

# BMW at the Tokyo Motor Show 2013. Contents.



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# 1. BMW at the Tokyo Motor Show 2013. (Summary)



The dawn of a new age of individual mobility, a further aesthetical highlight in the mid-range segment and fascinating perspectives for extremely sporty driving pleasure will mark the presence of premium car manufacturer BMW at the Tokyo Motor Show 2013.

The international automobile show, which is taking place for the 43rd time, is showplace for the Japan premiere of the purely electrically powered BMW i3 and the plug-in hybrid sports car BMW i8, as well as the world premiere of the BMW 4 Series Convertible. Furthermore, the BMW Concept M4 Coupe offers a preview of the next generation of exceptional high-performance sports cars. In addition, the new BMW X5, the BMW Concept Active Tourer Outdoor and the BMW R nineT will be making their first appearance at an Asian car show.

At the Tokyo Motor Show being staged from 22 November to 1 December 2013, exhibitors from all over the world will be presenting their latest model innovations, concepts and technological developments to the general public. The venue for the show is the Big Sight International Exhibition Centre, which was built on the island of Odaiba in Tokyo Bay and first used as a location for the competitive exhibition of the international automotive sector in 2011. The Tokyo Motor Show is one of the world's most significant motor shows and is held every two years. In 2011, the organisers recorded around 850,000 visitors to the exhibition grounds.

## **BMW 4 Series Convertible: Open-top driving pleasure redefined.**

The world premiere of the BMW 4 Series Convertible marks the beginning of a new era of open-air driving pleasure. Thanks to its specific design vocabulary, the open-top four-seater stands out significantly from mid-range models of the BMW 3 Series. Unique aesthetics and the noticeable increase in size compared to the predecessor model give the BMW 4 Series Convertible an expressive presence. The three-part, folding hardtop guarantees the highest degree of everyday suitability all year round. When closed, it offers enhanced acoustic comfort and opens in less than 20 seconds at the push of a button. At market launch, there will be a choice of a straight six-cylinder petrol engine, a four-cylinder petrol engine and a four-cylinder diesel power unit with an output ranging from 135 kW/184 hp to 225 kW/306 hp.

## **BMW i starting off with two models: Electric mobility with the BMW i3 and the BMW i8.**

With the simultaneous presentation of its first purely electrically powered production vehicle and the world's most progressive sports car of the present time, the BMW i brand is demonstrating a broad spectrum of future-oriented vehicle concepts. Both models represent a new form of premium characteristics that are sharply defined by sustainability. The electric motors and lithium-ion high-voltage batteries were developed by the BMW Group for use in each specific model. A further distinctive feature conceived exclusively for BMW i is the LifeDrive vehicle architecture, which includes a passenger compartment made of carbon-fibre reinforced plastic (CFRP), thereby contributing significantly towards weight optimisation.

The BMW i3, which is scheduled to be launched in Japan in the spring of 2014, is the first premium automobile designed right from the start to be powered solely by electricity, rendering it entirely emission-free. The five-seater car, which boasts pathbreaking BMW i design language, offers a generous amount of interior space and four seats. It is powered by a 125 kW/170 hp electric motor and achieves a range of between 130 and 160 kilometres (approx. 80 and 99 miles) in everyday traffic conditions. The optional two-cylinder combustion engine assumes the function of a range extender with which vehicle range can be increased to up to 300 kilometres.

The BMW i8 will also arrive on the market in 2014 as a sports car of a new generation. It combines the dynamics of a high-performance sports car with the fuel consumption and emission levels of a small car. The BMW i8 is a 2+2-seater featuring a visionary design and an intelligent lightweight construction, facilitating not only emission-free driving in the urban environment, but also sporty performance on country roads and motorways. The vehicle's plug-in hybrid system comprises a supercharged three-cylinder petrol engine with BMW TwinPower Turbo Technology delivering 170 kW/231 hp and BMW eDrive technology in the form of a 96 kW/131 hp electric motor. With the power of both engines, the BMW i8 sprints from 0–100 km/h (60 mph) in just 4.4 seconds. Average fuel consumption according to the EU test cycle for plug-in hybrids is 2.5 litres/100 kilometres, the respective CO<sub>2</sub> emission level being 59 grams/kilometre.

**The new BMW X5: Sports Activity Vehicle built to perfection.**

The BMW X5 was and still is the world's first and most successful Sports Activity Vehicle (SAV). In its third generation, it presents itself with a distinctive and aerodynamically optimised design, up to 90 kilograms less weight depending on equipment options on board (EU specification). The new BMW X5 is more luxurious and versatile than ever and impresses over and above with increased performance and ever better fuel economy.

