

# BMW at the Tokyo Motor Show 2015. Contents.



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# 1. BMW at the Tokyo Motor Show 2015. (Highlights at a glance)



- BMW at the 44th Tokyo Motor Show, from 30 October to 8 November 2015.
- BMW presents one world premiere and four Asian premieres in Tokyo.
- World premiere of the BMW M4 GTS: the exclusive special-edition model serves as a technological showpiece, with its intelligent lightweight design and a significant increase in power thanks to innovative water injection. Rear lights with OLED (organic light-emitting diode) technology make their debut in a series-produced car and create a distinctive light signature.
- Asian premiere for the new BMW 7 Series: unique combination of dynamic excellence, long-distance comfort and luxurious ambience; sixth generation of the luxury sedan features technology borrowed from BMW i, including a weight-minimised body structure built using carbon fibre.
- Asian premiere for the new BMW X1: second generation of the successful all-rounder; proportions, interior and appointments take their cues from the large BMW X models; engines, gearboxes and xDrive all-wheel-drive system all comprehensively revised; enhanced sporting ability and efficiency; optimised spaciousness, variability and premium character.
- BMW eDrive technology spreads through the BMW model line-up: plug-in hybrid drive system developed by the BMW Group and tailored to the model at hand delivers all-electric mobility, outstanding efficiency and unmistakable driving pleasure; BMW X5 xDrive40e is joined in the range by representatives of three other vehicle segments – in the shape of the BMW 740e, BMW 330e and BMW 225xe – within a short space of time. This means BMW now offers innovative plug-in hybrid technology in everything from compact models to luxury-class cars.
- The BMW 330e with electric drive system celebrates its Asian premiere. The sporting genes of the world's most successful premium sedan are fully embodied by the plug-in hybrid model. Combined fuel consumption

is between 2.1 and 1.9 litres per 100 kilometres (134.5–148.7 mpg imp), and CO<sub>2</sub> emissions come in at just 49–44 grams per kilometre.\*

- Asian premiere for the BMW 2 Series Active Tourer with eDrive and the BMW 225xe: innovative interior layout meets groundbreaking drive system; plug-in hybrid model fuses BMW eDrive technology with a front-mounted transverse three-cylinder petrol engine and a front-wheel-drive configuration for the first time; the electric motor powering the rear wheels makes for an electrified all-wheel-drive system that is unique in this segment; combined system output of engine and motor: 165 kW/224 hp, fuel consumption (combined): 2.1–2.0 litres/100 km (134.5–141.2 mpg imp), CO<sub>2</sub> emissions combined: 49–46 g/km.\*
- Setting the pace for electric driving pleasure: BMW i showcases its current model range; technology transfer to BMW models and innovative services from 360° ELECTRIC deliver effective impetus.

## 2. BMW at the Tokyo Motor Show 2015. (Summary)



BMW is presenting the world premiere of the BMW M4 GTS at the 44th Tokyo Motor Show from 30 October to 8 November 2015. Celebrating its Asian premiere, meanwhile, is the new, luxurious BMW 7 Series containing a host of innovations never before seen in automotive construction. Likewise making their Asian debut are the completely newly designed BMW X1 and the plug-in hybrid models, BMW 330e and BMW 225xe – the eDrive variant of the BMW 2 Series Active. BMW will also greet visitors to the Tokyo show with a range of pioneering services, including mobility features.

### **Focused motor sport expertise delivers the ultimate in driving dynamics: the new BMW M4 GTS.**

BMW M GmbH is presenting a new, exclusive technological showpiece at the 2015 Tokyo Motor Show. The BMW M4 GTS improves on the potential of the BMW M4 Coupe to reach impressive new levels. With its motor sport genes clearly to the fore, the new model has its sights set squarely on the race track – yet it is also equipped for life on the road. The special edition is limited to a production run of 700 units and celebrates the 30th anniversary of the BMW M3, which has been in production since 1986. It is the latest in a line of extraordinary models, following in the tyre tracks of the BMW M3 GT (1995), BMW M3 CSL (2003), BMW M3 GTS (2010) and BMW M3 CRT (2011). The BMW M4 GTS highlights the innovative talents of the BMW M engineers with trailblazing technologies such as water injection – which increases output significantly to 368 kW/500 hp (fuel consumption: 8.3 l/100 km [34 mpg imp]; CO<sub>2</sub> emissions: 194 g/km)\* – and intelligent lightweight design, which delivers an outstanding weight-to-power ratio of 3.0 kg/hp. Rear lights with OLED (organic light-emitting diode) technology make their series-production debut in this sharpest of all BMW M4 variants.

### **Driving pleasure, luxury and long-distance comfort redefined: the new BMW 7 Series.**

The new BMW 7 Series underlines its claim to redefine what an exclusive, luxurious driving experience looks like in contemporary, pioneering form with an exceptional array of innovations. Key factors in enhancing dynamics, efficiency, comfort and safety while on the move are the use of carbon-fibre-reinforced plastic (CFRP) in the body structure, engines from the BMW Group's new generation of power units, the plug-in hybrid system in the

\* Fuel consumption figures based on the EU test cycle, may vary depending on the tyre format specified.

new BMW 740e, the Executive Drive Pro active chassis system, the Driving Experience Control switch with ADAPTIVE mode, and BMW Laserlight. Maximising well-being in the interior, meanwhile, are the Executive Lounge feature with massage function, the illuminated Sky Lounge Panorama glass roof, just the right amount of accent lighting and a smartphone holder with inductive charging station.

The new generation of the BMW 7 Series also boasts standout innovations when it comes to operating system and driver assistance technology. The various new features that are unprecedented in the luxury sedan segment include, for example, the extension of the iDrive system to include a touch display and BMW gesture control, as well as Touch Command for controlling comfort and infotainment functions in the rear compartment using a tablet computer. In addition to all this, BMW is also presenting the latest generation of the BMW Head-Up Display in its new flagship model, not to mention Crossing traffic warning, the Steering and lane control assistant, active side collision protection, the Surround View system with 3D View and Panorama View, and a Remote Control Parking system.

