver with precise information tailored to the situation at hand. Exceptionally intuitive operation using voice or touch control enables the driver to interact with the additional intelligent functions aboard the BMW iX easily and safely. This takes the renowned user friendliness of BMW display and operating systems to the next level.

“There is no user interface anywhere in the automotive industry that can be operated as simply and as safely as ours,” explains Frank Weber. “In the BMW iX we have taken this to new heights with a new digital platform and the next-generation BMW Operating System.”

### **Newly designed control panel on the centre console.**

The Curved Display’s position and technology have been optimised to facilitate very intensive and intuitive use of the touchscreen functionality. However, all elements of the iDrive menu can also still be selected and activated with the familiar centre console Controller in the BMW iX. It forms the main control element on the centre console, whose colour scheme and material selection create the appearance of a classy piece of furniture between the comfortable front seats.

The Controller is enclosed by a sharply styled control panel with a High-gloss Black frame, a glass-effect surface and white backlit buttons. The rest of the control panel design is another clear example of the principles of shy tech and reduction to the essentials at work. Instead of conventional buttons, a control surface with active haptic input subdivided by feeler bars is used to select the iDrive menus, driving modes and other functions. The Touch Controller, designed in an extremely smart glass-effect finish for the BMW iX, is encircled by a bezel painted in Gold Bronze. A roller control allows for convenient adjustment of the audio system volume. The Start/Stop button is illuminated in the signature BMW i Blue, signifying the presence of an all-electric drive system. Nestled between the Start/Stop button and the button for the electromechanical parking brake is a newly devised rocker switch that takes the place of the customary gear selector lever.

The Controller, the rocker switch for gear selection, the audio roller control and the seat adjustment buttons can also be specified in a polished crystal finish as an option. Clear & Bold specification additionally includes a control

panel surface made from FSC-certified wood. The open-pore walnut finish again incorporates backlit buttons.

The space gained from the absence of a centre tunnel is also used to create additional stowage facilities in the centre console area. As a result, the centre console's lower level houses two cupholders, a smartphone tray with inductive charging, a 12V power connection and two USB-C ports.

The centre console armrest – which is available in a heated version as an option – doubles as a butterfly lid that opens to reveal a roomy, illuminated storage compartment. The rear console terminates in air vents for the rear passenger compartment with a High-gloss Black trim surround. Depending on the optional equipment fitted, arrays of buttons for the rear seat heating or independent climate control in the rear are also located here.

### **Premiere for the hexagonal steering wheel in the BMW iX.**

The BMW iX is the first model from the BMW Group to be fitted with a hexagonal steering wheel. Its polygonal geometry means it is ideally suited to switching between automated and active driving. The rim's unique, track-inspired contour has the additional effect of improving ease of access and seating comfort. The hexagonal shape also affords the driver a better view of the section of the Curved Display positioned directly behind the steering wheel. The steering wheel's six-sided outline sets the scene for focused assimilation of all driving-related information.

The new-look multifunction buttons on control pads in a high-quality glass-effect finish optimise intuitive operation of both audio and communications functions and the driver assistance systems. Steering wheel heating, with a new three-stage control system used for the first time, is also available for the BMW iX as an option.

### **BMW Head-Up Display with frameless projector integration.**

The latest generation of the BMW Head-Up Display is a further aid to focused driving in the BMW iX. For the first time, the BMW Head-Up Display's projector has been flush fitted into the surface of the instrument panel without a frame, meaning that it is hidden from sight. It projects driving-related information onto the windscreen in the form of graphics that appear directly in the driver's field of vision. This allows the driver to take in all the key data without having to divert their attention from the road. The information projected by the BMW Head-Up Display includes the car's speed, speed limits in force and overtaking restrictions, Check Control messages, status indicators and warnings from the driver assistance systems, detailed route guidance and turn instructions, as well as telephone and entertainment lists.

The display's imaging angle, height and brightness can be adjusted individually.

The combination of the Head-Up Display and the Curved Display's fully digital screen grouping represents an ideal solution for conveying information appropriately in any given driving situation in a way that optimises ergonomics, comfort, safety and driving pleasure. The system of projection in the BMW iX is designed so that the driver perceives the graphics as being in a position approximately three metres in front of the vehicle. This projection distance allows information to be absorbed with the greatest of ease as it enables the driver to assimilate readouts accurately without having to adjust their gaze in normal driving situations.

### **Automatic climate control with new controls and integral nanofibre filter.**

The BMW iX comes with 2.5-zone automatic climate control as standard, with the option of upgrading to a four-zone system that allows the temperature and ventilation settings to be controlled individually for the passengers in the rear as well as for the driver and front passenger. The convenient operation and precision control offered by both system variants when warming up or cooling down the cabin has a greater impact than ever on the occupants' sense of well-being thanks to the pared-down interior styling and the enhanced technology at work. Cutting-edge nanofibre filter technology is used to purify the air inside the car more effectively. A pre-heating and pre-conditioning function is also included as standard on the BMW iX.