**BMW Concept Active Tourer Outdoor: Innovative concept, advanced drive technology, innovative detail solutions.**

The BMW Concept Active Tourer Outdoor demonstrates the best prerequisites for capturing a further vehicle segment. This concept car combines advanced plug-in hybrid drive technology, compact dimensions and an exceptionally variable interior into a new manifestation of brand-typical driving pleasure supplemented by intelligent detail solutions for leisure activities.

**BMW Concept M4 Coupe: Concentrated motor racing genes.**

When shown to the general public at the Tokyo Motor Show 2013, the BMW Concept M4 Coupe will demonstrate immediately noticeable, high-performance characteristics. The athletic and dynamic concept car combines motor racing genes and everyday suitability into an extremely emotional overall concept in the unmistakable style of the BMW M GmbH. The powerfully shaped front end with large air intakes, dynamic side lines and a sporty, flat rear end signal phenomenal performance and precisely controllable handling. CFRP elements such as the front splitter, the roof or the rear diffuser underscore consistent lightweight construction as a further measure towards achieving fascinating performance.

**The BMW Motorrad nineT: Fascination and emotion from 90 years of BMW Motorrad.**

On the occasion of the anniversary "90 Years of BMW Motorrad", the BMW R nineT is presenting itself in a classic but nevertheless ultra modern form. The "cafe racer" combines the original charm of the 81 kW (110 hp) boxer engine and puristic design vocabulary from various BMW Motorrad eras with innovative technology and a modular concept that offers maximum possibilities for individualisation.

## 2. BMW at the Tokyo Motor Show 2013. (Long version)



### 2.1 Open-top driving pleasure redefined: The BMW 4 Series Convertible.

The new BMW 4 Series Convertible heralds a new era in the premium mid-size range of open cars offered by BMW. The new design language introduced with the BMW 4 Series Coupe is even more evident in this second model of the series, enhancing the appearance of the BMW 4 Series Convertible while setting new standards in terms of dynamics, elegance and extraordinary driving pleasure – with the top up or down. In addition to having its own distinct design, the BMW 4 Series Convertible sets itself apart from its BMW 3 Series cousins through a number of distinguishing technical features.

The new BMW 4 Series Convertible is visibly larger in width, track and wheelbase than the BMW 3 Series Convertible.

The vehicle's impeccable balance of proportions and characteristic flowing lines stem from the typical BMW short overhangs front and rear, the stretched bonnet and set-back passenger compartment. The striking BMW design features up front – such as the double-kidney grille, twin circular headlights and the large air intakes in the front apron – are keen to display this convertible's family ties with the BMW 3 Series.

However, the dynamic convictions of the BMW 4 Series Convertible are expressed by elements such as the so-called Air Breathers positioned rearward of the front wheel arches. Together with the Air Curtains, these elements reduce turbulence and aerodynamic drag at the front wheels. The markedly flat design of the boot area at the rear underlines the flowing harmony of the overall vehicle silhouette. Horizontal lines and muscular wheel arches combine to accentuate the car's wide track and rear-wheel drive concept.

The three-piece retractable hardtop of the BMW 4 Series Convertible is distinguished by advanced soundproofing with its "noise-absorbing" headliner, ensuring quietness and genuine passenger comfort under all weather conditions – even in winter. The interior roof is fully lined and features lamps that add to the ambience expected of a premium sport coupe. When the top is down and stored in the boot, the standard load and unload assistance function pivots the folded roof in the luggage compartment upwards to provide ample storage space and easy access. Thus even large and bulky items and luggage can be conveniently stowed when the top is down. The low and sporty seats ensure more headroom as well as added rear legroom in comparison to the predecessor model.

The interior of the BMW 4 Series Convertible presents a stylish fusion of sporty allure, elegance and exclusivity. The doors are designed so that all the lines converge towards the rear, and bright colour combinations featuring a two-tone effect for the door and side panels contribute in combination with the hardtop cover to the “boat deck” look. This wrap-around interior design provides for a seating ensemble that allows all passengers to share the open-sky driving experience. The design of the seats is new and includes integrated seatbelts. The seats are electrically adjustable as standard. If desired, the standard seats and the optional sport seats with recessed head restraints can be equipped with neck warmers for the driver and front passenger, an optional extra available for the first time. When the top is down, the temperature setting is automatically controlled in relation to the outdoor temperature and the speed of the vehicle.

In addition to the standard model, three specially equipped lines and an M Sport package are also available. The Sport Line, Modern Line and Luxury Line versions can be selected to personalise the new convertible with special interior and exterior accents. The fine materials and meticulous craftsmanship underline the premium ambience of the BMW 4 Series Convertible.