### **Urban all-rounder delivers boundless driving pleasure: the new BMW X1.**

The second generation of the BMW X1 successfully transfers the trademark qualities of a Sports Activity Vehicle to the compact segment with greater intensity than ever. The new edition of this highly popular model makes its mark with powerful proportions and clean lines in the style of its larger BMW X siblings. Inside, the new BMW X1 offers far more space for both passengers and luggage, a state-of-the-art premium ambience and sophisticated functionality.

Petrol and diesel engines from the BMW Group's latest generation of power units, an efficiency-optimised version of the BMW xDrive intelligent all-wheel-drive system and newly developed chassis technology combine to produce a notable increase in sportiness and ride comfort along with far greater efficiency. Equipment features available for the BMW X1 for the first time include full-LED headlights, Dynamic Damper Control, the BMW Head-Up Display that projects driving-related information onto the windscreen as in the larger BMW X models, and the Driving Assistant Plus system.

### **BMW EfficientDynamics with BMW eDrive: electric driving pleasure in four plug-in hybrid models from BMW.**

The introduction of BMW eDrive technology in BMW brand models opens up all-electric motoring with zero local emissions to new target groups. The BMW 330e with plug-in hybrid drive is being added to the model line-up of

the new BMW 3 Series. It will also be possible to sample the pleasure of all-electric driving with zero local emissions in the BMW 2 Series Active Tourer in future, thanks to the BMW 225xe – the Active Tourer variant with eDrive. They will join the BMW 740e luxury sedan (the plug-in hybrid variant of the new BMW 7 Series) and the BMW X5 xDrive40e in the BMW model family, so that in 2016 the BMW eDrive technology initially developed for BMW i cars will be available for BMW models spanning four different vehicle segments – from the compact to the luxury class.

### **BMW i: a trailblazer for electric driving pleasure and everyday usability.**

Following the successful global launch of the purely electrically powered BMW i3 (energy consumption combined: 12.9 kWh; CO<sub>2</sub> emissions combined: 0 g/km) and the BMW i8 plug-in hybrid sports car (fuel consumption combined: 2.1 l/100 km [134.5 mpg imp]; CO<sub>2</sub> emissions combined: 49 g/km) the BMW i brand is now further cementing its status as a trailblazer for sustainable mobility with an expanding range of vehicle and mobility services. BMW i can already claim to be the brand to have won the most awards during its introductory phase in the history of motoring.

BMW i is giving the spread of electric motoring fresh impetus by making its technology available to current BMW brand models. For instance, all the plug-in hybrid models being exhibited by BMW at the 2015 Tokyo Motor Show employ the BMW eDrive technology initially developed for BMW i cars in the form of electric motors, power electronics, high-voltage batteries and intelligent energy management. Equally, the experience in using industrially manufactured CFRP garnered during development of the BMW i cars has now helped to reduce the weight of the new BMW 7 Series luxury sedan.

Further information on official fuel consumption figures, specific CO<sub>2</sub> emission values and the electric power consumption of new passenger cars is included in the following guideline: "Leitfaden über Kraftstoffverbrauch, die CO<sub>2</sub>-Emissionen und den Stromverbrauch neuer Personenkraftwagen" (Guideline for fuel consumption, CO<sub>2</sub> emissions and electric power consumption of new passenger cars), which can be obtained from all dealerships, from Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen and at <http://www.dat.de/en/offers/publications/guideline-for-fuel-consumption.html>. Leitfaden CO<sub>2</sub> (Guideline CO<sub>2</sub>) (PDF – 2.7 MB).



### 3. BMW at the Tokyo Motor Show 2015. (Long version)

#### 3.1 Focused motor sport expertise delivers the ultimate in driving dynamics: The new BMW M4 GTS.

The BMW M4 GTS gives BMW M GmbH a new and exclusive technological showpiece which elevates the potential of the BMW M4 Coupe to another impressive new level. With its powerful, motor sport-inspired looks and high-performance technology, the BMW M4 GTS has its sights set squarely on the race track. A lap time of 7:28 minutes around the legendary Nürburgring-Nordschleife, the world's most exacting race circuit, is a clear statement of this special-edition model's exceptional abilities. At the same time, the sharpest BMW M4 of all – like its BMW M stablemates – can also hold its own on public roads. BMW M GmbH is launching the BMW M4 GTS in a special edition limited to 700 units to celebrate the 30th anniversary of the BMW M3, which has been in production since 1986. In so doing, it is highlighting the innovative flair of the BMW M engineers in developing trailblazing M technologies on the powertrain, chassis and lightweight construction front. The first high-performance special edition in the M3/M4 model range will also be available for the first time in the important North American market.

“Special-edition models like the BMW M3 GT, BMW M3 CSL, BMW M3 GTS and BMW M3 CRT have a decades-long tradition in our mid-size line-up – and that continues with the BMW M4,” says Frank van Meel, CEO of BMW M GmbH. “They sharpen the character of the BMW M brand and embody an emotionally rich and exclusive driving experience. We've taken a radical route with the set-up of the BMW M4 GTS to create a sports machine for the race track that delivers top-end dynamics and inspirational performance. It allows us to demonstrate what is possible today with a road-legal car. Owners can drive their BMW M4 GTS to circuits such as Spa-Francorchamps, the Nürburgring or Laguna Seca – for clubsport events, for example – and then set lap times there that raise the bar to extremely high levels for road-legal cars.”