Air outlets are located out of sight in the footwells and near the windscreen, while the extremely slender air vents with Gold Bronze surrounds in the instrument panel area form a particularly eye-catching visual highlight. They are arranged horizontally in the middle of the instrument panel and vertically at its outer edges. Additional air vents for climate control in the rear can be found on the back of the centre console and in the B-pillars. The direction and intensity of the airflow can be adjusted manually. The BMW iX is the first model to be offered with the option of efficient surface heating for the instrument panel, glove compartment, door panelling, centre armrest and steering wheel to help heat up the interior.

Innovative nanofibre filter technology provides a particularly effective means of helping to keep the air in the BMW iX cabin clean as it prevents ultra-fine particles, certain microbial particles and allergens from entering the vehicle's interior. Nanofibre filter technology is more rigorous than normal filter systems, removing virtually all particles from the air in the interior in a matter of a few



minutes when air recirculation mode is switched on. Drivers are also able to use the My BMW app to activate the air conditioning system's ventilation function before the journey starts in order to purify the air in the cabin quickly and thoroughly.

### **LED interior lighting.**

LED units are used for all of the interior lighting functions in the BMW iX. All controls have white backlighting, making it easy to locate them even at night. The harmonious night design of the Curved Display adds to the laid-back lounge-like feel, as does the coloured interior light, which is clearly visible in daylight too thanks to the large number of LEDs used. The interior light accentuates the expansive surfaces and crisp lines of the door panelling while also providing indirect illumination of the footwells and entrance areas.

### **Panoramic glass roof with electrochromic shading.**

The BMW iX is available with the option of a panoramic glass roof. Its single-piece transparent surface spans the entire interior without any cross struts to break it up, making it the largest glass roof ever fitted in a model from the BMW Group. The panoramic glass roof greatly enhances the sense of spaciousness and the lounge-style ambience inside the BMW iX, and has the additional benefit of maximising headroom for the occupants by dispensing with the need for an interior liner. The glass roof features electrochromic shading instead, which can be activated at the press of a button to shield the interior from direct sunlight.

The panoramic roof is composed of a steel frame, two glass panels and three layers of film sandwiched between them. The laminated glass construction offers both optimum protection against ultraviolet rays and an excellent standard of acoustic comfort. The upper glass panel's triple silver coating is designed to maintain a comfortable climate in the cabin.

Instead of having an interior liner, the roof is the only one of its kind in the automotive industry to employ PDLC (Polymer Dispersed Liquid Crystal) technology for shading the interior. The panoramic glass roof's transparency is altered by applying a voltage to the middle layer of film. The liquid crystals dispersed as droplets in a polymer matrix are aligned so evenly by the electrical energy that they allow rays of light to pass through into the interior unimpeded. When de-energised, it takes less than a second for the crystals to distribute themselves in a disorderly pattern that creates the effect of shade. This electrochromic shading function can be switched on and off using a button at the front of the panoramic glass roof. The shading mode is activated automatically once the BMW iX has been parked.

### **Pioneering sound experience: Bowers & Wilkins Surround Sound System with 4D Audio.**

The audio system fitted as standard in the BMW iX comprises a HiFi sound system with twelve speakers and a 205-watt amplifier. A bespoke Harman Kardon Surround Sound System available as an option provides superb listening pleasure for all occupants with its seven-band equalizer, 655 watts of audio power and sound adjustment based on the car's dynamic performance level. In all, 18 speakers are responsible for producing the surround sound effect, with four built-in speakers in the rear head restraints complementing the five midrange and five tweeter speakers. The combination of two central bass speakers and two additional subwoofers located under the rear seat unit has never been seen before in a BMW model and ensures powerful sound performance. The system's tweeters are housed behind top-quality perforated grilles, while the midrange speakers are hidden beneath the door panels' fabric trim.

Available as an option for the first time, the latest version of the Bowers & Wilkins Surround Sound System takes the audio experience into a new dimension, turning the BMW iX into a concert hall on wheels. The fully active audio system boasts a seven-band equalizer, microphone-assisted sound control based on dynamic performance and five sound modes. With 30 speakers in total and an impressive amplifier output of 1,615 watts, this highly advanced system produces an exceptionally clear and wonderfully nuanced sound. Standout features include the eight speakers integrated into the front and rear head restraints, two Diamond tweeters, a quartet of 3D speakers, plus two central bass speakers and two subwoofers under the rear seats. In addition to this, the Bowers & Wilkins Surround Sound System also incorporates a 4D Audio function generated using 'shakers' in the front seats. Their precise, magnetically controlled vibrations result in intense perception of bass frequencies, even at low volumes. The midrange units in the Bowers & Wilkins Surround Sound System are installed underneath the fabric door panel trim. The tweeters feature brushed stainless steel grilles with a classy brand logo etching and a discreet lighting effect.