In addition to the enjoyment of the unrivalled open-air driving experience at the push of a button, the BMW 4 Series Convertible also impresses with exhilarating performance and sovereign handling. BMW engineers have succeeded in making key improvements in areas such as steering accuracy, precision and agility. Sophisticated chassis technology, torque-steer-free Electric Power Steering, 50:50 weight distribution, a programme of fine-tuning in the wind tunnel and a lightweight construction concept enabled them to build an unadulterated driving machine. The sporty look of the convertible is evident in the longer wheelbase, wider track and standard lower suspension when compared with its predecessor model. Among many factors, the extremely low centre of gravity also accounts for the remarkable performance and handling of the new BMW 4 Series Convertible.

At model launch the BMW 4 Series Convertible can be delivered with an in-line six-cylinder petrol engine (BMW 435i Convertible), a four-cylinder petrol engine (BMW 428i Convertible) and a four-cylinder diesel (BMW 420d Convertible). These engines cover the performance range from 135 kW/184 hp to 225 kW/306 hp and feature the latest BMW TwinPower Turbo technology. These state-of-the-art engines imbue the BMW 4 Series Convertible with outstanding acceleration and elasticity while intelligently reducing fuel consumption in compliance with the EU6 standard.

## 2.2 BMW i starting off with two models: Electromobility with the BMW i3 and the BMW i8.



BMW i stands for tailor-made vehicle concepts, sustainability along the entire value chain, complementary mobility services and a new understanding of the word premium, this being strongly defined by sustainability. The brand takes into consideration the worldwide ecological, economical and social change and consistently pursues the principle of sustainability. In addition to the BMW i3, which celebrated its premiere in 2013, BMW i will be offering a further, uniquely fascinating model as of 2014 – the plug-in hybrid sports car BMW i8.

Conceptual and technological development at BMW i is underpinned by extensive research and development work. At the same time, there have been large-scale field studies to examine the behaviour of purely electrically powered vehicles in everyday traffic conditions. In the process, a great deal of valuable experience has been gained and is reflected in the innovative vehicle concepts and mobility solutions offered by BMW i. Characteristic BMW driving pleasure in conjunction with emission-free mobility, cutting-edge design, intelligent lightweight construction as well as resource-conserving and energy-saving production methods complement each other to create the unique premium characteristics of BMW i automobiles such as the new all-electric BMW i3 and the upcoming BMW i8 plug-in hybrid sports car.

What makes the BMW i approach so unique is the revolutionary, holistically sustainable concept which ranges from initial development and design, production and utilisation right up to recycling and offers, in all respects, sustainability at the same level as conventional BMW standards in terms of quality and driving pleasure. BMW i thinks beyond the actual vehicle itself and makes allowances for the entire value chain. For example, BMW i vehicles are produced at the BMW Leipzig plant using electricity that is gained directly from wind turbines located on the factory premises and – thanks to a new production method – built using a fraction of the energy that is required for conventional vehicle construction. For the very first time at this factory, premium automobiles are being produced that are designed from the outset to be powered solely by electricity or by a plug-in hybrid drive system respectively. These are vehicles that, unlike so-called conversion models, are not based on conventional automobile structures and merely equipped with additional electric components, but vehicles that are designed right from the start to attain sustainable electromobility.

Sustainable electromobility calls for completely new solutions – which also applies to the vehicle architecture. At BMW i, this solution is termed “LifeDrive”, a vehicle architecture especially designed for the electric vehicle. This innovation not only more than compensates for the weight of the battery, but also lowers the centre of gravity, guaranteeing a high degree of occupant safety. The LifeDrive architecture of the BMW i3 and the i8 comprises two modules – the Life Module as a passenger compartment and the Drive Module, a suspension set-up featuring integrated drive technology.

The Life Module consists of high-strength, extremely light carbon, a material that is 50% lighter than steel but significantly more rigid. The BMW Group is the world’s first company to industrialise the CFRP production process for economical usage in automobile production. Thanks to the use of this material, it was possible to dispense with the B pillar in the entrance area of both the BMW i3 and the BMW i8, thereby conveying a distinct feeling of spaciousness and permitting convenient access to the interior. The Drive Module is made of lightweight aluminium and accommodates all suspension, heating/air conditioning and drive components as well as the battery. All in all, this means more room for the passengers and, thanks to the low centre of gravity, typical BMW agility and road-holding characteristics.