#### **Performance boost courtesy of innovative water injection.**

At the heart of each and every BMW M model is its engine. The BMW M4 GTS uses the multi-award-winning six-cylinder in-line turbo engine from the BMW M3/M4, but adds innovative water injection technology to give the 3.0-litre unit a substantial power boost. The water injection system raises the engine's output significantly – to 368 kW/500 hp – and increases torque to 600 Nm (442 lb-ft), yet still keeps fuel economy and CO<sub>2</sub> emissions at the level of the BMW M4 Coupe (8.3 litres per 100 km\* (34 mpg imp), 194 g/km\*).

\* Fuel consumption figures based on the EU test cycle, may vary depending on the tyre format specified.

This makes the BMW M4 GTS the most agile, radical and dynamically potent model in the range. It races from a standstill to 100 km/h (62 mph) in a mere 3.8 seconds and hits a limited top speed of 305 km/h (189.5 mph).

### **Lightweight design extends into the details.**

Intelligent lightweight construction allows the BMW M engineers to limit the car's DIN kerb weight to 1,510 kilograms. Its outstanding weight-to-power ratio of 3.0 kg/hp provides the perfect platform for a highly dynamic driving experience. The rigorous weight-saving measures extend through both the interior and exterior of the car. Inside, carbon-fibre bucket seats, a lightweight centre console, the lightweight construction of the rear seat panelling and boot area partition, and special lightweight door and side panel trim, including door pull loops in place of solid door handles, are clearly visible indications of the designers' commitment to weight-saving. The rigorous application of lightweight design can also be seen in details that are out of view. The instrument panel bracing tube is made from lightweight carbon fibre. And on the outside of the car, the newly designed bonnet, roof and adjustable front splitter are also constructed from carbon-fibre-reinforced plastic (CFRP). The adjustable rear wing, too, is cut from this light but extremely durable high-tech material. It rests on intricate, CNC-machined aluminium mounts fixed to the CFRP boot lid which likewise demonstrate how every detail, no matter how small, has been honed to minimise weight. Teaming up with the diffuser – again, made from carbon fibre – below the rear bumper, the rear wing optimises the flow of air and reduces lift at the rear axle. The exhaust system has a titanium muffler, which allows a weight saving of 20 per cent. Its emotionally rich soundtrack fits the M profile perfectly and envelops the inside and outside of the car in the ambience of the race track.

### **Performance-maximising equipment features.**

The standard-fitted seven-speed M Double Clutch Transmission (M DCT) selects the optimum ratio for every driving situation with no interruption in the flow of power as it makes its way to the rear wheels. The driver can also select gears manually using either shift paddles on the steering wheel or the selector lever. The Drivelogic shift programs and Launch Control have been adapted to the engine's increased output. The weight-minimised, exclusive M light-alloy wheels in star-spoke 666 M Styling are forged and polished, and come in Acid Orange. They are fitted with Michelin Pilot Sport Cup 2 tyres (front: 265/35 R19, rear: 285/30 R20) which are adapted specifically to the BMW M4 GTS and therefore play a role in the car's outstanding mechanical traction and feedback through corners.

The three-way M coilover suspension specially set up for the BMW M4 GTS can be individually adapted to the demands of various race tracks. The



lightweight M carbon ceramic brakes provide a clearly defined pressure point and guarantee outstanding deceleration even when under extreme and sustained strain, e.g. when working at the limit out on the track.

**World-exclusive OLED technology, brilliant LED light.**

The familiar two sets of twin circular headlights with four corona rings ensure the best possible illumination of the road surface. They combine cutting-edge LED (light-emitting diode) technology with BMW Selective Beam (dazzle-free high beam assistant) and Adaptive Headlights.

The L-shaped rear lights are as distinctive as the design of the headlights. Indeed, innovative OLED rear lights will make their series-production debut in the BMW M4 GTS. OLEDs (organic light-emitting diodes) are a new kind of light source that light up over their full surface with a very homogeneous effect – unlike LED units, which emit their light in the form of points. The flat design of OLEDs (they measure just 1.4 millimetres in height) and the ability to trigger individual light modules separately opens up fresh possibilities for lighting concepts and exudes the presence of exceptional precision. As such, the tail lights underline the width of the rear end, lend the car an even more eye-catching and powerful appearance and ensure it cuts a stand-out figure in both the light and dark.

**The interior – focused, exclusive and committed to motor sport.**

The carbon-fibre M bucket seats for the driver and passenger stick firmly with the lightweight construction theme inside the pure-bred, exclusive interior. They weigh around 50 per cent less than the sports seats in the BMW M4 Coupe, enable an ideal seating position and offer compelling long-distance comfort to go with their unbeatable levels of support. The exclusive seat covering made of Alcantara and Merino leather, along with the M stripes in the backrests, three-point seat belts and door pull loops, highlight the profile of the BMW M4 GTS as a high-performance sports machine as well as the car's standalone character. The M4 GTS is fitted with different bucket-style M sports seats (including lightweight backrests with cut-outs) for the North American market, in line with local registration requirements.

The exclusive material Alcantara is also used for the M sports steering wheel, whose “12 o'clock” marker underlines the racing character of the BMW M4 GTS. In place of a rear seat bench, the BMW M4 GTS features a glass-fibre-reinforced plastic (GFRP) shelf and a rear panel in carbon-fibre sandwich construction. Both are covered in Alcantara, and together they enable a weight saving of around 40 per cent.

Customers can also specify the optional Clubsport Package to further enhance the affinity of their BMW M4 GTS with the race track. It includes a roll bar in Acid Orange behind the front seats, a race-specification six-point harness\*\* and a fire extinguisher.

## 3.2 Driving pleasure, luxury and long-distance comfort redefined: The new BMW 7 Series.



With the new BMW 7 Series, BMW has redefined what an exclusive, luxurious driving experience looks like in contemporary, pioneering form.