The drive concept BMW eDrive, i.e. the electric motor and the liquid-cooled lithium-ion high-voltage battery, was developed entirely by the BMW Group. The electric motor accelerates from a standstill at maximum torque and facilitates emission-free driving when 100 percent regenerative power sources are used. Consequently, during its lifespan, the BMW i3 leaves behind a CO<sub>2</sub> footprint that is only half the size of that of the benchmark vehicle – the World Green Car of the Year 2008, the BMW 118d. At the same time, typical BMW driving pleasure remains the trademark of the BMW i3 and, of course, the BMW i8 as well.

The BMW i3 is the first all-electric series vehicle produced by BMW i and the first premium automobile designed right from the start to be powered solely by electricity. The BMW i3 creates entirely new and pathbreaking possibilities to experience driving pleasure, sustainability and networking in urban traffic conditions. The visionary design of the BMW i3 authentically expresses both the typical BMW sportiness and the efficiency of the 4-seater car alike. Its innovative vehicle concept combines lightness, stability and safety with a remarkably high level of spatial comfort. In perfect interplay with the driver assistance systems and BMW ConnectedDrive mobility services developed exclusively for BMW i, as well as the services provided by 360° ELECTRIC, emission-free mobility within the urban environment becomes both a fascinating and practical everyday experience that also convinces in terms of

fuel economy. For example, ongoing maintenance costs for a BMW i3 in Germany are 30 percent lower than those of a BMW 320d.

The BMW i3 boasts a new interpretation of typical BMW design characteristics. At the front, the flat double kidney grille sporting a colour accent and the U-shaped headlights attract immediate attention. Like the roof and the tailgate, the bonnet, under which a 35-litre storage space is provided, is always finished in black, regardless of the exterior body colour, giving the car a flatter and more dynamic appearance. Viewed from the side, the BMW i3 looks particularly dynamic, thanks to 19-inch forged alloy wheels, short overhangs and a flowing silhouette. The front and rear doors open in opposite directions, permitting convenient access thanks to the large door openings and the B pillar being integrated into the door. The U-shaped headlights with LED daytime driving lights at the front and the likewise U-shaped taillights are also striking features of the BMW i3.

In spite of its extremely compact exterior length of just under four metres, the BMW i3 offers its occupants a surprisingly generous amount of space. The spacious and airy interior convinces with a lounge-like, relaxing atmosphere. The distinctive styling of the instrument panel and door elements convey a sense of lightness and the interior elements made of renewable raw materials enable occupants to experience the sustainability of this new vehicle concept at any time.

The electric motor of the BMW i3 delivers a maximum power output of 125 kW/170 hp and a maximum torque of 250 Nm (184 ft-lbs), transferring spontaneously developed power to the rear wheels via a single-stage gearbox. The BMW i3 sprints from 0 to 100 km/h (60 mph) in just 7.2 seconds, whilst a speed of 60 km/h (approx. 37 mph) is reached from a standstill in a mere 3.7 seconds. The low centre of gravity and well-balanced axle load distribution ensure a high level of directional stability and agility. The energy storage module facilitates a range of 130 to 160 kilometres (approx. 80 to 99 miles) in everyday operation. Depending on the drive mode, vehicle range can be extended by between 20 and 40 kilometres (approx. 12 and 24 miles). The BMW i3 can also be equipped with an optional Range Extender, which keeps the charge of the lithium-ion battery at a constant level during operation as soon as it drops below a certain value. The Range Extender comprises a 650 cc, 25 kW/34 hp two-cylinder petrol engine, which is located above the rear axle immediately next to the electric drive motor. The maximum possible range in everyday operation is then increased to around 300 kilometres (approx. 186 miles).

The BMW i8 was intentionally conceived right from the start as a high-performing and exceptionally efficient plug-in hybrid sports car. The model-specific plug-in hybrid system of the BMW i8, which was exclusively developed and produced by the BMW Group, marks a new evolutionary milestone in the development of the company's Efficient Dynamics technology. The basic principle of Efficient Dynamics – enhanced driving pleasure, lower fuel consumption – is particularly resolutely implemented in the BMW i8. With the performance characteristics of a thoroughbred sports car and the fuel economy of a small car, the BMW i8 plug-in hybrid sets benchmarks that can only be achieved by incorporating the revolutionary LifeDrive vehicle concept. As a result, the BMW i8 is the trailblazer of a new generation of sports cars that are defined not only by performance, but also by intelligent solutions to the challenges of individual mobility of the future.

The BMW i8 boasts an entirely new sports car design featuring many aerodynamically refined details. At the same time, the 2+2-seater car is immediately recognisable as a model of the BMW i brand and a sports car of a new generation. At the front, the bonnet is encompassed by slightly higher wheel arches and, together with the almost closed kidney grille, shapes an extremely flat and muscular frontal view. The precise swage line emphasises the wedge shape of the body and, together with the sloping roofline and the C pillar, creates an aerodynamic and sporty exterior design. In order to further optimise fuel economy, the BMW i8 ensures aerodynamically favourable airflow within all areas of the body, including Stream Flow air routing from the side to the rear, a smooth underside and the diffuser located beneath the rear end. Optional laser headlights developed exclusively by BMW with three-fold light intensity, doubled high beam range and extremely low energy consumption are unique worldwide.

The interior of the BMW i8 conveys sportiness, dynamics and lightness. Distinct driver orientation and a modern cockpit design characterise the sports car of the future. All data required for driving such as speed, range and state of charge are shown on the instrument display in three-dimensional form. Familiar from other BMW models, the central control display on the instrument panel provides a representation of all further vehicle functions, including the extensive BMW ConnectedDrive services, which have been especially adapted to suit the demands of the plug-in hybrid technology featured in the BMW i8.

The technical highlight of the BMW i8 is undoubtedly BMW eDrive, drive technology developed by BMW for use in all electric and plug-in hybrid models. This is supplemented by the completely new 1.5-litre, three-cylinder petrol engine. Power from the two motors (electric at the front and petrol at the rear) is transferred to the road without any noticeable interruption of traction and, in

SPORT mode, using four-wheel drive technology. Thanks to an overall system power output of 266 kW/362 hp, the BMW i8 offers the performance of a sports-car: 0–100 km/h (60 mph) in 4.4 seconds, with top speed being electronically limited to 250 km/h (approx. 155 mph). Average fuel consumption of the BMW i8 as per EU test cycle for plug-in hybrid vehicles is 2.5 litres/100 kilometres, coupled with a CO<sub>2</sub> emission level of 59 grams per kilometre. Maximum possible vehicle range in solely electric operation is approximately 35 kilometres (approx. 22 miles), whereby the battery of the plug-in hybrid can also be constantly recharged by the three-cylinder petrol engine during the journey. This means that during overland journeys for example, the BMW i8 can be driven through towns and cities at any time entirely by electric power, whilst outside built-up areas, the battery is recharged by the combustion engine so that sufficient capacity is available to drive through the next town using only the power from the electric motor.

In addition to the actual vehicle, the “360° ELECTRIC” programme from BMW i offers customers an extensive range of products and premium services guaranteed to satisfy all needs and provide answers to all questions. These include recharging at home using the BMW i Wallbox, recharging at public charging stations, mobility assurance and the integration of innovative mobility services offered by BMW ConnectedDrive. The programme supports the comfortable, reliable and flexible use of the electric vehicle and provides answers to all questions pertaining to electromobility. As a result, the “360° ELECTRIC” programme makes a significant contribution towards making a BMW i customer’s everyday life considerably easier.

Innovative driver assistance systems such as the Traffic Jam Assistant, Parking Assistant or the Collision and Pedestrian Warning Assistant with City Braking Function, as well as BMW ConnectedDrive mobility services exclusively adapted to suit purely electric drive technology, help cope with emission-free driving in everyday traffic conditions. In addition, navigation services especially developed within the framework of 360° ELECTRIC for the demands of electromobility complement the proven range of BMW ConnectedDrive products.

Every BMW i is fitted as standard with a SIM card and a navigation system, the range of functions of which is supplemented by BMW ConnectedDrive services that have been specifically developed for BMW i. The Dynamic Range Assistant accompanies route planning and the current journey. If the destination chosen in the navigation system is outside the vehicle’s range, the driver is assisted by the recommendation to change either to the ECO PRO mode or the ECO PRO+ mode and by the calculation of an economically more favourable alternative route. Should it become necessary to recharge

the battery at a public charging station, the respective stations available within the vicinity are then displayed to the driver.

BMW i vehicles achieve a new dimension in the networking of the driver and the car. The BMW i Remote app also provides useful mobility planning data on the customer's smartphone. Both inside and outside the vehicle, BMW i ConnectedDrive offers intermodal routing that is unique worldwide and incorporates public transport connections, parking spaces and footpaths into mobility planning. From travelling in the BMW i to the search for a parking space or taking the bus or the subway right up to the final stage of the journey covered on foot, BMW ConnectedDrive services for BMW i guide the customer accurately and efficiently to any desired destination.