Groundbreaking technologies in the areas of lightweight design, powertrains, chassis, operating systems, intelligent connectivity and interior ambience underline its mission to bring together unbeatable driving pleasure and long-distance comfort in a luxury sedan. The handing over of the baton from one generation to the next at the top end of BMW's model line-up sees the brand presenting a raft of innovations unmatched by any of its rivals.

Key factors in enhancing dynamics, efficiency, comfort and safety while on the move are the use of carbon-fibre-reinforced plastic (CFRP) in the body structure, engines from the BMW Group's new generation of power units, the plug-in hybrid system in the new BMW 740e, the Executive Drive Pro active chassis system, the Driving Experience Control switch with ADAPTIVE mode and BMW Laserlight. Maximising well-being in the rear, meanwhile, are the Executive Lounge feature with massage function and Vitality Programme, the Sky Lounge Panorama glass roof, Welcome Light Carpet, Ambient lighting accents and a smartphone holder with inductive charging station. Standout innovations in operating system and driver assistance technology include the extension of the iDrive system by a touch display and BMW gesture control, as well as Touch Command, the new BMW Head-Up Display, Crossing traffic warning, the Steering and lane control assistant, active side collision protection, Surround View with 3D View and Remote Control Parking.

### **Design: stylish presence, assured dynamics, exclusive elegance.**

The design of the new BMW 7 Series provides an authentic showcase for the car's character. Harmonious proportions, a strongly controlled surface design and precise lines point to the stylistic confidence, assured dynamics and exclusive elegance at work here. The optimised balance of driving pleasure and long-distance comfort finds clear expression in the unmistakable aura of the luxury sedan, which is available in both standard and long wheelbase variants.

Characteristic features of the interior include generous levels of space accentuated by its horizontal surfaces and lines, the driver-focused cockpit design, the fusion of exquisite materials and precision craftsmanship and the sophisticated functionality of the control and display elements. The M Sport package, the design Pure Excellence package and a BMW Individual Design

Composition will be available for the new BMW 7 Series from launch. They underline the car's dynamic ability, exclusive elegance and luxurious ambience to great effect, and satisfy the diverse expectations of customers around the world.

“At BMW we believe the future can be predicted most effectively if we're helping to shape it,” explains Adrian van Hooydonk, Senior Vice President BMW Group Design. “The primary objective in the development of the new car was to create a vision of modern luxury and to exceed our customers' expectations. In BMW's eyes, modern luxury is rooted in the most advanced technologies and extremely fine attention to detail. This generation of the BMW 7 Series is the most luxurious, most comfortable and – all round – the best car we have ever built in this class.”

### **BMW EfficientLightweight: a Carbon Core for a weight reduction of up to 130 kilograms.**

BMW EfficientLightweight helps to reduce the weight of the new BMW 7 Series models by up to 130 kilograms compared to their previous-generation counterparts. At the centre of it all is the body structure with Carbon Core, a product of the transfer of technology from the development of BMW i cars. The new BMW 7 Series is the first car in its segment in which industrially manufactured CFRP combines with steel and aluminium. The intelligent body concept uses this mixed-materials approach to increase the strength and rigidity of the passenger cell while at the same time significantly reducing vehicle weight.

### **New-generation straight-six engines.**

The new BMW 7 Series is available with an extensively updated V8 engine and six-cylinder in-line variants from the BMW Group's latest generation of power units. All the engines link up as standard with the likewise further developed eight-speed Steptronic transmission. The BMW xDrive intelligent all-wheel-drive system, which can be specified as an option, also operates more effectively than ever.

### **Plug-in hybrid BMW 740e with BMW eDrive technology.**

The addition to the model range of the BMW 740e sees the arrival in the luxury sedan segment of BMW eDrive technology which was first introduced in BMW i cars. The plug-in hybrid model, which will also be launched in long-wheelbase form as the BMW 740Le and with intelligent all-wheel drive as the BMW 740Le xDrive, is powered by a four-cylinder petrol engine and an electric motor, which together generate total system output of 240 kW/326 hp. The BMW 740e records combined fuel consumption of 2.1 litres per 100 kilometres (134.5 mpg imp) and combined power consumption of 12.5 kWh per 100 kilometres, as calculated in the EU test

cycle for hybrid vehicles. CO<sub>2</sub> emissions (combined) stand at 49 grams per kilometre (provisional). The electric drive system, supplied with energy by a high-voltage lithium-ion battery, provides a noticeable boost for the combustion engines when dynamic acceleration is required. Moreover, the BMW eDrive technology enables all-electric and therefore locally emission-free driving at speeds of up to 120 km/h (75 mph) and with a range of up to 40 kilometres (25 miles).

### **Dynamics and ride comfort made to measure – and to the highest standard.**

Sophisticated, precision-honed chassis technology and additional chassis control systems – fitted as standard or available as an option – enhance both the dynamics of the new BMW 7 Series and its ride quality. At the same time, the balance between these two facets of driving pleasure reaches a level without parallel in the luxury sedan segment. Standard specification includes 2-axle air suspension with automatic self-levelling and Dynamic Damper Control.

Further enhancing comfort, dynamics, poise and assurance are the latest update of the Integral Active Steering system, which can now be specified in conjunction with BMW xDrive, and the Executive Drive Pro system with active roll stabilisation and data-based predictive function, which is available for the first time. Electromechanical anti-roll bars reduce body roll under dynamic cornering and the active chassis control system adapts the dampers' responses to ruts and bumps in the road.

The latest wave of innovations offer drivers greater freedom when selecting the perfect set-up for their car; they can opt for even sportier handling or further improved ride comfort, or use the high-efficiency ECO PRO mode. ADAPTIVE mode can now also be activated via the newly designed Driving Experience Control switch. In this setting, the car set-up adapts to driving style and route characteristics.