## 2.3 Sports Activity Vehicle built to perfection: The new BMW X5.



The BMW X5 – founder of the Sports Activity Vehicle segment and, with more than 1.3 million units sold since the launch of the first model generation, the best-selling vehicle in its class worldwide – is entering a new chapter in its successful history. The third-generation X5 sees BMW once again setting the benchmark for powerful design, spaciousness and luxury in the interior, versatility, driving pleasure, efficiency and innovative equipment features. The new BMW X5 offers customers an assured all-round package equipped to meet the most exacting and varied demands. Owners keen to make the configuration of the exterior and interior a little more individual can vary the car's basic equipment with the M Sport package and Pure Experience and Pure Excellence “design worlds”. The defining features of the new BMW X5's onboard experience are an exclusive interior ambience with luxurious design, high-quality materials and innovative comfort-enhancing functions.

In a number of markets, the vehicle's intelligent four-wheel drive system BMW xDrive can be supplemented by various suspension packages. These include, among others, the Active Roll Stabilisation system Active Drive for a targeted increase in sporty handling characteristics, pneumatic shock absorption for the rear axle and Dynamic Damper Control for an even higher level of comfort. Likewise, the Adaptive M Suspension, which is available as an integral part of the M Sport Package, also includes Dynamic Damper Control and rear axle shock absorption as well as an additional, specifically sports-oriented suspension setting.

The drive portfolio comprises a V8 power unit with 330 kW/450 hp for the BMW X5 xDrive50i, a straight six-cylinder petrol engine featuring BMW TwinPower Turbo Technology for the BMW X5 xDrive35i (225 kW/306 hp) and a 190 kW/258 hp straight six-cylinder diesel available in Japan for the BMW X5 xDrive35d. All the engines available for the new BMW X5 link up as standard with an eight-speed automatic gearbox.

BMW EfficientDynamics allows all variants of the Sports Activity Vehicle to combine enhanced performance with reduced fuel consumption and CO<sub>2</sub> emissions. The increases in efficiency over the predecessor model have been achieved through measures including intelligent lightweight design – which generates a weight saving of as much as 90 kg over a comparably equipped corresponding model from the previous X5 generation (EU specification) – and

optimised aerodynamic properties. Depending on the engine, the new BMW X5 achieves a drag coefficient (Cd value) of 0.31 (EU specification), a value unmatched in this class. All models fulfil the EU6 exhaust stipulations as standard.

The range of BMW ConnectedDrive features is now also larger than ever and includes innovative driver assistance systems, some of which are unique among the competition. The Sports Activity Vehicle also impresses with its outstanding practicality, provided by a standard 40 : 20 : 40 split/folding rear seat backrest, load capacity rising from 650 to a maximum of 1,870 litres and an optional third row of two additional seats. The luxurious interior ambience is headlined by high-quality and beautifully finished materials and options such as rear comfort seats and the lighting package. The latter includes the innovative ambient lighting design feature, whose LED units illuminate the interior to particularly atmospheric effect in a choice of colours: blue, white or orange.

## 2.4 Clever use of space for sports and leisure activities: The BMW Concept Active Tourer Outdoor.



The BMW Concept Active Tourer Outdoor is treating the premium compact segment to a taste of how interior space can be cleverly utilised for sport and leisure purposes. It combines compact dimensions with sporty design and generous levels of interior space. A carrier system for two bicycles (integrated into the vehicle) and other clever details make the BMW Concept Active Tourer Outdoor the ideal companion for active recreational sports enthusiasts. In contrast to conventional solutions, this carrier is not mounted on the outside of the vehicle, but instead integrated into the interior. This has the advantage of keeping bicycles clean and dry while also protecting them from theft and damage. And when not in use, the carrier system disappears away into the side structure of the car or the load compartment floor without restricting interior space. Easy-care interior materials likewise represent a perfect match for the requirements of the BMW Concept Active Tourer Outdoor.

The BMW Concept Active Tourer Outdoor's new plug-in hybrid (PHEV) drive concept combines the benefits of an electric motor and the attributes of the vehicle's conventional 1.5-litre petrol engine. The BMW eDrive concept familiar from the BMW i8 enables the car to run on electric power alone (and therefore produce zero local emissions) and the lithium-ion high-performance batteries can be recharged from a standard 220V domestic socket. Plug-in hybrid vehicles generally have a range of over 30 kilometres (approx. 20 miles) in all-electric mode. The BMW Concept Active Tourer Outdoor's total system output of 140 kW/190 hp gives it sporty performance credentials while returning average fuel consumption figures of around 2.5 litres per 100 kilometres (113 mpg imp) and CO<sub>2</sub> emissions below 60 g/km.

With an exterior length of 4,350 millimetres, width of 1,833 millimetres and height of 1,576 millimetres, the BMW Concept Active Tourer Outdoor blends compact dimensions with hallmark BMW aesthetics and sportiness. The long wheelbase (2,670 millimetres), a higher roofline, a compact, transversely mounted engine sending its power to the front wheels, and the hybrid drive system's batteries fitted underneath the load compartment floor all combine to deliver generous interior space.