### **Intuitive operation with touch display and BMW gesture control.**

In the new BMW 7 Series the iDrive operating system's monitor comes in touch display form for the first time. This means customers will also be able to operate the system in the same way as modern electronic devices. In addition to using the Controller to control the system in familiar style, its functions can also be selected and activated by touching the screen's surface.

Another new addition to the iDrive system's functionality is BMW gesture control, which is being introduced for the first time. Hand movements detected by a 3D sensor control infotainment functions in an extremely intuitive and user-friendly fashion. The gestures can be used for a number of

functions, including controlling the volume in audio applications and accepting or rejecting incoming telephone calls. There is also the option of pairing a specific gesture with an individual choice of function. Also joining the fray is a new smartphone holder integrated into the centre console, which allows wireless, inductive charging for mobile phones for the first time in a car.

### **Luxury ambience with all the trimmings: Executive Lounge, Touch Command.**

Levels of comfort a class apart are offered in the rear of the long-wheelbase models specified with the optional Executive Lounge, which redefines personal well-being in a luxury car. This equipment package includes Automatic air conditioning with 4-zone control, Electrically adjustable comfort seats with massage function in the rear and Active seat ventilation for all seats, plus the optional Executive Lounge Seating, Executive Lounge rear console and Rear-seat entertainment Experience with BMW Touch Command. The massage function now also includes the Vitality Programme, which allows rear passengers to engage in active physical exercise for recuperation purposes. The Executive Lounge Seating option increases comfort in the rear seat behind the front passenger seat, which can slide forward by an additional 90 millimetres and has an electrically extendable footrest integrated into its backrest. The rear passenger can unwind into an extremely relaxing position thanks to a backrest which can recline impressively close to the horizontal position.

The Executive Lounge rear console houses a fold-out table, additional cupholders and the Touch Command system. This removable 7-inch tablet computer allows the user to control the infotainment and comfort functions available in the rear of the new BMW 7 Series and can also be used to play back external audio and video files, as a games console or to surf the internet.

### **Atmospheric touches: Ambient light, Sky Lounge Panorama glass roof.**

The exclusive ambience inside the new BMW 7 Series is also enhanced by a precisely arranged lighting design. The Ambient light option now includes the Welcome Light Carpet, which provides an eye-catching light graphic in the entry and exit area. Another unique feature is the Ambient highlight for the long-wheelbase versions of the new BMW 7 Series, which bathes the rear compartment in an atmospheric light from light sources positioned vertically on the B-pillars.

Long-wheelbase versions of the new BMW 7 Series will also be available with the Sky Lounge Panorama glass roof, which is likewise one of a kind in the luxury sedan segment. When it gets dark, the light emitted from side-mounted

LED modules is directed evenly onto the glass surface, where it hits an imprinted graphic. This creates an atmospheric motif mimicking a starry sky.

Another option customers can select to increase the feeling of well-being on board is the Ambient Air package, which ionises the air and generates a selection of eight aromas. Outstanding sound quality, meanwhile, is the speciality of the likewise newly developed Bowers & Wilkins Diamond surround sound system, which has been specifically tuned to the interior of the new BMW 7 Series.

### **Premiere in the new BMW 7 Series: Remote Control Parking.**

The new BMW 7 Series is the world's first series-produced car that owners will be able to manoeuvre in or out of forward-parking spaces or garages without anyone at the wheel. As such, the Remote Control Parking option allows drivers to access tight parking spaces with ease. The driver initiates the car's progress forwards into or reversing out of a space using the likewise newly developed BMW Display Key. While the car is carrying out the semi-automated manoeuvre, the driver watches out for obstacles.

### **Unique in the luxury sedan segment: BMW Laserlight.**

Another new feature in the luxury sedan segment is BMW Laserlight, familiar from the BMW i8. Thanks to BMW Selective Beam it is dazzle-free, and can be specified for the new BMW 7 Series as an alternative to the standard full-LED headlights. The laser headlights generate a particularly bright, pure white light as well as providing a high-beam range of 600 metres, double that of LED headlights.

### **Innovative driver assistance systems from BMW ConnectedDrive enhance comfort and safety.**

The Steering and lane control assistant, Lane keeping assistant with active side collision protection, Rear collision prevention and Crossing traffic warning functions have been added to the Driving Assistant Plus system. Meanwhile, the Traffic jam assistant – which involves semi-automated driving – can be used on any type of road. And the Active Cruise Control with Stop & Go function now only requires drivers to press a button to incorporate speed restrictions detected by the Speed Limit Info function. The new generation of the Surround View system now also includes a 3D View and Panorama Side View option in the Control Display.

### **Production at BMW Plant Dingolfing: globally unparalleled lightweight design expertise.**

The new BMW 7 Series will be built, like all of its predecessors, at BMW Plant Dingolfing. The Dingolfing factory combines its many years of experience in

building luxury sedans with globally unmatched expertise in the field of lightweight design. BMW Plant Dingolfing serves as the aluminium competence centre within the BMW Group's worldwide production network and has now also become the world's first automotive manufacturing facility in which CFRP is used in body construction as part of a hybrid technique.



## 3.3 Urban all-rounder delivers boundless driving pleasure: The new BMW X1.



The new BMW X1 – the successor to the model that blazed the trail for this class of car – treats the premium compact segment to an even more potent shot of Sports Activity Vehicle DNA. The second generation of this successful model, more than 730,000 units of which have now been sold, takes to the stage with a body design straight out of the BMW X model mould. The interior of the new BMW X1, meanwhile, offers significantly more space for passengers and luggage, a cutting-edge premium ambience and functionality grounded in solid engineering. Four-cylinder engines from the BMW Group's latest generation of power units, an efficiency-optimised version of the BMW xDrive intelligent all-wheel-drive system and newly developed chassis technology all help to palpably enhance sporting ability and ride comfort compared to the outgoing model – with fuel consumption and emissions reduced by up to 17 per cent, model-on-model.

Alongside its market-leading dynamics and efficiency, a host of innovative equipment features also help to secure the new BMW X1 its stand-out position in the segment. Among the items on the options list are full-LED headlights, Dynamic Damper Control, the BMW Head-Up Display and the Driving Assistant Plus system.

### **A typical BMW X model: sturdy proportions, impressive variability and established premium characteristics.**

Rugged proportions, a powerful presence and dynamic lines lend the new BMW X1 a commanding appearance and highlight its status as the youngest member of the BMW X model family. The new model has grown in height compared to its predecessor (+53 millimetres), which has helped increase the spaciousness of the interior. And its significantly raised seating position (+36 millimetres at the front, +64 millimetres at the rear) optimises the driver's view out over the road.

Knee room in the rear has increased by 37 millimetres in standard specification and by up to 66 millimetres with the optionally adjustable rear seat, while the 505-litre boot capacity is 85 litres larger than that of its predecessor. Folding down the standard-fitted 40:20:40 rear seat backrest, which can also be specified in angle-adjustable form as an option, allows load capacity to be expanded to as much as 1,550 litres. The optional folding front passenger seat backrest and a rear seat bench which can slide 13 centimetres fore and aft offer additional variability.

The interior design of the new BMW X1 combines the driver-focused cockpit design that has become a hallmark of the brand's models with touches promoting authoritative, SAV-style driving pleasure and a contemporary premium ambience. Standard equipment includes air conditioning, an audio system with USB and AUX-in sockets, and the iDrive operating system, whose 6.5-inch display is integrated into the instrument panel in freestanding monitor form. Meanwhile, the Advantage, Sport Line, xLine and M Sport packages available as an alternative to standard specification open the door for targeted individualisation.

### **New generation of engines, efficiency-optimised xDrive all-wheel-drive system.**

The second-generation BMW X1 (fuel consumption combined: 6.4–4.1 litres [44.1–68.9 mpg imp]; CO<sub>2</sub> emissions combined: 149–109 g/km) lines up with an all-new selection of engines. Two petrol and three diesel units will be available from launch in October 2015, all of which have four cylinders and are members of the BMW Group's new engine family. Outputs range from 110 kW/150 hp to 170 kW/231 hp. The engines link up with a six-speed manual gearbox or an eight-speed Steptronic unit, both of which are also new developments.

The xDrive intelligent all-wheel-drive system also takes its place in the new BMW X1 in a further developed form. The weight-saving, compact and efficient system uses an electro-hydraulically controlled multi-plate clutch to distribute drive between the front and rear axle just as required for the situation at hand. The BMW X1 sDrive20i and BMW X1 sDrive18d feature a front-wheel drive construction that is designed to deliver hallmark BMW driving dynamics and has already proved its mettle in the BMW 2 Series Active Tourer and BMW 2 Series Gran Tourer.

### **Premiere in the BMW X1: Head-Up Display and Driving Assistant Plus.**

The change of BMW X1 generations also brings significant advances in the field of intelligent connectivity. A new addition to the range of BMW ConnectedDrive features is a BMW Head-Up Display which, as in the larger BMW X models, projects driving-related information directly onto the windscreen. The BMW X1 can now also be specified with the Driving Assistant Plus line-up of the Active Cruise Control system with Stop & Go function, Lane Departure Warning, Traffic Jam Assistant, Collision Warning and Pedestrian Warning with City Braking function. These systems are complemented by an up-to-the-minute selection of apps allowing customers to add to the car's comfort, navigation and infotainment functionality, as desired.



## 3.4 BMW EfficientDynamics with BMW eDrive – electric driving pleasure of unrivalled diversity: The BMW X5 xDrive40e, BMW 330e and BMW 225xe plug-in hybrid models.

In addition to the BMW X5 xDrive40e, the range of BMW plug-in hybrid models is being expanded with the BMW 740e, BMW 330e and BMW 225xe – the eDrive version of the BMW 2 Series Active Tourer – to include three further segments, from the luxury to the compact class.

### **BMW eDrive: hallmark brand characteristics, flexible range of applications.**

BMW eDrive technology basically comprises the electric motor, the lithium-ion high-voltage battery and the power electronics. All plug-in hybrid models from BMW employ a common boost strategy, combining the two drive systems to ensure superb power delivery and give the BMW TwinPower Turbo technology even sharper response.

BMW eDrive grants motorists an optimised, all-electric – and thus locally emission-free – driving experience both in urban traffic and on cross-country journeys. A key element of the operating strategy involves deploying the externally charged and recuperated electrical energy as required in order to maximise efficiency.

The individual components of the BMW eDrive architecture are tailored to each model concept. They can be paired with both four- and three-cylinder petrol engines, combined with either classic rear-wheel drive, front-wheel drive or BMW xDrive, and even turned into an electrified all-wheel-drive system. The eDrive components initially developed for BMW i can be integrated into further model series from the core brands in a short space of time. The scalable architecture is furthermore a vital prerequisite for marketing plug-in hybrid models at attractive prices comparable with those for conventionally powered model variants with similar outputs. Customers opting for this advanced drive concept therefore stand to reap not just the ecological but also the economic benefits of electric mobility.

### **Intelligent energy management, hybrid driving experience.**

The intelligent energy management in plug-in hybrid models ensures that engine and electric motor interact to optimum effect in all driving situations. The operating strategy has been configured for the vehicle starting in all-electric mode. At low and moderate speeds, BMW plug-in hybrid models give

preference to electrical operation, thereby capitalising on the advantage of zero-emission driving on electrical power.