A dominant element of the characteristic BMW front view is the striking, slightly forward-leaning BMW kidney grille. The twin headlights with LED

accent lights positioned like eyebrows above them extend far into the front wings and, together with the multifaceted front apron and two large air intakes below the main headlights, strengthen the presence of the BMW Concept Active Tourer Outdoor. When seen in profile, even at a standstill, the elongated silhouette with its suggestion of a wedge shape lends the BMW Concept Active Tourer Outdoor a dynamic aura that is unmatched in this class. Defined horizontal body lines headline the rear-end view of the compact BMW. And the exclusive Gold Race Orange exterior paintwork and partly painted 20-inch wheels reinforce the vehicle's sporting appearance. The large tailgate offers convenient access to the load compartment thanks to its wide aperture and low loading sill.

The BMW Concept Active Tourer Outdoor marks the debut appearance of a new bicycle carrier system. In a departure from the conventional approach, this system allows up to two bicycles to be carried inside the vehicle. The carrier system is mounted against the left side of the boot area and consists of a rail system with a pivoting bracket. The rail is fitted with two mounts which hold the top tube of each bicycle in place. The bikes' saddles and front wheels need to be detached before they are secured in place. But, given the quick-release mechanisms of modern sports bikes, this should take only a few seconds. Once the bracket has been closed again, the bicycles can be pushed back into the interior with little ado. Another clever detail is the storage compartment recessed into the centre of the load area floor, which offers space for the bike saddles, tools and small parts.

The multifunction instrument display, complete with extended black panel technology, offers totally new functionality. The four-dial view will be familiar, but the COMFORT, SPORT and ECO PRO driving experience modes, for example, are all given their own display sections and colour schemes. The large 8-inch display in the centre of the instrument panel is used to access the suite of BMW ConnectedDrive services and the new navigation system's route planning functions. The central Control Display also shows the current operating status of the hybrid system. The hybrid drive system's power electronics are linked up to the intelligent Navigation system Plus, allowing it to work as efficiently as possible.

The BMW Concept Active Tourer Outdoor boasts optimum connectivity thanks to BMW ConnectedDrive. For example, tours with special route profiles and stop-off points can be planned via the BMW homepage, while stages for drivers can be combined with those for cyclists and hikers as desired. The route plan can be sent from the driver's home computer to the BMW Concept Active Tourer Outdoor's navigation system and the driver's smartphone so that it can be called up at any time. As with all vehicles fitted

with an integrated SIM card, BMW ConnectedDrive services such as the Concierge Service and RTTI (Real Time Traffic Information) can also be accessed. Added to which, powerful interface technology allows extensive use of external mobile phones and many Bluetooth office functions for Internet-based services.

## 2.5 Concentrated motor racing genes: The BMW Concept M4 Coupe.



With the launch of the new BMW M3 Sedan and the new BMW M4 Coupe, BMW M GmbH is bringing to market an entirely new interpretation of the high-performance sports car – and again consistently implementing the BMW M philosophy in the M3's fifth generation. Following the production of more than 40,000 units of the predecessor model, the fourth-generation BMW M3 Coupe, the BMW M4 Coupe is now taking its place – and, with the "M4" type designation, is establishing a link to the series, which serves as a starting point for the new M model. For the first time, the four-door variant, which is logically named BMW M3, is being launched simultaneously with the Coupe.

"For four model generations now, the BMW M3 has combined motor racing genes and unrestricted everyday suitability in a highly emotional overall concept," explains Dr. Friedrich Nitschke, CEO of BMW M GmbH. "The BMW M3 Sedan and the BMW M4 Coupe continue to consistently pursue this fundamental idea: The engine is the heart of every BMW M model. The power unit of both models combines the advantages of the high-revving, naturally aspirated engine with the power of turbo technology. A comprehensive lightweight construction concept keeps the weight down to below 1,500 kilograms."

"Countless laps on the legendary Nordschleife of the Nürburgring and motor sport technology bear witness to motor racing genes. Meticulous and passionate work render the BMW M3 and the BMW M4 high-performance sports cars that set new standards in terms of conceptual harmony."

The straight six-cylinder engine with BMW M TwinPower Turbo Technology and high-revving concept, which was completely newly developed for the new BMW M3 Sedan and BMW M4 Coupe, has a maximum torque of well over 500 Nm (369 ft-lbs) along with a peak power output of around 430 hp, thereby surpassing the maximum torque delivered by the predecessor model BMW M3 by significantly more than 30 percent. Thanks to the new power unit, fuel consumption and emissions have dropped by around 25 percent. Vehicle weight, which has been reduced by around 80 kilograms to less than 1,500 kilograms compared with the predecessor model, contributes towards the highest level of driving dynamics coupled with outstanding efficiency.