When accelerating more briskly or travelling at higher speeds, the combustion engine also cuts in. By merging the torques from the two drive sources, the boost function maximises dynamism while endowing the vehicle with authoritative performance. Even at higher speeds, BMW eDrive provides an electric assist function that allows the engine to run more efficiently. This makes it possible to also lower fuel consumption on faster cross-country or motorway drives, for example. The predictive energy function, meanwhile, devises an anticipatory operating strategy designed for optimised efficiency and maximised electric driving whenever the navigation system is being used for route guidance.

Like the BMW i8, the BMW X5 xDrive40e, BMW 740e and BMW 330e are able to drive on electric power alone in MAX eDRIVE mode at speeds of up to 120 km/h / 75 mph (BMW 225xe: up to 125 km/h / 78 mph) at the simple push of a button. In this driving mode, the combustion engine only cuts in if the kickdown function is activated.

Selecting the SAVE BATTERY mode allows the high-voltage battery's charge to be maintained for electric driving at a later time. If the charge level is below 50 per cent, the battery is recharged during the journey. When the selector lever is moved into the S gate, the combustion engine starts regardless of the current mode, which means the maximum power output of both drive units is permanently on tap. At the same time, the charge level of the high-voltage battery is increased to 80 per cent. Compared to conventionally powered models, the eDrive functions further intensify the range of characters encompassed by the Driving Experience Control modes ECO PRO, COMFORT and SPORT.

### **BMW X5 xDrive40e: a new form of motoring supremacy.**

The first plug-in hybrid model from the BMW brand is a Sports Activity Vehicle. In the BMW X5 xDrive40e, intelligent all-wheel drive melds with exceptionally efficient hybrid technology to create a brand new form of motoring supremacy. The long-distance capabilities and driving dynamics expected of a large BMW X model are beautifully complemented by the ability to drive in all-electric mode virtually silently and with zero local emissions in urban traffic.

The drive system on board the BMW X5 xDrive40e comprises a 2.0-litre 180 kW/245 hp four-cylinder petrol engine with BMW TwinPower Turbo technology and a permanently excited synchronous electric motor with an

output of 83 kW/113 hp. The power stemming from the two drive units is routed via an eight-speed Steptronic transmission, before being directed to all four wheels by means of xDrive – permanently and always as the situation requires. The overall system output is 230 kW/313 hp with a combined peak torque of 450 Newton metres (332 lb-ft) – both engine and motor contributing to the pulling power of the BMW X5 xDrive40e. The electric drive furthermore unleashes its full torque of 250 Newton metres (184 lb-ft) from standstill. The maximum torque of the combustion engine, meanwhile, is 350 Newton metres (258 lb-ft) and is reached at just 1,250 rpm. The BMW X5 xDrive40e completes the sprint from 0 to 100 km/h (62 mph) in 6.8 seconds.

The BMW X5 xDrive40e is able to drive purely on electric power with zero tailpipe emissions for a maximum distance of 31 kilometres (19 miles). The maximum speed that can be attained in the MAX eDRIVE electric driving mode is 120 km/h (75 mph). The BMW X5 xDrive40e returns combined fuel consumption figures of 3.4–3.3 litres per 100 kilometres (83.1–85.6 mpg imp), CO<sub>2</sub> emissions come in at 78–77 grams per kilometre (figures based on the EU test cycle for plug-in hybrid vehicles, may vary depending on the tyre format specified).

With 500–1,720 litres of luggage space, a three-part folding rear backrest and a luxuriously designed interior, the BMW X5 xDrive40e also boasts the high versatility associated with a large Sports Activity Vehicle within an exclusive ambience. The charging cable can be stored in a compartment underneath the luggage compartment floor.

### **BMW 330e: BMW eDrive technology for the world's most successful premium sedan.**

The new BMW 3 Series model range will also be expanded to include a variant with an electrified powertrain in 2016. And the plug-in hybrid version of the BMW 3 Series retains all the sporty essence of the most successful premium sedan in the world.

In the BMW 330e Sedan, a four-cylinder petrol unit from the BMW Group's latest generation of engines is teamed up with a permanently excited synchronous electric motor integrated in the eight-speed Steptronic transmission. The combustion engine featuring BMW TwinPower Turbo technology generates a maximum output of 135 kW/184 hp, the electric motor produces 65 kW/88 hp. Both drive units transmit their power via the standard eight-speed Steptronic transmission to the rear wheels. Delivering an overall system output of 185 kW/252 hp and a total torque of 420 Newton metres (310 lb-ft), the BMW 330e races to 100 km/h (62 mph) from a standing start in 6.1 seconds and goes on to reach a top speed of 225 km/h

(140 mph). Combined fuel consumption, meanwhile, comes in at between 2.1 and 1.9 litres per 100 kilometres (134.5–149 mpg imp), which equates to CO<sub>2</sub> emissions of 49–44 grams per kilometre (figures based on the EU test cycle for plug-in hybrid vehicles, may vary depending on the tyre format specified).

The BMW 330e delivers the hybrid driving experience in all its glory. Accommodating the high-voltage lithium-ion battery above the rear axle allows unrestricted everyday use of the luggage compartment with no loss of versatility. All-electric driving with zero tailpipe emissions is possible for distances of up to 40 kilometres (25 miles), while the top speed that can be reached in MAX eDRIVE mode is 120 km/h (75 mph).

**BMW 225xe: efficient all-rounder with matchless all-wheel-drive system and versatile interior.**

Also slated for launch in spring 2016, the BMW 225xe (the BMW 2 Series Active Tourer with eDrive) provides further proof of the BMW eDrive technology's tremendous adaptability. This is the first time that the BMW eDrive technology has been mated to a transversely mounted three-cylinder petrol engine with BMW TwinPower Turbo technology at the front, with the engine's power being relayed to the front wheels and an electric motor driving the rear wheels. Intelligent control of this drive duo gives rise to an electrified all-wheel-drive system that is unique in its segment. The principle is similar to the all-wheel-drive system on the BMW i8 – albeit with the positions of the motor and engine reversed and characteristics that have been carefully tailored to the BMW 2 Series Active Tourer vehicle concept.

All-electric driving is possible with a range of up to 41 kilometres (25.5 miles). The energy required for this is drawn from a high-voltage lithium-ion battery, which is housed in a space-saving location underneath the rear seat, thereby allowing unrestricted everyday use of the principal luggage compartment capacity.

The 65 kW/88 hp permanently excited hybrid synchronous electric motor in the BMW 225xe is located at the vehicle's rear end and propels the rear wheels. With the MAX eDRIVE mode activated, this BMW 2 Series Active Tourer with eDrive is capable of speeds up to 125 km/h (78 mph) with zero local emissions.

The 1.5-litre three-cylinder petrol engine from the BMW Group's latest generation of power units provides a maximum output of 100 kW/136 hp, which is directed to the front wheels via a six-speed Steptronic transmission. The engine switches on extremely smoothly thanks to a high-voltage starter generator, which also serves to charge the lithium-ion battery while on the move and to provide a boost effect.

When SPORT mode is selected via the Driving Experience Control switch, the two drive units' maximum system output of 165 kW/224 hp and combined peak torque of 385 Newton metres (284 lb-ft) can be summoned up. The electrified all-wheel drive ensures sporty handling and superb traction in all driving situations. The BMW 225xe accelerates from standstill to 100 km/h (62 mph) in 6.7 seconds and has a top speed of 202 km/h (126 mph). The BMW 2 Series Active Tourer with eDrive returns combined fuel consumption figures of 2.1–2.0 litres per 100 kilometres (134.5–141.2 mpg imp), combined CO<sub>2</sub> emissions are 49–46 grams per kilometre (figures based on the EU test cycle for plug-in hybrid vehicles, may vary depending on the tyre format specified).

## 3.5 Breaking new ground in electric driving pleasure: BMW i shapes the future face of mobility.



The BMW i brand stands for visionary mobility concepts, progressive design and an understanding of premium which is strongly defined by sustainability. BMW i products are now available in 34 countries and the range includes tailor-made vehicle concepts and innovative services delivering electric mobility. By introducing the world's first premium cars designed from the outset to provide locally emission-free driving – the pure-electric BMW i3 and pioneering BMW i8 plug-in hybrid sports car – not to mention the services introduced under its 360° ELECTRIC banner, BMW i has built up the largest global market presence of any electric vehicle manufacturer within an extremely short space of time and taken on an active role in shaping the face of personal mobility in the future.

The stand-out features of BMW i cars include the LifeDrive architecture developed specially for the new brand's models, complete with a passenger cell made from carbon-fibre reinforced plastic (CFRP). This architecture combines an intelligent lightweight construction, and the new freedoms in design that this allows, with BMW eDrive drive system technology to deliver groundbreaking efficiency combined with outstanding everyday usability and the driving pleasure for which BMW is renowned. The range of 360° ELECTRIC services is focused on enabling customers to use electric mobility solutions every day.

### **Trailblazer and pace-setter in electric driving pleasure.**

Together, the models and services from BMW i help to raise awareness of electric mobility as an attractive and practical solution aimed at enhancing sustainability in personal transport and fuelling enthusiasm among new customers for efficient driving pleasure. So far, four out of five drivers choosing a BMW i model have been new to the BMW Group.

The positive reaction to the BMW i range has been expressed not only in demand that has exceeded expectations, but also in numerous international awards for the brand and its models, technologies and services. BMW i has recorded a run of success unparalleled in the automotive sector in terms of the number and variety of distinctions it has gained through jury decisions and public surveys: BMW i has gained more awards during its launch phase than any other brand in automotive history.



### **Secrets to success: an integrated concept targeting sustainability and outstanding development expertise.**

One of the main factors behind the public perception of BMW i as a pioneering carmaker is the brand's innovative premium approach based around an integrated commitment to sustainability that extends beyond the cars themselves. The overall concept behind BMW i covers the entire value chain – from the selection of materials and manufacturing processes through to a car's service life and its eventual recycling. It is focused on enhancing the environmental profile of BMW i cars, in all areas of development and every technical detail, without comprising on the driving pleasure expected of a BMW.

### **BMW i as a driver of innovations: BMW eDrive, 360° ELECTRIC, CFRP technology and BMW Laserlight heading for the BMW brand's model line-up.**

The trailblazing nature of the technology developed initially for BMW i cars is being showcased to an ever wider audience, thanks in part to its adoption by the latest BMW brand models. For example, BMW eDrive technology is included – in the form of electric motors, power electronics, high-voltage batteries and intelligent energy management – in the BMW X5 xDrive40e, BMW 740e, BMW 330e and BMW 225xe plug-in hybrid models. BMW eDrive is therefore developing into an additional pillar of the Efficient Dynamics development strategy aimed at consistently reducing fuel consumption and emissions, while enhancing hallmark BMW driving pleasure. Specific services from 360° ELECTRIC are also available for BMW's plug-in hybrid models to combine the electric driving experience with an exceptionally high level of comfort, reliability and everyday usability.

At the same time, the experience gained in the use of CFRP in the development of BMW i cars has helped to minimise the weight of the BMW 7 Series. The luxury sedan has an innovative Carbon Core body structure, in which industrially produced CFRP has been used for the first time in combination with steel and aluminium. The new BMW 7 Series is also the first model in the luxury sedan segment that comes with the option of BMW Laserlight. These laser headlights, whose benefits include a full beam range double that of LED headlights (at around 600 metres), were first offered in a series-produced car in the BMW i8.

The range of series-produced BMW i cars is also gaining further appeal through the introduction of new equipment details. Looking ahead, the BMW i3, for example, will also be available in the new exterior paint finish, Fluid Black.