The BMW Concept M4 Coupe offers a specific outlook on the BMW M3 Sedan and the BMW M4 Coupe of the future. The BMW Concept M4 Coupe, finished in the colour “Aurum Dust” exclusively developed for this model, continues with BMW M’s design language – strong in character, emotional and extremely dynamic. From every perspective it is the embodiment of agility, dynamism and superior performance. Large air inlets in the dynamic front, a swift design language in the side and a sporty, low rear give clear visual indication of the car’s tremendous dynamic potential. CFRP (carbon fibre reinforced plastics) elements such as the front splitter, the roof or the rear diffuser underline the optimized lightweight concept down to the smallest detail.

Faceted surfaces, precise contours and distinctive visual depth shape the powerfully expressive front end of the BMW Concept M4 Coupe. The classic “BMW face” with its double kidney and a modern interpretation of the twin round headlamps featuring LED technology provides the car with a distinctive identity, making it recognizable as a BMW M automobile at very first glance. The bonnet with its characteristic power dome symbolises the immense power of the engine that lies beneath it.

The powerfully shaped front apron sporting the carbon fibre front splitter immediately catches the eye. The three large air intakes supply the high performance power unit with sufficient cooling air. The sharply outlined vertical air vents located in the outer section of the side air intakes, the so-called Air Curtain is a design statement of its own. Together with the Air Breather, this feature ensures the aerodynamic closure of the wheel arches and consequently, improved air flow and fuel consumption.

A streamlined, flat silhouette and an athletic body design characterize the BMW Concept M4 Coupe. Typical BMW proportions – a long bonnet, long wheelbase, set-back greenhouse and a short front overhang – create an exceptionally dynamic appearance even when the car is at a standstill. Muscular wheel arches and the powerfully expressive surface language reveal the BMW Concept M4 Coupe’s supreme performance capabilities at very first glance.

The flowing roofline enhances the BMW Concept M4 Coupe’s sporty design with elegant finesse. As a visible high-tech lightweight element, the contoured CFRP roof characterizes the BMW Concept M4 Coupe’s technically innovative design: The CFRP roof reduces weight and ensures a lower centre of gravity, thus facilitating an even sportier driving experience. Here, form and functionality are optimally combined in typical BMW M fashion.

The coupe-like roofline flows into the muscularly designed rear end, which then adopts the contour of the roof. A rear spoiler lip is integrated into the boot lid for optimum downforce. Thanks to this feature, the BMW Concept M4 Coupe not only has better downforce values, but when viewed from the side, also gains in volume and length, in athletic presence. Below it, the boldly shaped, muscular sill emphasizes the car's sportive stance on the road.

Exclusively designed, bicoloured 20" M light alloys boasting the typical M double spoke design complete the sportive design of the car's sides. The five filigree double-spoke rims with polished outer surfaces reveal M carbon ceramic brakes.

The muscular rear end of the BMW Concept M4 Coupe gives visual indication of the car's supreme power. The large shaded areas beneath the spoiler give the rear end an even flatter and athletic appearance. At the same time, the flat taillights located far to the outside, the wide track and the powerfully flared wheel arches underscore the car's stable stance on the road.

The two pairs of carbon fibre tailpipes are encompassed by the sculptural rear apron. A carbon fibre rear diffuser completes the overall aerodynamics package.

## 2.6 Fascination and emotion from 90 years of BMW Motorrad: The BMW Motorrad nineT.



On the occasion of the anniversary “90 Years of BMW Motorrad”, the BMW R nineT – or simply nineT – is presenting itself in a classic but nevertheless ultra modern form. The “cafe racer” combines the original charm of the 81 kW (110 hp) boxer engine and puristic design vocabulary from various BMW Motorrad eras with innovative technology and a modular concept that offers maximum possibilities for individualisation.

The tubular trellis front and rear frame constitutes a vital aspect of the motorcycle’s construction. The easily removable pillion frame, which permits riding solo or with a passenger, and with the optionally available hump, the nineT even exudes the flair of the vintage “cafe racer”. Featuring an upside-down telescopic fork at the front and Evo Paralever rear-wheel guide, it builds on high-grade suspension technology coupled with classic looks.

Manufactory character and strong emotions are reflected in the aluminium tank with side surfaces that are elaborately hand-brushed and then coated. Moreover, the nineT exudes a high level of craftsmanship and quality thanks to numerous forged aluminium parts. The Blackstorm metallic finish matches the puristic design and sophisticated surfaces.